

Closing the

Net



Stopping illegal fishing on the high seas

Final report of the Ministerially-led
Task Force on IUU Fishing on the High Seas

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For copies of this report, please contact:

IUU Fishing Coordination Unit
c/o Department for Environment, Food and Rural Affairs
6th Floor, 3-8 Whitehall Place
London SW1A 2HH
United Kingdom

E-mail: iuu@defra.gsi.gov.uk

www.high-seas.org

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Final report of the Ministerially-led Task Force
on IUU Fishing on the High Seas



March 2006

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EXECUTIVE SUMMARY

Illegal, unreported and unregulated (IUU) fishing is a serious global problem. It is increasingly seen as one of the main obstacles to the achievement of sustainable world fisheries. Recent studies put the worldwide value of IUU catches at between USD 4 billion and USD 9 billion a year. While USD 1.25 billion of this comes from the high seas, the remainder is taken from the exclusive economic zones (EEZs) of coastal states.

IUU losses are borne particularly by developing countries that provide over 50 per cent of all internationally traded fishery products. Significantly, losses from the waters of Sub-Saharan Africa amount to USD 1 billion a year – roughly equivalent to a quarter of Africa's total annual fisheries exports. IUU fishing therefore imposes significant economic costs on some of the poorest countries in the world where dependency on fisheries for food, livelihoods and revenues is high. Moreover, it effectively undermines recent efforts by these countries to manage natural resources as a contribution to growth and welfare.

IUU fishing respects neither national boundaries nor international attempts to manage high seas resources. It thrives where weak governance arrangements prevail and is further encouraged by the failure of countries to meet their international responsibilities. It puts unsustainable pressure on fish stocks, marine wildlife and habitats, subverts labour standards and distorts markets.

IUU fishing has proved stubbornly resistant to recent international attempts to control it. Its persistence is due both to economic incentives (fuelled by demand, overcapacity and weak governance) and by the lack of global political resolve to tackle its root causes.

An extensive framework of international measures has emerged with the aim of resolving IUU fishing, but a central difficulty has been to garner the political resolve to carry forward targets and declarations already agreed. Many states remain reluctant to adopt measures aimed at controlling their fishing vessels on the high seas. Even where they have adopted such measures, enforcement is patchy.

Towards a solution – the High Seas Task Force

Recognising these problems, a small group of fisheries ministers¹ and directors-general of international non-governmental organisations (NGOs)² decided to take the lead in actively promoting practical solutions. In 2003 they decided to establish the High Seas Task Force to advise them and finalise an action plan. The aim was to provide political leadership to drive forward much-needed practical initiatives that could be implemented immediately. The solutions proposed are designed to complement international multilateral initiatives on IUU fishing.

The focus of the Task Force's attention has first been on fishing activity on the high seas – *outside* EEZs – where IUU fishing undermines international agreements on the management of common property resources. A second key area of attention has been on IUU fishing *within* EEZs, including incursions by foreign vessels from adjacent high seas waters into EEZs where they are not licensed to fish. Although IUU fishing by licensed domestic vessels within EEZs is also a major problem, solutions to the latter are more dependent upon domestic fisheries management arrangements rather than international governance.

The solution

It is a fact that IUU fishing will persist unless immediate action is taken. The Task Force has therefore devised a set of practical proposals intended to tackle the root causes of IUU fishing. Each of the major proposals is intended to have one or both of the following effects:

- It will enhance enforcement, sharply increasing the risk of exposure of IUU operations and the potential for successful prohibition
- It will make IUU operations less profitable, increasing the capital and operating costs and reducing the revenues from IUU fishing

Each measure is thus designed in some way to **expose** IUU fishing activities, **deter** them and **improve enforcement** against those responsible.

Action must be underpinned by corresponding political determination. The weight of the proposals is therefore on measures that can be implemented immediately by Task Force members and by like-minded states that, together, wish to demonstrate such commitment in a coherent international push against IUU fishing.

Introduction to the proposals for action

As a first priority, swift and concerted action is required to stem the worst abuses. As a precondition to this, the international community needs radically to improve the quality of information and intelligence on IUU fishing activity and access to it. The first two proposals focus on ways of better exchanging knowledge derived from monitoring, control and surveillance activities, thus increasing the likelihood of exposure of IUU operators. *Proposal 1* is to commit resources to the existing voluntary **International Monitoring, Control and Surveillance (MCS) Network** to enable it to become an international network with dedicated resources, analytical capacity and the ability to provide training and support to developing countries.

Closely associated with the MCS Network and potentially contributing valuable intelligence on offenders, *Proposal 2* is to develop a **global information system on high seas fishing vessels**.

Existing international fishery instruments such as the 1995 UN Fish Stocks Agreement are of critical importance to ensuring effective high seas governance. *Proposal 3* will ensure Task Force members work together in **encouraging countries to become parties to relevant instruments** and collaborate in an international effort to foster better implementation of these.

There has been growing recognition of the need for Regional Fisheries Management Organisations (RFMOs) to perform better both individually and collectively, as well as the need for increased cooperation between them on issues of common concern. International consensus is already forming around the need to reform RFMOs and to initiate processes for improving their performance. This consensus recognises the crucial role played by RFMOs in effecting governance of high seas fishing in a world where fisheries are rapidly -and often uncontrollably- expanding into these regions. *Proposal 4* is to identify where the Task Force might bring leverage to bear and provide added impetus to existing initiatives. As an initial step, the Task Force **recommends guidance for RFMOs**. The guidance is not comprehensive, but is intended to be reflective of best practices in the implementation of international fishery instruments. It is offered with a view to encouraging self-evaluation by RFMOs and to aid internal discussions of reform by RFMOs in the near term. The objective is to encourage change from within.

Task Force members will actively promote the application of this guidance through the RFMOs of which they are members and through other multilateral discussions. Immediately following the launch of this report, to enable the guidelines to be further developed, the Task Force also proposes to commission an **independent high-level panel to develop a model RFMO** based on a more comprehensive assessment of best practices worldwide. *Proposal 4* also recognises the need for greater coordination, cooperation and information sharing. It notes that key gaps remain in high seas governance in several regions and need to be closed.

Task Force members recognise that responsible flag state and port state behaviour is central to strong deterrence of IUU fishing. To help tackle the problem of flag states that fail to live up to their international obligations, *Proposal 5* is a preliminary set of guidelines on flag state performance.

Proposal 6 sets out a range of measures aimed at improving port state controls over IUU. These include promoting the broad application of regional port state controls, reviewing domestic port state measures and suggestions for strengthening domestic legislation controlling the import of IUU product. Targets may include, for example, enterprises attempting to import IUU fish, or those that can be shown to be blatantly jeopardising the resource management measures adopted by a third state or RFMO.

Proposals 7 and 8 address two further areas of major importance – how to secure good information on IUU activity, and how to address the specific needs of developing countries in overcoming IUU fishing.

Because IUU is a covert activity, much information on it is of necessity anecdotal. However, the weight of evidence currently emerging is such that calls for mechanisms to fill critical gaps in scientific knowledge and assessment, and to monitor IUU activity and inform remedial policy, can no longer be ignored. *Proposal 7* therefore suggests some approaches for improving methods of assessing and monitoring IUU fishing activity and bycatch, and incorporating these into stock assessments.

Proposal 8 is to initiate a process to evaluate and then support vulnerable developing countries to adopt relevant Task Force measures.

Proposal 9 recognises the significant advances in information technology that could be brought to bear on exposing, deterring and enforcing IUU fishing, but also takes account of several weaknesses in the application of existing systems. The proposal will focus on the role of remote vessel monitoring systems in tackling IUU fishing and includes the development of internationally accepted codes of practice for its correct application, with particular concern for security, reliability and data sharing.

The implementation plan

Task Force members will work together to advance the proposals. It is hoped that within the range of specific measures proposed, there are some that like-minded countries and organisations may also wish to support. The Task Force will welcome participation and assistance from others in the implementation of the proposals. With this in mind, the Task Force will actively seek to engage an ever-widening group of like-minded countries and organisations.

From March 2006, the UK (on behalf of the High Seas Task Force) will establish an international coordination unit with responsibility to facilitate this process. Instrumental to this will be a targeted strategy that will:

- Encourage and promote broader acceptance and participation in the adoption of measures proposed
- Seek agreement on implementation arrangements through regular consultation with Task Force member states and like-minded partners, and
- Establish a monitoring unit to review and evaluate progress

Task Force members have, from the outset, recognised that their wish to take the lead in a number of areas should support broader multilateral efforts. Thus the initiatives that Task Force members commit to implement are not promoted as solutions in isolation from more broadly-based activities. Indeed, it is recognised that some measures can only be achieved effectively through concerted multilateral action.

Clearly, it is beyond the Task Force members alone to secure such an outcome. With this in mind, the Task Force set out to ensure its recommendations would be fully compatible with multilateral processes and that its members would lend their collective weight to those processes by taking a common advocacy position wherever possible.

In summary, therefore, the proposals represent a menu from which like-minded partners may chose. Those interested in pushing ahead on tackling IUU fishing with practical solutions, either unilaterally or in concert with other processes, can select from a set of priority actions to support as part of this new global effort to expose, deter and enforce IUU fishing.

FOREWORD BY BEN BRADSHAW MP

We should be in no doubt that IUU (illegal, unreported and unregulated) fishing is a serious global problem. Recent reports put the worldwide value of IUU catches at between USD 4 billion and USD 9 billion per year, including at least USD 1 billion per year for Sub-Saharan Africa. IUU fishing does not respect national boundaries. It puts unsustainable pressure on fish stocks, marine wildlife and habitats, undermines labour standards and distorts markets. It imposes significant economic costs on some of the poorest countries in the world and undermines the governance structures. There are enormous social costs linked to these economic costs, and we are all affected by IUU fishing, even if we don't realise it.



IUU fishing has proved stubbornly resistant to a number of recent international attempts to control it. On paper these international initiatives should easily be able to eliminate IUU fishing. But one of the key difficulties has been to gather the necessary political leadership needed to carry internationally agreed targets and declarations into effect. Recognising this, a small group of fisheries ministers and directors-general of international NGOs decided in 2003 to take the lead in actively promoting some practical solutions. They created the High Seas Task Force, which I have the honour to chair. Our aim is not to undercut multilateral processes but rather to provide additional impetus to existing initiatives.

After two years' work by a wide range of international legal, scientific, economic and enforcement experts the High Seas Task Force has identified a number of specific initiatives that are designed to *expose* IUU fishing activities, *deter* them and *improve enforcement* against those responsible. These initiatives can be very rapidly implemented by Task Force members and like minded states, which will support existing processes and which will have a significant impact on IUU fishing.

I would particularly like to acknowledge the input and support of my ministerial and other colleagues on the Task Force. They are: Elliott Morley MP (United Kingdom), the first chair of the Task Force, Hon Jim Anderton (New Zealand), Senator the Hon Eric Abetz (Australia), Hon David Benson-Pope (New Zealand), Hon Loyola Hearn (Canada), Hon Pete Hodgson (New Zealand), Dr Abraham Iyambo (Namibia), Senator the Hon Ian Macdonald (Australia), Dr. Claude Martin (Director-General, WWF), Hon Geoff Regan (Canada), Dr. Jeffrey Sachs (Director, Earth Institute at Columbia University), H.E. Undersecretary Felipe Sandoval (Chile) and Achim Steiner (Director-General, IUCN). While there have been changes in individual membership over the two-year life of the Task Force, I am grateful for the continued strong support shown by all my colleagues.

We are now moving from a period of analysis to a time of action. This report provides a plan for action, describing the proposals and the impact that they will have on IUU fishing.

I commend the report to you as essential background to understanding the various recommendations of the Task Force.

I invite and urge you, whether or not your minister has been a member of the Task Force, to join us in implementing some or all of the initiatives now, and help in the fight against IUU fishing.

Ben Bradshaw MP
Minister for Local Environment, Marine and
Animal Welfare, United Kingdom

FOREWORD BY RT. HON SIMON UPTON

Chair of the Round Table on Sustainable Development at the OECD

In the wake of the Johannesburg World Summit in 2002, many people were wondering how to make sense of the vast agenda that the world community had assembled. There was weariness with unwieldy, drawn-out global processes. But the global nature of so many problems meant that merely national or even regional-level initiatives would fall short. Most worryingly, there was a realisation that many multilateral solutions would only be as effective as the weakest link in the chain of implementing nations.

The Round Table on Sustainable Development at the OECD had played a role in the lead-up to the Summit, specifically, hosting an informal ministerial meeting to help focus the agenda. In the aftermath, we turned our minds again to how we might assist. Two aspects of the Round Table's *modus operandi* offered a way forward. The first was to choose a single troublesome issue on the global sustainability agenda that was defying easy progress at the multilateral level. The second was to engage a range of stakeholders who wanted to make progress even if others didn't.

While there was no shortage of candidates, illegal fishing on the high seas seemed peculiarly well suited to this treatment. It had been the subject of intense international effort yet continued almost unabated. It was an issue that cut across far more fields than any single global agency or negotiating forum. And because, by definition, it occurred in the global commons, it was beyond the enforcement reach of any single nation.

In hosting a post-Johannesburg meeting to discuss the phenomenon, the Round Table provided the catalyst for a group of like-minded ministers to team up with NGOs and others to give IUU fishing the undisturbed attention it required – and commit to practical steps that they could take without waiting for everyone to develop their sense of urgency.

As a result, this report – and the commitments contained within it by member countries of the High Seas Task Force – breaks new ground as a response to a pressing global environmental issue. It is both more modest and more audacious than traditional attempts to tackle a problem at global level: modest in both a material sense and the number of players engaged; audacious in the sense that a number of initiatives will actually kick off ideas that have been talked about before at the global level but so far failed to reach fruition.

The High Seas Task Force is an object lesson in what countries can do with very slender resources. The Round Table hosted a secretariat of just three people. That secretariat was given a little over two years to develop its thinking and stitch together an action plan. With the help of a wide network of committed experts, this tiny team was able to leverage some of the best expertise available to address the full breadth of issues that often fall between the cracks of large multilateral agencies each with its own carefully delimited turf. Placing a sunset clause on the Task Force from the outset was an excellent way of focusing scarce resources on practical proposals that would not be out of date by the time they were delivered.

The Round Table on Sustainable Development at the OECD has been very pleased to host the Task Force. Whether or not it is a model for future initiatives, it is proof that like-minded countries and interested stakeholders can work together to make progress in a way that supports multi-lateral action without being constrained by the painstaking but slow processes of multilateral diplomacy.

Of one thing we can be sure: illegal fishing operators move swiftly and the fate of the global fishery demands much swifter action than the global community is used to supplying. If the High Seas Task Force can be a catalyst for a newly invigorated assault on the many abuses and gaps that plague the governance of high seas fishing, it will well and truly have succeeded.

Rt. Hon Simon Upton
Director, *High Seas Task Force* and Chair, *Round Table
on Sustainable Development at the OECD*

LIST OF ACRONYMS AND ABBREVIATIONS

CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCSBT	Commission for the Conservation of Southern Bluefin Tuna
CDS	Catch Documentation Scheme
COFI	FAO Committee on Fisheries
COLTO	Coalition of Legal Toothfish Operators
EC	European Commission
EEZ	Exclusive Economic Zone
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
FFA	South Pacific Forum Fisheries Agency
FOC	Flag of Convenience
GFCM	General Fisheries Council for the Mediterranean
IATTC	Inter American Tropical Tuna Commission
ICCAT	International Commission for the Conservation of Atlantic Tunas
IISD	International Institute for Sustainable Development
IMO	International Maritime Organisation
IOTC	Indian Ocean Tuna Commission
IPOA-IUU	International Plan of Action to prevent, deter and eliminate illegal, unreported and unregulated fishing
IPOA-Seabirds	International Plan of Action for reducing incidental catch of seabirds in longline fisheries
IPOA-Sharks	International Plan of Action for the conservation and management of sharks
ITLOS	International Tribunal for the Law of the Sea
IUCN	The World Conservation Union (International Union for Conservation of Nature and Natural Resources)
IUU	Illegal, Unreported and Unregulated fishing
MCS	Monitoring, Control and Surveillance
MSC	Marine Stewardship Council
NAFO	Northwest Atlantic Fisheries Organisation
NEAFC	North East Atlantic Fisheries Commission
NGO	Non-Governmental Organisation
NPOA	National Plan of Action
OECD	Organisation for Economic Co-operation and Development
Paris MOU	Paris Memorandum of Understanding
RFMO	Regional Fisheries Management Organisation
SEAFO	Southeast Atlantic Fisheries Organisation
SIOFA	Southern Indian Ocean Fisheries Arrangement
TAC	Total Allowable Catch
UN	United Nations
VMS	Vessel Monitoring System
WCPFC	Western and Central Pacific Fisheries Commission
WWF	The Global Conservation Organisation

THE TASK FORCE SECRETARIAT

Simon Upton

Simon Upton chairs the Round Table on Sustainable Development at the OECD. The Round Table is a unique forum that brings together the key inter-governmental organisations dealing with sustainable development issues along with ministers from both economic and environmental portfolios, NGO representatives and business organisations. Simon Upton has chaired the Round Table since its inception in 1998. In addition to his work at the Round Table, Simon Upton is a board member of the International Research Institute for Climate Prediction at Columbia University, NY, and a member of the Eminent Person's Group leading the IISD's global initiative on subsidies.

Michael W. Lodge

From 1996 to 2004, Michael Lodge was the legal adviser to the International Seabed Authority. Prior to joining ISA, he was Legal Counsel to the South Pacific Forum Fisheries Agency, based in Honiara, Solomon Islands, and was one of the key participants in the UN Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks from 1993 to 1995. He was also the Executive Secretary of the Conference for Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific, which concluded with the adoption of the Honolulu Convention in 2000, and served as the Head of the Interim Secretariat for the Preparatory Conference for the Western and Central Pacific Fisheries Commission from 2001 to 2004.

Michael Lodge has worked as a consultant on fisheries and international law in Europe, Asia, Eastern Europe, the South Pacific and Africa and has written widely on fisheries, the marine environment and deep seabed mining. He is associate editor of Volume VI of the prestigious University of Virginia Commentary on the UN Convention on the Law of the Sea, which covers the deep seabed mining provisions of the Convention and the 1994 Agreement relating to the Implementation of Part XI of the Convention.

Frank Meere

Frank Meere has extensive fisheries policy and management experience. In 1990 Frank Meere joined the Australian Government Fisheries Policy Statement Implementation Team where he took prime responsibility for the drafting and passage of legislation to establish the Australian Fisheries Management Authority (AFMA) and implement wide ranging new fisheries management arrangements. From AFMA's establishment in February 1992 until November 1998 he served in the key senior positions of Executive Secretary to the Board, General Manager Corporate Services, General Manager Strategy and Planning and General Manager Fisheries. In this last position he was responsible for the development and implementation of fisheries management plans and policies for domestic fisheries and for Australia's involvement in international fisheries. He then became Managing Director of AFMA until December 2003, when the Australian Government announced that, as part of the Australian Government commitment to the Task Force, it would provide Frank Meere's services to the secretariat.

Prior to his time in fisheries, Frank Meere worked for a number of other Australian Government departments and agencies including the Industries Assistance Commission, and the Departments of Industry and Commerce and Primary Industries and Energy. Frank Meere has a strong interest in natural resource management and in particular the important role economics plays in effecting desirable resource management outcomes.

Karla Gutierrez

As webmaster and administrative assistant to the secretariat Karla has been responsible for graphic layout and development of the Task Force website as well as handling the principal administrative needs of the secretariat. With a degree in journalism and communications from the Metropolitan Autonomous University of Mexico City, obtained in 1998, Karla has worked mostly in the private sector in the areas of web design, marketing, communications and publicity, in both Mexico and France. Karla joined the OECD in February 2004.

ACKNOWLEDGEMENTS

A great many people contributed to the preparation of this report and to the development of the initiatives set out in the action plan. It would be impossible to name them all, especially the many officials in Task Force member countries and organisations who worked closely with the secretariat to develop this report and, more importantly, the action plan to implement the recommendations and proposals of the Task Force.

Nevertheless, we wish especially to express gratitude to all those who volunteered to serve, in their individual capacities, as members of the expert groups set up to advise and assist the secretariat. We particularly thank the coordinators of those groups, Ms. Michele Kuruc (Enforcement issues), H.E. Gudmundur Eiriksson (Legal issues), Dr. Keith Sainsbury (Science issues) and Prof. Geoffrey Heal (Economics and Trade issues). We also thank the members of the expert groups: Mr. Alejandro Covarrubias, Mr. Austin Jones, Mr. Marcel Kroese, Mr. Terje Løbach, Mr. Richard McLoughlin, Dr. Denzil Miller, Mr. Eugene Proulx, Mr. Stephen Stuart and Mr. Michael Sutton (Enforcement); Dr. Jorge Berguño, Prof. Robin Churchill, Prof. Moritaka Hayashi, H.E. Satya N. Nandan and Mr. Olav Schram Stokke (Legal); Prof. Rashid Hassan, Mr. Barry Kauffman, Mr. Carl-Christian Schmidt, Mr. Vangelis Vitalis, Prof. James Wilen and Ms. Anna Willock (Economics and Trade); Prof. John Beddington FRS, Prof. Douglas Butterworth, Dr. Andrew Constable, Dr. Simon Cripps, Dr. Alain Fonteneau and Prof. Andy Rosenberg (Science). All gave generously of their time and expertise and their comments, practical suggestions and collective wisdom were greatly appreciated by the Task Force. It goes without saying that they are in no way to be held responsible for the shape or content of the final report.

Others who contributed to the development of the ideas contained in the report, or who acted as consultants to the secretariat include: George Barclay and Albert Bergonzo at Equasis, Trevor Downing at Lloyd's Register, Poseidon Ltd. (UK), Dr. David Agnew, Marine Resources Assessment Group (MRAG), Dr. Norm Geddes (Qinetiq Ltd.), Cathy Roheim, Jon Sutinen, Dr. Talbot Murray, Andrew Serdy, David Carter, Martin Exel, Lee Kimball, Erik Jaap Molenaar, Paul Ortiz, Ocean Law Information and Consultancy Services Ltd., David Balton, Rebecca Lent, Mary Harwood, Carl-Christian Schmidt, Anthony Cox, Ingrid Kelling, Robert Gallagher (Navigs s.a.r.l.), Katherine Short (WWF), Jessica Battle and Nikki Meith.

Finally, we acknowledge the OECD, which made it possible for the Task Force to be hosted by the Round Table on Sustainable Development at the OECD.

Funding for the High Seas Task Force was provided by members of the Task Force and a number of other supportive bodies, including philanthropic bodies and the European Union. The Task Force wishes to specifically acknowledge the generous contributions of the David and Lucile Packard Foundation and the Oak Foundation. Their support for this novel approach to address a major environmental issue is appreciated.

CHAPTER 1

Where this all started

The problem of illegal fishing is scarcely new. Fish do not respect the artificial boundaries imposed on them by mankind. That may not have mattered when the equipment available was little more than hand-made hooks and nets dangled from hand-made boats. But the advent of modern industrial fishing techniques has changed all that. The sheer power of modern fishing technologies poses a challenge even for a rigorously controlled fishery. Deploying this fishing power in contravention of the rules – or where there aren't any rules – can have devastating impacts.

Between 1960 and 2002 capture of wild fish for human consumption soared from 20 million tonnes to 84.5 million tonnes.¹ It is estimated that more than 40 per cent of this annual fish production enters international trade. Millions of people worldwide depend on fisheries for work and millions more for food. For many developing countries, fisheries offers one of the few easily accessible opportunities for economic development.

The gravity of the global fisheries problem should not be underestimated. The current level of exploitation is unsustainable. Years of overfishing are leading inexorably to an impending crisis for global marine fisheries. The collapse in the 1990s of valuable cod stocks in the Northwest Atlantic and pollock stocks in the Bering Sea demonstrated the catastrophic effects of failure to manage fisheries in a sustainable manner. Despite this, even in areas where strong management arrangements are in place, stocks continue to be overfished or at best are only being slowly rebuilt. In 2004, the UN Food and Agriculture Organisation (FAO) reported that in twelve of its sixteen statistical regions at least 70 per cent of fish stocks are fully exploited or overexploited, strongly suggesting that the global potential for marine capture fisheries has been reached. (Box 1)

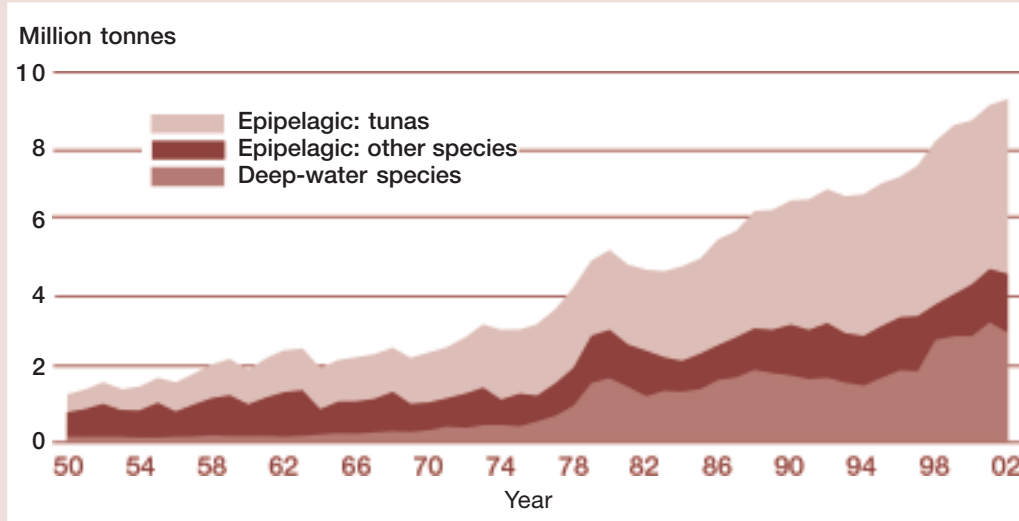
This situation has been reached in part as a result of legal fishing and has led to a frenzy of international activity to try to improve fisheries conservation and management. In recent years, however, something called “Illegal, Unreported and Unregulated” or “IUU” fishing has invaded international discussions. In a field already thick with jargon and acronyms, the term “IUU fishing” has become shorthand for a quasi-legalistic definition of something even worse: deliberately irresponsible fishing that hastens the decline of fish stocks everywhere.

Just what is IUU fishing?

A detailed account of the evolution of the term IUU fishing is contained in Appendix 1. At its broadest, **illegal fishing** takes place where vessels operate in violation of the laws of a fishery. This can apply to fisheries that are under the jurisdiction of a coastal state or to high seas fisheries

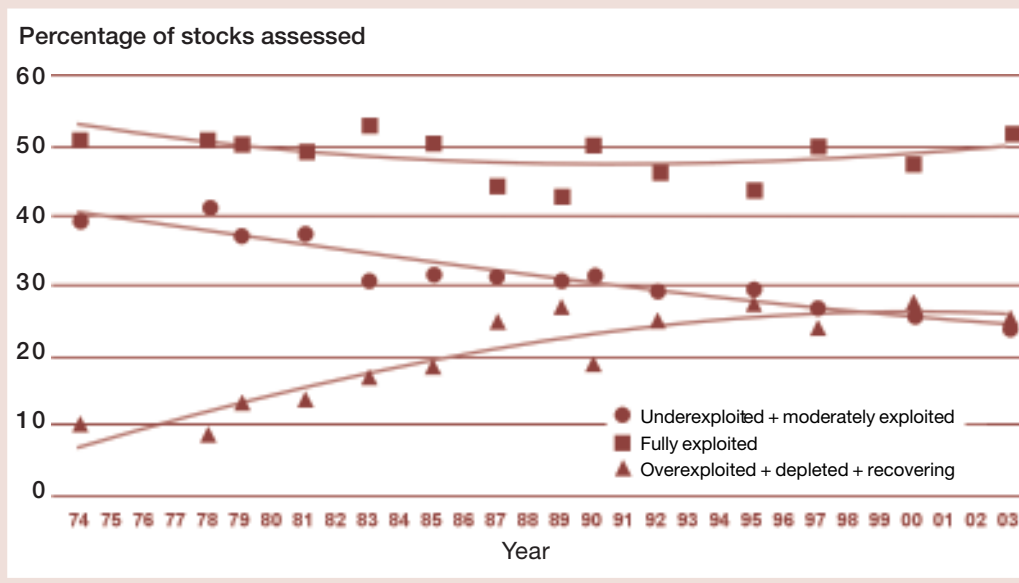
Box 1. Global catches and trends in oceanic stocks

World catches of oceanic species (epipelagic and deep water) occurring principally in high seas areas



As well as monitoring the catches, FAO monitors the state of exploitation of the main fish stocks or groups of resources for which assessment information is available. According to its most recent report on the State of World Fisheries and Aquaculture (FAO, 2004), the current global situation follows a general trend observed in previous years. About half of global fish stocks (52 per cent) were fully exploited, while approximately 25 per cent were overexploited, depleted or recovering from depletion. From 1974 to 2003 there was a consistent downward trend in the proportions of stocks offering potential for expansion. But at the same time there was an increasing trend in the proportion of overexploited and depleted stocks, from about 10 per cent in the mid-1970s to close to 25 per cent in the early 2000s. The percentage of stocks exploited at or beyond their maximum sustainable levels varies greatly by area. However, in 12 of the 16 FAO statistical regions at least 70 per cent of stocks are already fully exploited or overexploited, suggesting that that, despite local differences, the global potential for marine capture fisheries has been reached. In most cases overfishing has been a main contributory factor and in some cases this has been associated with adverse or highly variable environmental conditions.

Global trends in the state of world marine stocks since 1974



Source: FAO, *SOFIA report 2004*

regulated by regional organisations. It can entail fishing with no authorisation at all, where these are required, or fishing in contravention of established rules. It covers members of regional organisations who violate the agreed rules. **Unreported fishing** is fishing that has been unreported or misreported to the relevant national authority or regional organisation, in contravention of applicable laws and regulations. **Unregulated fishing** generally refers to fishing that is conducted by vessels without nationality, or vessels flying the flag of a country that is not party to the regional organisation governing the particular fishing area or species. Unregulated fishing can also relate to fishing in areas or for fish stocks where there are no conservation and management measures in place.

It has to be acknowledged that, while there are clear distinctions between fishing that is illegal, unreported or unregulated, there are also overlaps and the different categories of IUU fishing share many common characteristics. For the purposes of this report the primary distinction to draw is between regulated high seas fishing (which may still be illegal or unreported) and unregulated high seas fishing (which may be unreported but is not necessarily illegal). In both cases, there may be “knock-on” effects of high seas IUU fishing in areas under national jurisdiction.

Of course, the strain on fish stocks is not all due to IUU fishing. There is an overriding global problem of overfishing. High seas fishing problems are in many cases spillovers from inadequate fisheries management at the national level. The causes of unsustainability in fisheries are many and complex, including overcapacity, inappropriate subsidies and poor management² – not to mention the effect of other human activities in the oceans. What is clear, however, is that the presence of IUU fishing further undermines efforts to conserve and manage fish stocks. It is damaging to the economies and food security of coastal states, particularly developing coastal states; and it wreaks havoc not just on the target species being pursued, but with the wider ocean ecosystem.

There has been a tendency to group all the elements of IUU fishing into a single phenomenon. To do this is misleading. IUU fishing is rarely a single type of activity and the actual fishing part of it is often the least difficult element to deal with. A more accurate description of the problem would draw in the entire range of economic transactions associated with catching fish and bringing them to market, from investing in and operating fishing vessels to transshipping catches internationally and selling them on world markets. Dealing successfully with the problem of IUU fishing on the high seas requires consideration of all facets of high seas fisheries management including access arrangements and allocations, stock assessment, scientific and economic research, the institutional structures by which decisions are made and disputes settled, and the full array of enforcement activities.

While this report focuses on IUU fishing on the high seas, it has to be recognised that the boundaries of IUU high seas fishing cannot be rigidly drawn. Those who engage in fishing that is illegal, unreported or unregulated are likely to do so anywhere. The reality is that IUU fishing operations are not respectful of boundaries. Neither are the effects of their activities. So, while the focus of the Task Force has been on the high seas, the analysis contained in this report does not pretend there is some artificial boundary between the effects of IUU fishing on the high seas and in areas under national jurisdiction.

This report is an attempt by a small group of fisheries ministers, together with partners from the non-governmental sphere, to develop an action plan that will bring practical leverage to bear on the problem of IUU fishing. The objective was to crystallise the international debate on the causes and effects of IUU fishing on the high seas and then to take the lead in promoting a practical, interlinked set of solutions to this complex global issue.

What led to the establishment of the Task Force?

Over the last decade a huge amount of diplomatic energy has gone into trying to address the problem of IUU fishing. A complex and evolving web of binding and non-binding international instruments aimed at IUU fishing has been constructed. This body of hard and soft law is largely built on the foundations established by the 1982 United Nations Convention on the Law of the Sea. Chief amongst these instruments (we shall meet all these again in more detail in Chapter 3) are the 1995 UN Fish Stocks Agreement (UNFSA), the FAO Code of Conduct for Responsible Fisheries (including the FAO Compliance Agreement) and the FAO International Plan of Action to Prevent, Deter and Eliminate IUU Fishing (IPOA-IUU).

Each of these instruments is an attempt to elaborate the limited (and very general) provisions of the Law of the Sea Convention that deal with the conservation and management of high seas living resources. The result is a patchwork quilt of measures with differing geographical and legal reach and different levels of participation by states. But while the effect of these instruments may have been to reduce and change the nature of grossly unsustainable high seas fishing they have not stopped it. IUU fishing is often simply displaced to new locations. Those engaged in these activities continually manage to elude new controls by changing flags and vessel identities or hiding behind impenetrable front companies.

One of the key difficulties throughout has been to gather the necessary political leadership needed to carry internationally agreed targets and declarations into effect. This has been reflected in a lack of willingness on the part of some states to participate in multilateral arrangements or, when they do, to do so without any deep sense of commitment – a phenomenon by no means confined to fishing. The 153 paragraphs that emerged as the Johannesburg Plan of Action from the 2002 World Summit on Sustainable Development make repeated reference to the need to fulfill previously agreed commitments.

It was the uneven and sometimes ambivalent nature of political leadership that led the Round Table on Sustainable Development at the OECD³ to focus on just one of the many items contained in the Johannesburg Plan. A meeting of fisheries ministers at the Round Table in June 2003 was invited to review progress and discuss how best to bring leverage to bear on a global problem which lay beyond the enforcement capabilities of any one country or even any single regional or international agency.⁴

The upshot was a decision by a small number of ministers to take the lead in promoting some practical solutions. Their aim was not to undercut multilateral processes. But their logic was that if there is a place for the slow, painstaking negotiation of international accords (that must, inevitably advance at the pace of the most reluctant party), so too is there a place for initiatives by those who wish to take the lead and make progress in the meantime. Together with partners from the non-governmental sphere, six ministers (from Australia, Canada, Chile, Namibia, New Zealand and the United Kingdom) decided to establish a Task Force to advise them and finalise an action plan. Their brief was to approach the phenomenon of IUU fishing in the round by standing outside the usual institutional and diplomatic boundaries and focusing instead on all its aspects – economic, criminal, legal, scientific and environmental.

Right at the outset, the ministers spelt out the criteria by which they wished to measure the Task Force's success. The brief was to open the way to direct political peer pressure. As a starting point, the ministers wanted a report that would rapidly become the point of reference for anyone wanting to enter the debate on IUU fishing in the future. They wanted a set of practical initiatives to reduce IUU pressures that they could immediately set about implementing. And they wanted recommendations with which they could directly and personally engage their political counterparts. The proposals developed by the Task Force reflect this mandate.

What is the scale of the problem?

Any attempt to quantify the scale of the IUU problem faces formidable obstacles. Most obviously, the people who fish illegally and in breach of regional and international management regimes don't report their catches for the convenience of official statistics. Estimates of illegal and unreported fishing are therefore extremely hard to come by. There may be some reports for unregulated fishing but we know that they are incomplete. At the same time our understanding of fish stocks and their dynamics is by no means complete. The extent of our lack of understanding is compounded if we bear in mind that most of the IUU fraction of the catch cannot be taken into account in scientific assessments. The IUU fish harvest is thus an unknown percentage of an ill-defined resource.

To get a better idea of the scale of the IUU catch worldwide, the Task Force sought an informed estimate of its likely level.⁵ The resulting analysis suggested that the global value of IUU fishing lies somewhere between USD 4.2 billion and USD 9.5 billion. The portion of this that can be directly attributed to IUU fishing on the high seas amounts to some USD 1.25 billion. The most important species targeted on the high seas are tunas, billfish, sharks and deep-water species such as roughy, alfonsino and redfish, toothfish and squid.

Table 1. Estimates of annual value of high seas IUU catches

	Species group	IUU annual value (\$m estimated)	Legitimate fishery annual value (\$m estimated)	Gears used	Areas
Tunas and tuna-like fish	bluefin	33		pelagic longline	Southern Pacific and Indian Oceans
	skipjack, yellowfin, albacore, bigeye	548		pelagic longline, seines	worldwide
Sharks	sharks	192		pelagic longline	worldwide
Groundfish	toothfish	36	427	demersal longline	Southern Ocean
	cod high seas	220	1,872*	bottom trawl	North Atlantic
	redfish	30	274	bottom/semi-pelagic trawl	North Atlantic
	orange roughy / alfonsino	32	453	bottom/semi-pelagic trawl	Southern Indian and Pacific Oceans
Other pelagic resources	jack mackerel	45		seines and pelagic trawls	Southeast Pacific
	squid	108		jig	South Atlantic and Pacific
Total		1,244			

* Estimated from FAO 2003 catches of Atlantic cod (incl. high seas)

These statistics do not tell the whole story, however. They do not, for instance, take into account the direct and indirect effects of high seas IUU activities on the waters of coastal states, particularly developing countries, in terms of lost fishing opportunities. When countries lack the resources to police their own waters, IUU fishermen are quick to move in and exploit the situation. Unregulated and unreported fishing is also rampant adjacent to the coastal waters of many developing states, further undermining effective management of transboundary stocks.

In 2001, an aerial survey of Guinea's territorial waters found that 60 per cent of the 2 313 vessels spotted were committing offences.⁶ In Tanzania, it is estimated that illegal incursions into the exclusive economic zone by high seas tuna longliners resulted in lost revenue of some USD 20 million in 2001. For Sub-Saharan Africa as a whole, the cost of illegal fishing is estimated at about USD 0.9 billion (about 19 per cent of current landed value).

Ecological impacts

Neither do the bare statistics tell us anything about the ecological impacts of overfishing and its effect on biodiversity. These impacts are both direct and indirect. Fish and other species that aren't being targeted but get caught along with wanted species are given the innocuous sounding name of "bycatch". The effects on the populations of these species can be significant. The direct effects of bycatch have been highlighted for species of particular concern such as sea birds, turtles and dolphins, but there is equal concern for low productivity, slow-growing species such as sharks and rays.⁷ Modelling studies have shown that over-exploitation of apex predators such as cod and sharks is likely to lead directly to population changes in species at lower trophic levels in the food web. Fishing gear and practices can also destroy important habitat of target species and their prey, undermining productivity and biological diversity.

Mitigation measures aimed at reducing ecological impacts from bycatch have been imposed by several regional fisheries management organisations (RFMOs)⁸, notably for seabirds, but further efforts are needed to reduce these impacts in many regions. Those that exist are generally in the early stages of implementation. IUU fishing further reduces their effectiveness.

Effect on the target species

The ecological impacts of IUU fishing are fairly self-evident. But an equally important cost of IUU fishing is the increased uncertainty introduced into stock assessments and any fishery impact evaluation by RFMOs. The absence of reliable estimates of total extractions means that the effects of IUU fishing cannot be usefully gauged in stock assessment models. Thus, a management authority may not even know that a stock is in danger until it is in a poor state. It is very difficult to set appropriate catch or effort limits if the IUU portion of the catch cannot reliably be estimated.

Failure to set appropriate limits has obvious implications for the sustainability of stocks. In the case of fisheries for straddling and highly migratory stocks,⁹ it can also lead to a vicious downward spiral of management problems for fisheries within national jurisdictions. This has been observed in the groundfish fisheries on the nose and tail of the Grand Banks,¹⁰ and in the case of tuna and other pelagic species that pass through the waters of many coastal states.

If RFMOs are to meet their conservation and management objectives then it is implicit that members must assess the extent of any IUU fishing and adjust conservation measures to compensate for this take. They need to adopt more cautious measures (e.g. lower total allowable catches (TACs)). The result, however, is that it is legitimate fishers who bear the burden of IUU fishing.

Economic and social costs

IUU fishing imposes significant economic and social losses. In the case of high seas fisheries, the primary economic impact of overfishing, including that due to IUU fishing, is a long-run shrinkage of the common resources available to all stakeholders. More directly, the effect of IUU fishing on legal fishers translates into increased costs, lower employment, lower incomes and lower export revenues. Fish caught by both IUU fishers and legitimate fishers are sold on the same markets, but legitimate fishers pay the higher operating costs supporting fisheries conservation and management measures. This results in a basic inequity between those who play by the rules and those who break them. IUU fishers are free riders who benefit from the sacrifices made by others, thereby undermining legitimate fishers and encouraging them to disregard the rules as well.¹¹

There are also social costs associated with IUU fishing. On the one hand, IUU fishing adversely and directly affects the livelihoods of fishing communities, particularly in developing countries, by undermining the stocks on which they depend. On the other hand, IUU operators readily take advantage of an endless supply of unskilled labour desperate for income. Rarely subject to effective control by a responsible flag state, they have no incentive to meet international standards on maritime safety and working conditions on ships. There is ample scope to ignore international human rights norms; including abandonment of crew in foreign ports and forced labour.¹²

The case of the Sao Tome and Principe-flagged longliner, *Amur*, provides a graphic, but by no means atypical, illustration. *Amur* left Punta Arenas in October 2000 with a crew of 40 Korean, Spanish, Peruvian, Danish, Indonesian and Chilean nationals on board. The vessel was known to be unseaworthy and most crew members had neither proper contracts nor insurance cover. A few days later *Amur* sank in heavy seas while illegally fishing for toothfish in the exclusive economic zone of the French overseas territory of Kerguelen Island. Fourteen of the crew, including seven Chilean nationals, drowned.¹³

How to approach the problem of IUU fishing

The persistence of IUU fishing on the high seas, even in areas where management arrangements are relatively strong, highlights the fact that IUU fishing is, first and foremost, an economic activity which is likely to continue as long as the rewards are there. There have been numerous analyses of the causes of the problem.¹⁴ It is clear that the drivers of IUU fishing are primarily economic. They include overcapacity in the world fishing fleet, the strong market demand for fish, the economic and social conditions of fishers, the low level of sanctions and the low likelihood of being caught.

Alongside these economic incentives, IUU activities are facilitated by a number of well-documented shortcomings in national and international controls. These include the failure of some flag states to fulfill their responsibilities, insufficient monitoring, control and surveillance, and inadequate penalties and deterrents.

This suggests that even where the political will exists to implement the agreed governance framework, measures – to be effective – need to target the economic foundation of the activity. The key is to link the illegal or unregulated high seas activity to some other activity over which coastal states do have jurisdiction, for example, by applying restrictions on trade in IUU product or by using port state jurisdiction to deny access to ports and to detain and sanction IUU vessels. The fundamental problem, however, is that the global nature of the IUU problem means that it is beyond the enforcement capabilities of any one country or even any single regional or international agency to bring the offenders to heel.

To date, most efforts to achieve sustainable management of high seas fisheries have been confined to regional cooperative initiatives. The effectiveness of this approach relies on two bold assumptions: first, that the legal framework creates appropriate incentives for cooperation between states, and second, that states that have already signed up to the legal framework take seriously their obligations to cooperate to conserve and manage high seas fish stocks and to exercise control over vessels flying their flag.

No enforcement regime will completely eliminate criminality. Even in well-regulated and policed communities, we can expect a background incidence of unreported crime. Traditional enforcement aimed at reducing the opportunities to commit crime eliminates most criminal activity but tends to displace a certain level of crime to other places or activities. People live with a continuous degree of non-compliance that reflects both the limits (human and financial) of enforcement and social tolerance of delinquency. If this is often higher than citizens would ideally like within their territories, the challenges of enforcement in the marine environment and the limitations imposed by international law mean that the background level of crime on the high seas is likely to be very much higher.

The structure of this report

The logic of the Task Force's approach has been twofold. Firstly, it has developed a concise action plan that will allow its members to bring direct leverage to bear in a "joined-up" way. Secondly, it has laid out its analysis in a way that members hope will lend new impetus to current multilateral processes.

Most analyses of the IUU fishing problem start with a description of the rules of international law that establish the regulatory framework for governance of the high seas. This report takes a different approach.

The report begins in Chapter 2 with a description of what actually happens in the real world, focusing on the sort of ploys that are used by IUU fishers to avoid compliance and the loopholes in current enforcement systems that enable them to avoid detection and capture. Chapter 3 describes the theory of the global regulatory system that is supposed to provide for effective governance and control over the high seas and then identifies the gaps in the system, explaining how outcomes in practice fall well short of what in theory is supposed to be achieved.

Chapter 4 begins by explaining the rationale behind the measures proposed by the Task Force and demonstrating how they fit together to form a coherent action plan. Each of the specific proposals is then elaborated in more detail.

CHAPTER 2

How do they do it and how do they get away with it?

“If a path to the better there be, it begins with a full look at the worst.” – Thomas Hardy

At its worst, IUU fishing on the high seas is a classic type of international environmental crime. It shares many characteristics with other outlawed trans-border activities such as the trades in illegally logged timber and endangered species, and the illegal movement and dumping of waste products.

Unlike more traditional forms of predatory crime, these international environmental crimes are typified by loosely organised networks of individuals with specialist knowledge of the area in which they work.¹ The focus of criminal activity is on inserting illegal product into the chain of supply that links producers, processors, retailers and final consumers. Within this chain may be identified activities such as the co-mingling of legal and illegal catches, the vertical integration of fishing businesses to facilitate money-laundering, the falsification of documentation and the bribery of officials. As usual where profits are high and risks low, specialists learn how to take advantage of paper controls and how to influence regulatory decisions to create loopholes that can then be profitably exploited. While these activities are loosely organised, there is rarely a single entity directing the work of a unified network. This poses considerable challenges for law enforcement agencies who have to put together a jigsaw of clues from widely dispersed activities that are closely merged with perfectly legal operations.

The ultimate victim of environmental crime is society at large which depends on healthy functioning ecosystems and the services they provide for a wide range of social and economic activities. But the damage is often so diffuse (at least until it has reached crisis levels) that those who make the case for rigorous enforcement find it hard to prevail. Too often it is assumed that, because problems are not quantifiable, they are not significant. As a result, inadequate institutions and regulatory regimes are left untouched, providing a false sense of security. Typical weaknesses include regulations that fall short of implementing internationally agreed rules, contain loopholes or simply fail to have the necessary deterrent effect.

Even when the rules themselves are adequate, a lack of resources, untrained staff or cumbersome administration may prevent the effective operation of domestic and international laws and regulations. Corruption may also be an important factor everywhere, but it is a factor which is

particularly evident in some developing countries where the remuneration of enforcement officers and bureaucrats is poor and civil society weaker. Illegal trade flourishes even more easily where civil strife and the breakdown of government (as in Somalia and Sierra Leone for example²) render governments incapable of fulfilling their treaty obligations.

Poachers or pirates?

One of the biggest obstacles to tackling IUU fishing is the breadth of activities that it encompasses. For most lay people, IUU fishing is synonymous with straightforward poaching. This usually takes the form of fishing without a licence in an exclusive economic zone. It may be carried out by national or foreign vessels. These might be completely unlicensed vessels, or vessels licensed to fish in an adjacent area that have crossed the boundary into an area where they are not licensed. But illegal fishing may equally involve vessels fishing in areas for which they hold valid licences. Here, the illegality flows from breaches of the rules governing the way in which fish are caught. It might be the use of banned gear, catching fish over the allocated quota, fishing in closed areas, exceeding bycatch limits or failing to report accurate data.

Licensed vessels are not generally regarded as pirates or poachers in the way that unlicensed operators are and illegal activities in this category are usually seen as being qualitatively different from unlicensed poaching. Nevertheless, fishing in contravention of fisheries management rules can be just as damaging for fish stocks and the environment as fishing without a licence.

The sort of IUU fishing that is the focus of the Task Force's concern is fishing on the high seas in contravention of conservation and management controls set by national authorities or by RFMOs, either by vessels flagged to members of the RFMO or, more frequently, by vessels flagged to non-members in an attempt to evade controls. Even within these categories, there are clear differences in the criminal constituencies involved and in their attitudes to risk and incentives. In the case of high-value Patagonian toothfish, for example, there are differences in the risks that are run – and the way they are run – by the owners of expendable rust-buckets compared to the risks run by the owners of the expensive reflagged or purpose-built deep-water vessels that have latterly come to dominate the IUU fishery.

The “toothfish pirates”

The operating methods of the so-called toothfish pirates were exposed in 2003 by COLTO – the Coalition of Legal Toothfish Operators. COLTO's investigation revealed the existence of sophisticated syndicates aimed at maximising profits and spreading risks in the pursuit of illegal activities.³ Multi-layered business arrangements ensure that fishing operations can be directed from afar by corporations set up specifically to service the fleet, organise transshipments and ensure that the fleet is kept permanently on station in the Southern Ocean. These corporations are in turn controlled by syndicates which purchase the fish through exclusive marketing arrangements, allowing them to launder illegally caught fish by mixing them in refrigerated containers with legal product or on-selling them through legitimate trading relationships, mostly into mainland China, Japan, the United States and Europe. The high market value of Patagonian and Antarctic toothfish (commonly known as Chilean sea bass in the United States, its largest market) coupled with the low risk of either capture or heavy fines mean that illegal fishing can be between two and eight times more profitable than legal trade in these species. The regulatory body, the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), estimated that in 2002, the IUU catch of toothfish in the CCAMLR Convention Area actually exceeded the legal catch. In the last two years, as a result of robust and effective counter-action by CCAMLR members, including increased surveillance, the IUU catch in the toothfish fishery is estimated to have been reduced to something like 15 per cent of the total catch.

Tuna laundering

It is not only in the Southern Ocean that such methods have been applied. Investigations by Japan into imports of frozen tuna into the Japanese market have revealed widespread laundering of illegally caught catches from the Atlantic, Pacific and Indian Oceans.

In July 2004, the Japanese authorities arrested the freezer cargo vessel *Lung Yuin* (flagged to Panama, but operated by a Taiwanese company) for violation of reporting requirements. The vessel had entered port in Japan in order to offload frozen tuna caught and transshipped by 28 Taiwanese large-scale tuna longline vessels. Investigations revealed that all these vessels had submitted false information concerning either fishing areas, vessel names and authorisations or transshipment positions and dates. Two logbooks (one true and one false) and other evidence collected onboard the cargo vessel disclosed an organised operation that involved both the fishing vessel owners and operators, and the operators of the cargo vessel.⁴

These sorts of techniques enable IUU operators to disguise, for example, Atlantic or Pacific bigeye tuna (which are under threat from overfishing) as Indian Ocean bigeye, as well as allowing IUU operators to mingle unauthorised catches with legal catches. In September 2004, an inspection of the tuna transshipment vessel *Suraga No. 1* by the Fisheries Agency of Japan revealed that tuna carried by the vessel caught in the Atlantic was reported as taken from the Indian Ocean.⁵ A similar inspection of a Chinese tuna longliner in November 2005, using DNA analysis, revealed that 148 tons of tuna imported to Japan as Pacific bigeye tuna had in fact originated in the Atlantic.⁶

What are the failures of enforcement that enable IUU activity to thrive?

The realpolitik of negotiating treaties and the fragmentation of responsibilities between institutions and levels of governance often means that the root causes of environmental crimes are not properly addressed. One size does not fit all and regulations imposed by treaty frequently contain loopholes that directly facilitate illegal behaviour. A more fundamental problem is that signatories to multilateral treaties must transfer the provisions of the treaty into domestic law and apply sufficient resources to their effective administration and enforcement.

Sadly, but undeniably, countries often sign up to controls but fail to pass adequate laws or assign sufficient funds for their effective implementation. This can apply as much to wealthy developed countries as it does to countries who have at least the excuse of limited resources. Responsibilities for the implementation of controls may be allocated to an agency that is already overloaded with work. What one set of officials can negotiate may be beyond the realisation – or will – of those who must implement them. Even where domestic law is adequate, a basic lack of resources can cripple efforts to control IUU fishing. Where bureaucrats and enforcement agents are poorly trained, under-resourced or simply inefficient, the problems are compounded.

Even in well-resourced countries, customs, police and other enforcement personnel may not be aware of the fisheries problem: customs tend to give a higher priority to other contraband such as drugs and arms while the police tend to focus on predatory offences such as robberies and violence. Links between fisheries, customs and police authorities, even working in the same jurisdictions and ports, are not always as good as they should be.

There are particular constraints where administrative regimes vest the authority to regulate and the authority to enforce the rules in different authorities. The situation in the EU illustrates these complexities. The Union holds the basic regulatory powers over the management of fishing

activities in EU waters and the discipline that EU vessels must comply with when operating beyond EU waters. The latter confers on the Union the power to negotiate and accept conservation and control measures at the international level. However, actual enforcement, including prosecution of breaches, remains a competence and a responsibility of individual member states. This system therefore requires a significant investment at all levels to ensure appropriate follow-up to international measures and consistency of action throughout the EU membership. The EU has recently set up a dedicated Fisheries Control Agency to reinforce its capacity to coordinate such activities and ensure that both high seas and domestic enforcement is effective.

But beyond all of this, traditional law enforcement rarely addresses the supply and demand pressures that shape profit-making opportunities. IUU fishing is a high reward, low risk activity. For every illegal fisher that is apprehended, another one will appear. In the Southern Ocean, for example, organised syndicates play cat and mouse with authorities. The movements of patrol boats are monitored by spies and reported to the illegal fleet. Communication between vessels of the same fleet is kept to a minimum to avoid detection. If an interdiction is inevitable, older, less valuable, vessels are sacrificed to protect more valuable ones. Ownership structures involving multiple front companies are used to keep details from boat crews as well as authorities. Operational instructions for the illegal fleet are passed down through front companies with vessel masters often not knowing who their real employers are.

Surveillance and enforcement is costly

Governments invest huge sums of money in physical surveillance of EEZs using conventional platforms such as patrol vessels and aircraft. Australia, for example, which has the third largest exclusive economic zone in the world,⁷ recently allocated USD 163 million over five years for a full-time armed patrol boat presence – the *Oceanic Viking* – which is used, amongst other things, to patrol the waters around the remote Sub-Antarctic possessions of Heard Island and McDonald Island.⁸ It is estimated that it costs Canada approximately USD 26 million annually to deliver the operational monitoring, control and surveillance programmes associated with the NAFO Regulatory Area. The overall cost of monitoring fishing activities in the EU and its member states amounts to some USD 362 million, which is about 5 per cent of total landings. The cost of monitoring EU vessels in the NAFO Regulatory Area alone amounts to some USD 4.8 million, or 7 per cent of total landings.⁹

When it comes to physical surveillance and enforcement, most people think of fisheries patrol boats; purpose-built military or coastguard vessels sent out to intercept illegal fishing vessels. The problem is that fisheries patrol vessels are not only expensive, but of limited use on the high seas. The range of typical marine radar is limited to around 20 nautical miles. In comparison, an aircraft at an altitude of 7 500 metres can expect a radar range in the order of 200 nautical miles. Conventional sea and air surveillance can be made more effective if it is supplemented by remote sensing technologies such as sonar and satellite imagery, but these are all expensive. (Box 2)

There is also a limit to what conventional maritime surveillance can achieve. Physical apprehension of pirate fishers is, of course, the ultimate solution. But this is rarely possible for legal and practical reasons. Even if a patrol boat succeeds in intercepting a fishing vessel, the physical challenges of conducting a boarding at sea are immense. Few commanders will risk the lives of their personnel to conduct a hostile boarding in adverse sea conditions.

But is more money the only answer?

Since environmental crime is nearly always prosecuted by the state, the adequacy of state level surveillance and enforcement is critical. For those charged with the enforcement of fisheries laws, there is a real question as to whether the resources will ever be enough given the increasing

Box 2. Some new and emerging surveillance technologies

The Task Force commissioned a study of some of the new and emerging technologies that could be used to detect fishing vessels at sea (Geddes et al., 2005). The technologies with the highest potential useful capability to detect IUU fishing on the high seas include:

Airborne surveillance

In recent years, there has been a trend in military aerial surveillance towards unmanned air vehicles or drones. These are capable of extreme long-range operations in hostile environments without risk to aircrew. Costs are presently high, but it is likely that they will decrease once unmanned air vehicles become more widely available for commercial and scientific use.

Over the horizon radar (OTHR)

OTHR is already in widespread use for surveillance and is capable of providing long-range detection capability at ranges of up to 2 500 nautical miles. One of the major benefits of OTHR is that it provides real-time information which can readily be used to vector a patrol boat onto a target. Systems are not adversely affected by weather, but are vulnerable to changes in the state of the ionosphere and surface clutter. The major impediment to more widespread use at present is cost, which may range from € 3 – 30 million.

Satellite imagery

Satellite imagery is already available on a commercial basis and can be used to provide high resolution images of selected areas of the ocean. Obviously, the higher the level of detail required, the smaller the area that can be imaged. Costs are not high compared to other technologies, and prices are expected to fall still further. However, since satellites are in pre-programmed orbit, real-time imagery is difficult to obtain and considerable forward planning is required. Cloud cover also provides a natural, and so far insurmountable, limit to the usefulness of satellite imagery.

Satellite-based synthetic aperture radar

Synthetic aperture radar (SAR) can provide all-weather imaging capability. As with conventional satellite imagery, it requires advance planning to coincide with satellite passes and data obtained will require processing before it can be used. Nevertheless, the technology provides strong capability for identifying vessels in all weather conditions at a reasonable cost. With RADARSAT-2 scheduled for launch in 2006, it is expected that enhanced imaging capability and shorter lead times will become available.

volumes of trade, the increasing complexity of operations and the sheer size of the maritime areas to be covered.

These physical efforts are supported by investigative networks on shore in which fisheries officers work with police, customs officers and prosecutors to collect and analyse information from apprehended vessels and other sources on potential illegal activities. Within national jurisdictions, these arrangements are often highly sophisticated and highly effective. The problem is that fishing is increasingly a cross-border activity. For governments to deal effectively with IUU fishing on the high seas they need to be able to monitor what is going on and where, both at sea and on land regardless of borders. They also need to be able to act decisively once they know of

suspected illegal activity. To do so, national authorities need immediate access to accurate and timely information on potential or suspected IUU activity and to have the means to share that information in real time with other national authorities.

A lack of effective information and feedback on enforcement efforts can lead to a misleading sense of security. In the absence of reporting, authorities may be tempted to assume that laws are being obeyed when, in fact, they may be being openly flouted. Further, the clear link between the level of investigative effort and the magnitude of problems discovered means that there are few incentives for poorly-funded agencies to look for trouble. Big problems consume large amounts of resources. Less investigation will reveal smaller problems and entail smaller claims on resources.

Over-reliance on technology

The rapid development of satellite-based tracking systems, or vessel monitoring systems (known in the trade as VMS) since the mid 1980s has had a major impact on the way in which fisheries are managed worldwide. Technology has become more affordable and the availability of the Inmarsat, Iridium, and Argos satellite communications systems globally, and the Euteltracs and Globalstar systems with more selective coverage, has created a competitive market for tracking vessels of many types. The public availability of the Global Positioning System (GPS) added a new dimension to positioning accuracy.¹⁰ In 2008 the European Galileo system is scheduled to go into operation and will provide additional capabilities. It is difficult now to find any major fishing nation that is not already advanced in its use of VMS. The perceived importance of the technology as a solution to problems of enforcement has led to its being referred to in many of the international fishery instruments and resolutions of the UN and FAO. In March 2005, for example, fisheries ministers at FAO declared that they would “renew their efforts” to ensure that all large-scale fishing vessels operating on the high seas be required by their flag state to be fitted with VMS no later than December 2008.¹¹

There is no doubt that reliable and accurate VMS, which provide fisheries authorities with accurate near real-time information on the positions of all licensed fishing vessels, can significantly improve the efficiency of protection and compliance activities. There is a growing file of documented cases in the United States, Australia, Canada and New Zealand where, with the assistance of VMS, vessels fishing illegally have been brought to justice. Fisheries officers in those countries have already observed a deterrent effect of VMS in that vessels participating in a VMS scheme would appear to be less likely to engage in detectable illegal activities, such as fishing in closed areas and seasons.

Nevertheless, VMS is not a panacea. It only provides information on the position, speed and course of vessels and is nothing more than a tool that can be used to enhance monitoring, control and surveillance in the broadest sense. It is, therefore, not an end in itself. Moreover, there are powerful reasons why the world should not complacently assume that ensuring VMS is fitted to high seas fishing vessels will necessarily reduce the level of IUU fishing.

Tampering with satellite data

First there is the question of security. It was inevitable that unscrupulous fishing vessel operators would in time find a way to corrupt the data transmitted by the VMS terminal in their vessels so as to undertake illegal fishing activities without fear of detection. This is much easier to do where, as in most cases, vessel operators are permitted to select the specific equipment that will be used on their vessels from a range of commercially available “off-the-shelf” models. Whilst security standards are in place in some countries and regions, which require equipment to be tamper-

proof, there are no global standards in place nor any code of practice on installation and implementation of VMS. A study carried out for the European Commission found only one-third of the commercially-available VMS terminals have fully integrated, tamper-resistant, navigation and communications systems.

Even though fisheries authorities appear to have so far managed to stay one step ahead of physical tampering with VMS, a new phenomenon emerged in 2001 that is far more disturbing. Fisheries authorities in Australia, New Zealand, South Africa and the French overseas territory of Réunion all either observed, or captured, vessels transmitting VMS positions that were at enormous variance with their real, physical positions. In one case, a vessel was observed reporting a VMS position as far as 3 000 nautical miles from its real position.¹²

Up to now, nearly all of these vessels have been involved in operations in the Patagonian toothfish fishery. Examination of the circumstances indicates that vessel operators have been able to block out the integrated GPS equipment and use a manual GPS, or a GPS simulator, to input false positions to the communications module of the VMS equipment. This type of data falsification is undetectable without physical observation of the vessel or physical inspection of the terminal. Investigations carried out for the Task Force¹³ confirm that ready-made kits designed to permit a vessel to input false positions to widely-available VMS terminals can be bought for as little as USD 2 500. The existence of openly commercialised kits of this nature would tend to indicate that cheating by data substitution is likely to be far more widespread than the few incidents that have been confirmed by the authorities.

Although action can be taken, and has been taken by some countries, to improve security and require type approval of new equipment, this is likely to take considerable time. The fact is that there is as yet no international standard for VMS and no way of ensuring that all VMS units are fitted to recognised security standards. With thousands of operational terminals already installed on fishing vessels, and lucrative returns available for those prepared to corrupt VMS data, it is likely that coordinated international effort will be needed if the potential for cheating is to be contained.

Data sharing

The second major area of difficulty with VMS relates to the use that is made of VMS data. In short, when it comes to high seas fishing, VMS data is only useful if it can be shared, in a timely manner, between flag states, coastal states and RFMOs. The UN Fish Stocks Agreement impliedly recognises this when it refers to the need for flag states to ensure that the requirements they impose on their vessels are compatible with regionally agreed surveillance programmes. But it falls short of imposing an outright obligation on flag states to do so. Unfortunately, there are remarkably few examples of exchange and sharing of data at the time of writing.

One example where there is widespread cooperation is the EU, where each member state routinely provides other member states with near-real-time position data on their vessels. Such cooperation has been extended to flag states whose vessels fish in EU waters, and to coastal states in whose waters EU vessels operate. Admirable as this initiative is, it is an unlikely model for the rest of the world because it comes about as a result of a transfer of sovereign regulatory powers from EU member states to the European Community under the EU treaties which establish the Common Fisheries Policy. In the South Pacific, on the other hand, even though the South Pacific Forum Fisheries Agency (FFA) early on developed what remains one of the most ambitious, and impressive, regional VMS programmes, the system has never reached its full potential because the institutional structure linking the FFA countries is, of necessity, much looser than the one that operates in the EU.¹⁴

All of this bears directly upon how the flag and coastal states that are collecting VMS data can organise their efforts to share what they have gathered. This is a fundamental question, as it is **only** timely availability of the data that will help to identify IUU vessels. Not surprisingly, there is broad agreement as to the desirability of sharing data. There is no overriding technical difficulty that should prevent it. The problem is to find an acceptable institutional framework through which data can be accessed and distributed. So far, with a few notable exceptions in the North Atlantic,¹⁵ major flag states have shown a marked reluctance to consider the only two realistic institutional approaches to the problem – distribution and exchange through a centralised clearing house, or a network of regional organisations. Commercial confidentiality or flag state responsibility are lamely cited as the impediments.

Weak port state controls

Ports are the first point of entry into the landmass of a state for persons and goods. They are therefore a logical point of control to verify if visiting foreign ships have engaged in illegal activity in the port state's own maritime zone or on the high seas.¹⁶ Port state inspection and control regimes have a well-established track record in the area of merchant shipping. They have had a particularly significant impact on the problem of substandard shipping. For example, under an agreement known as the Paris MOU¹⁷, participating maritime authorities agree to harmonise and coordinate port state control procedures so as to inspect a certain minimum percentage of all merchant ships visiting their ports. Recognising the value of the Paris MOU, the International Maritime Organisation (IMO) has been working to create a global network of regional merchant shipping MOUs.¹⁸ In general, these are tied to internationally agreed rules and standards for vessel construction, safety, pollution prevention and maritime security, especially those developed through the IMO and the International Labour Organisation (ILO).

As ports lie wholly within a state's territory and are therefore subject to its sovereign jurisdiction, general international law acknowledges that a state has wide discretion in exercising that jurisdiction over what happens in its ports. There is no doubt that active use of port state controls can be an effective weapon against IUU operations. Such controls may include denial of access to ports or denial of port facilities. Another type of port state measure that has been applied is to refuse permission to land or transship catch without inspection to ensure that catches have been taken in accordance with applicable conservation and management measures. Such schemes have been applied in at least four RFMOs (CCAMLR, ICCAT, NAFO and NEAFC). CCAMLR has the most sophisticated catch documentation scheme as well as strong associated port inspection requirements. Its catch documentation scheme for toothfish¹⁹ was designed to track the landings and trade flows of Patagonian toothfish, thereby enabling CCAMLR to identify the origin of fish entering the market and to determine whether it was caught in a manner consistent with CCAMLR's conservation measures. Under the scheme, catch documents specifying vessel name, licence number, location, date of catch and gross weight, must accompany all landings, transshipments and imports of toothfish into CCAMLR countries.

Finding loopholes

As quickly as such schemes are adopted, IUU operators move to exploit loopholes and areas of weak enforcement. In the case of toothfish, the immediate response of the IUU operators was to move to ports where they were more likely to escape inspection. Such ports included Qingdao (China), Tanjung Priok (Indonesia), Walvis Bay (Namibia), Port Louis (Mauritius), Montevideo (Uruguay), Tenjog Pelepas (Malaysia) and Singapore. When international scrutiny increases, however, the fleet moves on. For example, after Namibia, Mauritius and Mozambique dramatically improved their enforcement capacity, IUU vessels ceased to utilise their ports for transshipments.

At the same time, it would be naïve to suppose that developed or developing countries are in a position to examine all imports in the face of competing priorities and limited resources. The difficulties can be illustrated by looking at what has happened in the United States, one of the primary markets for these fish.

The United States accepts around six million containers of imported fish every year, but is only able to inspect around two per cent of these. The manifests for shipments of Patagonian toothfish (*Dissostichus eleginoides*) frequently use only the term “sea bass”, which can also include common sea bass (*Dicentrarchus labrax* and *Dicentrarchus punctatus*). The shipping codes are similar and often are not carefully scrutinised by customs agents. Filleting, cutting and freezing toothfish makes the task of identification even more difficult. Since it is easier to disguise Patagonian toothfish (and most other IUU species) as a different species in the fillet form, importers can more easily evade restrictions by importing frozen fillets instead of whole fish. It is no coincidence that after the implementation of CCAMLR’s catch documentation scheme frozen imports into the United States increased to around 80 per cent of the total. Processing at sea is also on the increase as operators can declare the catch as toothfish, but misreport the form of the fish. Even if toothfish is correctly identified, the proportion of mix with another whitefish may be false. U.S. Government statistics demonstrate that in 2003 large shipments of toothfish were co-mingled with other seafood from Chile that had not been accurately differentiated or quantified.²⁰

The presence of bribery and corruption

At the other end of the spectrum there will always be some port states that fail to undertake even basic preventive measures. In some cases, bribery and corruption may release illegal operators from enforcement measures. Uruguay and Russia in particular have been accused of such actions. Inspectors have even been known to endorse data that is clearly false.²¹ The problem is that under current protocols, vessels carrying catch documentation endorsed by a state cannot be readily rejected, even when customs officials suspect the documents have been falsified.

Weak trade measures

In the same way that it is difficult to estimate the extent of IUU fishing globally, the extent of international seafood trade that involves IUU fishing operations cannot be estimated with precision. IUU fishing is well known, however, for taking high-value species such as tuna, shrimp, toothfish, cod, sturgeon, abalone, and bêche-de-mer. All of these species are traded internationally, destined for consumer markets in Asia, Europe and North America.

There are numerous ways that IUU producers and traders are able to get IUU fish into markets. Unregulated species (such as groupers and snappers from Indonesia and scallops from Russia) are readily accepted by markets in China and elsewhere in East Asia. For some regulated species (for example, abalone) no documentation is required, and they easily enter the market once they leave the country of origin.²² Few states currently have domestic legislation comparable to the U.S. Lacey Act that makes it illegal to trade in species that are illegally harvested, whatever their origin.²³

As described above, for those species that are regulated and for which documentation is required (such as Patagonian toothfish) various methods are used to legitimise IUU fish and get it into the market. These include falsifying names and shipping codes, falsifying the weight or form of shipments, mixing legal and illegal catches of IUU species by transshipments at sea or co-mingling of shipments and recycling illegally caught product through legitimate trading relationships.

There are currently a number of trade and market-place measures that exist to prevent IUU-caught fish from reaching the international marketplace. The phrase “trade and market-place measures” in this context is the label used to encompass all efforts to monitor and track seafood products from the time the fish are caught through to their sale to final consumers. These include the border controls that allow countries or territories to regulate, restrict or prohibit trade as well as initiatives designed to change the demand for or supply of a particular product. Specific measures commonly include catch documentation schemes, product tracking systems, chain-of-custody schemes and ecolabelling or similar product-identification schemes. In short, they cover almost any arrangements that may help regulators, traders, customs officials and consumers differentiate legal from illegal product.

Within RFMOs, the most commonly applied trade or market-place measures to date include catch documentation schemes, prohibitions on landings and transshipments from particular vessels, and trade restrictive measures such as import bans. The last approach has been used with some success by ICCAT, which in 1996 imposed an import ban on bluefin tuna from Belize, Honduras and Panama – all (at the time) non-contracting parties.²⁴ A similar ban was imposed on Equatorial Guinea, a contracting party, in 2003.

Whether restrictive trade measures of this nature are truly effective is very difficult to say. The import bans imposed by ICCAT met with some success in changing the behaviour of the states that were affected, but many of the vessels and operators that were affected were able to evade the ban simply by transferring their operations to other flags. It is also notable that there have been very few examples of import bans imposed on members of RFMOs.²⁵ The use of restrictive trade measures in these circumstances is also controversial. Whilst the World Trade Organisation (WTO) has shown itself prepared, in some circumstances, to countenance the use of trade measures to effect a positive environmental outcome,²⁶ there is a real concern among many countries (particularly smaller countries that cannot act unilaterally) that such measures can in fact be a disguise for punitive measures that are really intended to alter legitimate trade flows. This has led to an ongoing discussion within the WTO as to the sort of actions that are permissible under multilateral environmental agreements, and especially the extent to which trade measures may be applied to non-parties to those agreements.²⁷ The general principle is that measures addressing transboundary or global environmental problems should, as far as possible, be based on international consensus. There is a potential conflict, therefore, when multilateral environmental agreements require countries that are parties to the agreements to apply more restrictive trade provisions against non-parties than to fellow signatories and thus violate the WTO principle of non-discrimination.

The effect of this conflict is frequently overstated,²⁸ but countries are also justifiably nervous about extending the reach of the WTO without clear political signals and authoritative case law to clarify the practical implications of WTO rules.²⁹ In these circumstances, there is very little hard evidence to date that restrictive trade measures are an effective solution to the IUU problem, although it may well be said that the threat that trade measures might be imposed is sufficient. In any event, restrictive trade measures are a blunt instrument, and best viewed as simply another potential weapon in the armoury, for use when other measures have been exhausted.

Other market measures, such as catch documentation and product tracking schemes can be very useful in helping to quantify the size of IUU catches. In theory they also provide a powerful tool for enabling regulators, traders and consumers to check the origin and legality of product in the marketplace. But they are only as reliable as the weakest link in the chain.³⁰ The fact that documentation has been completed is by itself no guarantee of compliance. Much more effort needs to be made to harmonise documentation schemes and make them resistant to fraud. Such schemes also need to be more comprehensive in nature. There is also a need to ensure

that catch and trade documentation schemes are applied to all IUU species and cover all phases of production, trade and marketing.

Ecolabelling is seen by many as a way of using the power of consumers to affect markets. For fisheries, the most prominent ecolabelling scheme is the independent certification scheme run by the Marine Stewardship Council.³¹ But very little hard research has been done into the effectiveness of ecolabelling schemes in meeting sustainable management objectives. On the one hand, proponents of such schemes argue that they offer cachet to exporters in the form of access to niche markets and thus allow them to charge a price premium. On the other hand, many developing countries have a negative perception of the impact that environmental labels have on their trade flows and of the costs of compliance. Research attention could profitably be devoted to assembling hard evidence with which to test the effect on the market (and resource sustainability) that voluntary ecolabelling schemes such as the MSC initiative really have. Research could also usefully focus on the actual economic costs of such schemes, including the direct, indirect, one-off, and recurring costs of compliance, as well as the potential WTO implications of government funding for independent schemes.

A considerable amount of energy and resources are being expended by some in the seafood industry to promote the purchase of seafood only from sustainable sources. This is particularly true in Europe, where major corporations have built entire food sourcing campaigns around sustainable seafood initiatives. Some examples include Unilever's Fish Sustainability Initiative,³² a commitment by the UK supermarket chain J. Sainsbury to source all its wild fish from sustainable sources,³³ Royal Ahold's (Netherlands) Ecosound project³⁴ and the "Fish for our Future" programme sponsored by Whole Foods Markets in the United States. Whilst these examples would appear to indicate a trend, at least in the developed world, towards corporate demand for sustainable fish products, we do not know what the true effect of these trends is on the market. Not enough research has been done to establish whether corporate demand for sustainable fish is driven by consumer demand for sustainable products, or whether corporate interest is driving consumer demand.

Are current penalty levels an adequate deterrent?

Assuming that, against all the odds, a rogue vessel can be successfully interdicted and apprehended by a coastal state the next step is to get appropriate domestic legal sanctions to stick.³⁵

In most common law jurisdictions, at least, this means invoking the due processes of the criminal law. The vessel must be secured and taken to port so that a rigorous investigation can be completed. The crew must be removed from the vessel, accommodated ashore and advised of their rights and given access to consular officials and legal representation. Evidence must be gathered, sifted, analysed and submitted to the prosecuting authorities. If there is sufficient evidence to prefer charges, criminal proceedings may be launched, with all the attendant uncertainties as to whether a jury will convict.

All this is vastly expensive as well as time-consuming. Outcomes are unpredictable. IUU fishers, such as those encountered by Australia in the Southern Ocean, are adept at destroying evidence, even to the extent of throwing logbooks, computers, papers and navigation equipment overboard prior to being boarded.

Penalties not only determine the deterrent effect of legislation but also signal the seriousness with which offences are regarded. Penalties for illegal fishing are often inadequate and may be treated by unscrupulous entrepreneurs as a business overhead rather than a serious deterrent to market entry.³⁶ The Law of the Sea Convention further circumscribes the enforcement action that

may be taken by coastal states with respect to violations of their fisheries laws in the exclusive economic zone.

First it provides that arrested vessels and their crew shall be promptly released on posting of a reasonable bond or security.³⁷ Second, it provides that, in the absence of agreements to the contrary, penalties against foreign nationals for violations of fisheries law may not include imprisonment or other forms of corporal punishment.³⁸

Whilst the jurisprudential logic of this approach is irrefutable – based on the fact that the coastal state has sovereign rights, but **not** sovereignty, over the exclusive economic zone – the consequences are akin to the coastal state having one hand tied behind its

back. The case of the *Arvisa I* (otherwise known as *Camouco* and *Eternal*) provides a graphic illustration of what can happen. (Box 3)

Box 3. The case of *Camouco*

Camouco (Panama) was arrested in French waters around the Crozet Islands in 1999. Following her arrest, Panama, as the flag state, made a successful application to the International Tribunal for the Law of the Sea for prompt release of the vessel on the posting of a bond of €1.3 million. However, no sooner had *Camouco* been released than she was back at sea under a new flag (Uruguay) and with the new name of *Arvisa I*. Following a number of sightings by Australian and French patrol vessels *Arvisa I* (operating under the name *Eternal*) was finally arrested by French authorities in July 2002 for illegal fishing in the French exclusive economic zone around Kerguelen Island.

Even when deterrent financial penalties are allowed for in national legislation, they may not be applied by the judiciary, who are generally not well informed of the magnitude of the broader impact of environmental crime. Such perceived lenience serves as a source of frustration for enforcement agents. A lack of awareness and cooperation among prosecutors and investigators may lead to loss of cases through technicalities. Furthermore, costs of enforcement tend to be sunk and are rarely recovered on successful criminal prosecution of offenders. These problems are bad enough at the national level, let alone at the international level. Within Australia, for example, there is wide variation in fisheries legislation between states and a lack of uniformity in penalty regimes. The effect, nationally and internationally, is often to displace illegal activity to the jurisdiction with the lowest level of penalties.³⁹ (Table 2)

The Lacey Act

Few countries have gone so far as the United States. The Lacey Act is a U.S. statute that is aimed directly at illicit trade in illegally caught fish and wildlife.⁴⁰ The Act makes it unlawful for any person subject to the jurisdiction of the United States to “import, export, transport, sell, receive, acquire, or purchase ... any fish or wildlife taken, possessed, transported or sold in violation of any law or regulation of any State or in violation of any foreign law.” Both criminal and civil sanctions are available under the Act, as well as forfeiture of the illegally caught fish. United States prosecutors have used the Lacey Act’s provisions extensively to deal with importations of illegally caught fish. In Guam and American Samoa – important ports for offloading tuna – the Lacey Act has been used to deal with violations of the laws of a number of Pacific Island states. In 2004, the biggest criminal prosecution ever undertaken under the Lacey Act resulted in prison terms ranging from 12 – 46 months and fines of USD 7.4 million for the principals in a conspiracy to import rock lobster and toothfish from South Africa.⁴¹ (Box 4)

There are limitations on the use of Lacey Act provisions. In particular, it is essential to be able to show an underlying violation of a foreign law (although the illegal act for the purposes of the Lacey Act prosecution always remains the act of importation). The Act may only be used to enforce internationally agreed conservation and measures to the extent that those measures are reflected

Table 2. Penalties for illegal fishing

	Max penalty	Equiv. in € 19/10/2005	Confiscation of boat	Confiscation of catch
Australia	Up to A\$ 825,000 or 7,500 penalty points on conviction for boats over 24m	516,459	Yes	Yes
Canada	Up to C\$ 750,00	533,198	Yes	Yes
Chile	100-150 Gold Pesos for each gross registered ton (at the daily value fixed by the Central Bank of Chile). Fine doubled for second and subsequent offences		No	Yes
Namibia	R 100,000	12,732	Yes	Yes
New Zealand	Criminal Penalty up to NZ\$ 100,000 from each Master and Owner, NZ\$ 5,000 for crew. Administrative penalty of not moer than 1/3 of the maximum criminal penalty	58,250 / 2,912	Yes (on conviction)	Yes
Fiji	F\$ 100,000	48,710	Yes	Yes
Indonesia	Up to Rp. 225,000,000	18,656	Yes	Yes
Senegal	FCFA 50,000,000 - 150,000,000	76,224 - 228,672	Yes	Yes
Poland	20,000 for ship owners and 8,000 for captains	8000 / 20,000	Yes	Yes
Uruguay	From 5% to 50% of value of vessel and cargo		Yes (on second offence only)	Yes (from first offence)
USA	Criminal penalty up to \$100,000, Civil penalty up to \$25,000	83,800 / 20,950	Yes	Yes

in national laws and regulations.⁴² The consent and cooperation of the foreign country must also be forthcoming in order to launch a successful prosecution. To encourage this, U.S. prosecutors have begun to introduce schemes whereby penalties and forfeitures can be shared between the U.S. and the country where the underlying violation took place.⁴³

Are there sufficient controls over nationals on the high seas?

Recognising that fishing is carried out by individuals, not by vessels, one avenue for increased control over IUU activities may be found in requiring governments to take greater responsibility for the activities of their own nationals, irrespective of the flag carried by the fishing vessel involved. Making the activities of citizens abroad liable to domestic sanctions is a powerful disincentive that also sends a strong signal to other countries.

The UN Fish Stocks Agreement encourages states to introduce laws to prohibit their nationals from engaging in IUU fishing, even if it takes place on board a foreign vessel on the high seas or

in waters under the jurisdiction of a foreign state. Spain introduced legislation in 2002 that constrains the involvement of Spanish citizens in fishing operations of vessels flying flags of convenience, whilst Japan requires its citizens to obtain permission from the Japanese government before working on non-Japanese vessels fishing for Atlantic or Southern bluefin tuna. Amongst Task Force members, New Zealand's domestic fisheries legislation prohibits New Zealand citizens from fishing on the high seas without authorisation anywhere in the world. Australia makes it an offence for an Australian national to engage in illegal fishing activities on vessels flagged to any nation. However, these are a small minority of countries.

The obvious limitation on such measures (although the same applies to sex crime offenders etc.) is that the opportunity to take action (where there is evidence to do so) is not available until the national returns home.

The pre-eminence of flag state responsibility

The international law of the sea is founded on the notion of the freedom of the high seas. As regards the flagging of vessels, this has two aspects:

every state has the right to authorise ships to fly its flag on the high seas; the flag state has exclusive jurisdiction over the ship and no other state may exercise jurisdiction over that ship. Boats on the high seas are thus best regarded as mobile pockets of sovereignty, governed by the rules and regulations of the state whose flag they fly.

International law (as codified in the Law of the Sea Convention) permits of only very limited exceptions to these fundamental principles. There is a general requirement for a flag state to effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag.⁴⁴ The Convention also makes the principle of exclusive flag state jurisdiction subject to a number of extremely narrowly defined situations of extraordinary jurisdiction. These include piracy, slavery, illicit traffic in narcotics and unauthorised broadcasting from the high seas.⁴⁵

In recent years, some international fisheries agreements have attempted to further limit the exclusivity of flag state jurisdiction by giving states other than the flag state the right to board and inspect fishing vessels on the high seas.⁴⁶ Nothing, however, in these agreements abrogates the fundamental principle of flag state responsibility since the flag state – in the first place – has to

Box 4. The long reach of the Lacey Act

The power of the Lacey Act is well illustrated by the Hout Bay case (*United States v Arnold Bengis, David Bengis, Jeffrey Knoll, Hout Bay Fishing Industries, Icebrand Seafoods Inc. et al.*) On 28 May 2004, Arnold Bengis, a U.S. and South African national resident in New York was sentenced in the Manhattan federal court to 46 months imprisonment and USD 5.9 million in fines for violating the Lacey Act.

The indictment alleged that Bengis, together with two other co-conspirators, had between 1987 and 2001 engaged in an elaborate scheme first to harvest illegally large quantities of South African rock lobster and Patagonian toothfish, far in excess of applicable quotas, and then to export the illegal fish from South Africa to the United States. The defendants under-reported the fish harvest to South African authorities and bribed South African officials to accept false export documentation. After a container of rock lobster was seized by NOAA special agents in Newark, New Jersey, the defendants altered and destroyed import and export documentation and also diverted a further illegal shipment to Singapore in order to avoid its seizure by U.S. authorities. The prosecution and convictions followed a three-year investigation by U.S. and South African officials.

(Press Release by the United States Attorney for the Southern District of New York, 28 May 2004)

accept these restrictions by signing up to the relevant international agreement. The flag state also retains the ultimate responsibility to investigate and prosecute violations.

Using flag state responsibility as a fiction to avoid compliance

There is a clear and compelling link between IUU fishing on the high seas and fishing vessels flagged to what are commonly called open registers. An open register is one which imposes no nationality or citizenship requirements on those wishing to fly its flag.⁴⁷ The flags of the states that maintain open registers are popularly known as “flags of convenience”.⁴⁸ Typical high seas IUU operations involve vessels flagged to open registries such as Bolivia, Belize, Panama, Uruguay and Togo and nominally owned by front companies in those flag states. These companies may well have no assets in the flag state to allow for prosecution or recovery of damages and the true owner of the ship may never set foot in the jurisdiction. Ownership structures, flags, operational bases and vessel names are changed frequently in order to conceal their true identity and purpose.

To a great extent, the use of open registers merely reflects the reality of the global shipping industry in which open registers predominate as the most efficient economic vehicle for ship owners. More than half of the world’s total gross tonnage is now in open registers. As a response to the success of open registers, several of the traditional maritime countries (including Netherlands, Germany, Norway and the UK) have set up their own second registers offering more beneficial arrangements to ship owners. The largest open registers are maintained by six states: Panama, Liberia, Bahamas, Malta, Cyprus and Bermuda.⁴⁹ The problem for high seas fisheries is that some open registers are professional non-joiners of RFMOs and often franchise out the operation of their registers to extra-territorial companies where enforcement of international norms would actually deter business. This allows IUU operators routinely to ignore the conservation measures put in place by RFMOs as well as to hide their assets behind impenetrable corporate structures.⁵⁰

A recent analysis of the relationship between flags of convenience and IUU fishing on the high seas⁵¹ came up with the startling conclusion that by 2005, approximately 2 900 large-scale fishing vessels – or a staggering 17.5 per cent of the world’s fleet by tonnage – were flagged to one of 14 open registers or were listed as simply flag unknown.⁵² Four open register countries – Panama, Belize, Honduras and St Vincent and the Grenadines – consistently top the lists in terms of the number of large-scale fishing vessels on their registries, with almost 1 000 large-scale fishing vessels between them. Of these, 416 were registered in Honduras, 241 in Belize, 222 in Panama and 74 in St. Vincent and the Grenadines.

However, perhaps the most striking aspect of the information about these vessels contained on Lloyd’s Register of Shipping is the number of vessels flagged to open registers whose owner is listed as residing in a country that claims to be a responsible fishing state – the main beneficial owners are Taiwanese and Spanish companies (147 and 41 vessels respectively).

There is no sign that the attraction of open registers to IUU fishers is likely to diminish. In fact, it appears to be a classic type of displacement activity and as the number of potential flag states around the world increases (there were 67 in 1952; there are over 120 now), the problems associated with open registers are likely to increase. As flag states such as Belize⁵³ are brought into line through the imposition of measures by RFMOs, determined IUU operators seek out ever more exotic and unlikely places for doing business, such as Mongolia,⁵⁴ the Slovak Republic and the Union of Comoros. International registries are not slow to tout for business. The Singapore-based administrators of Mongolia’s register, for example, advertise competitive fees, no restrictions on crew nationality and no taxes and claim to be able to issue registrations “within the hour”.

Meanwhile, countries such as Georgia, Togo, Vanuatu and Bolivia appear to be “up and coming” flags of convenience for fishing vessels. The numbers of fishing vessels flagged to each of these four countries rose markedly between 1999-2003 with an increase from 70 to 184 fishing vessels registered to all four countries combined. Togo in particular appears to have recently become a flag of choice for IUU operators in the fisheries for toothfish in the Southern Ocean, with 15 large-scale fishing vessels registered on Lloyd’s Register as of July 2005.

A study of the performance of open registers commissioned for the International Transport Workers’ Federation (ITF) in 2001 attributed the exponential growth among emerging open registers to improvements in the standards of older, more established open registers. As standards increase, there is aggressive competition at the bottom of the market for registers which offer a complete lack of formal regulation as well as the capacity or willingness to take responsibility.⁵⁵

More and more fishing vessels

In a world where there are few new fishing frontiers and about two-thirds of the world’s commercial fish stocks are fished at, or beyond, their sustainable capacities, it may be surprising that construction of new large-scale fishing vessels continues. The fact that 12 per cent of large-scale fishing vessels built between 2001 and 2003 were flying flags of convenience or were listed as “flag unknown” suggests that a significant portion of new vessels are built with a view to engaging in IUU fishing. Many of these vessels are built in Taiwan. In fact, of 51 large-scale fishing vessels over 24 metres in length built in Taiwan between 2001 and 2003, at least 50 were flagged to open registers upon launching – only one was flagged in Taiwan.⁵⁶

In addition, there appears to be an increase in the construction, primarily by Taiwanese companies, of vessels smaller than 24 metres in length to fish for tuna and other highly migratory species. These vessels appear to be designed to avoid conservation measures applicable to large-scale vessels (generally defined as those 24 metres and above in length) promulgated by ICCAT and other RFMOs.⁵⁷ (Box 5)

Intelligence – the missing link

An emphasis that focuses solely on enforcing existing regulations will tend to ignore (or worse, tacitly condone) the wider context which makes illegal activity attractive. Thus, in addition to improving front-line enforcement, a joined-up approach to tackling IUU fishing must address the supply and demand pressures that shape the illegal market. These are factors that enforcement agents can rarely address themselves, yet they routinely have to deal with the results.

When it comes to IUU fishing, hard data on compliance and intelligence about trafficking routes and related offences are in short supply. In many cases they are not even being actively sought. Front-line agents and specialist enforcement personnel do not necessarily have the means to contact each other and their opposite numbers in other countries; nor do they have access to regularly updated national and international directories of enforcement expertise.

Valuable intelligence is readily available from a range of published sources, industry informants, the public and NGOs, but there is little evidence that this is routinely relayed through enforcement agencies or matched with government records on importers and exporters to allow for risk analysis and profiling of contraband, trafficking methods and likely countries of origin. Few fisheries enforcement personnel have skills in the areas of strategic intelligence analysis, high-level surveillance and forensic accounting. Insufficient distinction is made between the formal process of collecting evidentiary standard material and gathering intelligence that may help to cast light on illegal activity.

Box 5. Which flag states should we worry about?

The term 'flag of convenience' is a subjective one and there are many different ways of classifying flag States as flags of convenience. Currently, the International Transport Workers' Federation (ITF) identifies 28 countries as flags of convenience – an increase from 11 such countries in 1980. But this may be a conservative estimate. An FAO report published in 2002 (FAO 2002b) lists 32 countries operating open registries and having registered fishing vessels within recent years.

Four open register countries – Panama, Belize, Honduras and St Vincent and the Grenadines – consistently top the lists in terms of the number of large-scale fishing vessels on their registries, with almost 1 000 large-scale fishing vessels between them. These are also the countries that were most often identified by RFMOs as being the flag states of particular concern in a survey of FOCs and IUU fishing worldwide conducted by FAO (FAO, 2002b). In addition to these four, Bolivia, Georgia, Equatorial Guinea, Sierra Leone, and Cambodia have all been subject to import sanctions at one time or another by ICCAT because of IUU fishing for tuna in the Atlantic Ocean by vessels flying their flags. Another five countries that also feature on the ITF list – Cyprus, Marshall Islands, Mauritius, Netherlands Antilles and Vanuatu – were identified by the UN Consultative Group on Flag State Implementation as being among those countries with the highest number of fishing vessels on their registries (UN Doc. A/59/63).

In 2005, these 14 flag states were responsible for registering 1 267 high seas fishing vessels as shown in the table below.

Flag state	Total vessels	Total tonnage	Average tonnage	Average age
Belize	241	259,119	1075.2	22
Bolivia	16	16,824	1051.5	26
Cambodia	47	27,773	590.9	27
Cyprus	27	66,483	2462.3	22
Equatorial Guinea	39	21,636	554.8	22
Georgia	60	45,765	762.6	22
Honduras	416	158,842	381.8	24
Marshall Islands	7	11,434	1633.4	17
Mauritius	24	9,632	401.3	30
Netherlands Antilles	20	8,294	414.7	24
Panama	222	134,286	604.9	30
St. Vincent	74	97,893	1322.9	26
Sierra Leone	27	8,679	321.4	29
Vanuatu	47	118,298	2517	11
Totals	1,267	963,313	760.3	28

Table from Gianni and Simpson (2005) based on information derived from Lloyd's Register. As the authors note, information on Lloyd's Register should not necessarily be considered up to date as there are often delays in registering the transfer of flag from one country to another. Information on the flag, ownership and overall numbers of fishing vessels flagged to one or other of these countries may well change rapidly over time. Further, not all the vessels included on this list are necessarily IUU vessels.

The need for coordination and cooperation is widely recognised at national level. New Zealand, for example, will spend USD 8 million nationally over the next four years in a crackdown on domestic poaching and black-market fishing operations, including a 15 per cent increase in compliance staff and USD 2 million to create a Special Tactics Team for covert operations.⁵⁸ But these efforts are not being replicated rapidly enough in the world of international fisheries.

Although states frequently talk about exchanging information, and most RFMOs have adopted rules requiring members to report action taken in respect of illegal activity, very little of this information is presented in an actionable way. Indeed, actionable information is often withheld in order to avoid embarrassing the countries involved or because of the perceived confidentiality of national enforcement processes. Information may also be sanitised or sidelined into ritual exchanges at meetings.

CHAPTER 3

How the global regulatory system works (or doesn't) – Problems with the system for international governance of the high seas

If IUU fishing on the high seas is to be brought under control, an international governance framework is required that gives high seas fishers the long-term incentives they need to comply with management measures and protection from those who don't. If that governance system is effective it will significantly increase the costs and risks of illegal activity. We are currently far from that point.

The present system of international high seas governance has evolved over a period of several hundred years.¹ Disputes over access to fisheries resources lay behind some of the earliest attempts to regulate the use of the oceans. In the early twentieth century, as localised problems of overfishing became more apparent, governments responded by establishing international bodies charged with making joint decisions about managing common property resources. One of the earliest examples of such a body was the North Pacific Fur Seal Commission, established in 1911, intended to bring an end to massive and indiscriminate harvesting of the Northern fur seal. The first major global conference on fisheries – the 1955 Rome Technical Conference on the Conservation of the Living Resources of the Sea – solidified this basic pattern for managing international fisheries. It agreed that conservation and management of high seas fisheries resources could only be carried out through international cooperation in research and regulation and proposed that the best way of achieving this was through the establishment of regional conventions, based on the geographical and biological distribution of the marine populations concerned.

Within this cooperative framework, oceanic fisheries remained a common property resource, open to all. While governments could regulate their own fishers, no single government had the right to regulate all fishing and consequently regulation of all fishers depended upon cooperation between governments.

The establishment of 200 nautical mile exclusive economic zones in the mid 1970s as a result of the Third United Nations Conference on the Law of the Sea led to a fundamental shift in the way in which international fishery bodies operated. Given that most oceanic fisheries at the time were within 200 nautical miles of the world's coastlines, the most noticeable immediate impact was that a large share of the world's fisheries ceased to be open-access fisheries.

However, the attribution of exclusive rights to coastal states proved to be a mixed blessing for the conservation and management of fish stocks. While enclosure of coastal oceanic zones was thought at the time to be a necessary and inevitable step towards more efficient management of fisheries resources, in many cases it resulted in more rapid depletion of stocks. Many coastal

states, some of which lacked the experience and capacity to manage their fisheries resources, sought to maximise exploitation of the exclusive economic zone. Distant water fishing nations, on the other hand, found it difficult to adapt to a world in which the freedom to fish in some of the most productive areas had been suddenly and abruptly curtailed. While some adapted by entering into access agreements with coastal states, others paid little attention to new boundaries that many coastal states were not in a position to enforce. Moreover, in a relatively short period of time, the surplus harvest in exclusive economic zones potentially available to distant water fishing nations was lost as coastal states learnt to increase their own fishing capacity, often supported by foreign investors. The tension between coastal state rights in the exclusive economic zone and the exercise of high seas rights, open to all states, only increased over the ensuing decades.

In many cases, high seas fishing problems may be seen as spillover effects from inadequate national fisheries management. By the early 1990s, following a series of spectacular collapses of fish stocks worldwide, the failure of the law of the sea regime to prevent depletion of the world's fish stocks could no longer be ignored.² It was apparent that existing regional agreements relating to fisheries had in general failed to set TACs based on sustainable use, failed to provide adequate enforcement mechanisms, failed to resolve disagreements over allocations among fishing states and failed to deal with the rights and obligations of new entrants in a fishery. In fact, the very structure had in some cases led to a “race to fish” in the belief that future allocations would be based on previous catch history.

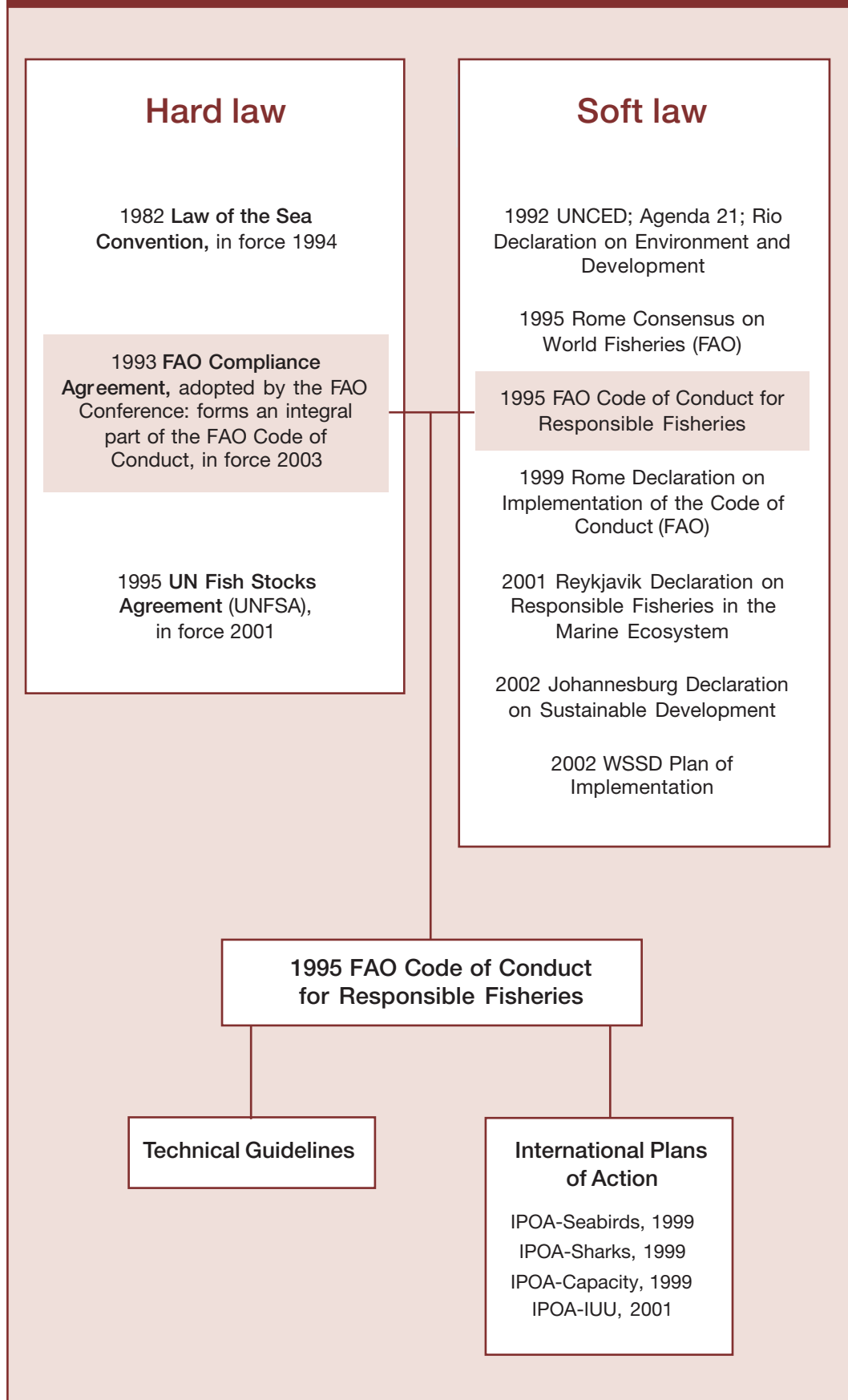
Over the last decade, the international community has made strenuous efforts to address the problems of international fisheries governance through a range of hard and soft law instruments. The “hard” instruments are legally-binding treaties of a global nature. The most notable one is the 1995 UN Fish Stocks Agreement.³ The “soft” instruments include a wide range of non-binding declarations and resolutions issued by a range of bodies, including the FAO Conference and the United Nations General Assembly. The most comprehensive non-binding instrument that has been adopted is the FAO Code of Conduct for Responsible Fisheries, which is itself made up of a number of separate, but linked, documents, and which continues to evolve through the formulation of international plans of action on specific issues of immediate concern. Not surprisingly there is an International Plan of Action on IUU Fishing (IPOA-IUU). (Boxes 6 and 7)

What all these instruments have in common is the aim of elaborating upon those provisions of the Law of the Sea Convention that deal with the conservation and management of high seas living resources. So, while the basic fishing entitlements of the Convention remain unaltered, the exercise of these entitlements is increasingly being constrained by a patchwork quilt of measures in the form of binding and non-binding instruments with differing geographical and legal reach and different levels of participation by states.

What are the obstacles to effective governance?

Obviously, if the international rules worked perfectly – and if all countries signed up to the rules and implemented them in good faith – IUU fishing on the high seas would be a far less serious problem than it now is. Fishery management organisations would exist in all regions of the world where commercial fish stocks may be exploited on the high seas. Every country that gave its flag to vessels that fish on the high seas or whose nationals fish on the high seas would be a member of the regional organisations set up to manage those fisheries and would abide by the conservation rules set by those organisations. These so-called flag states would exercise their legal responsibilities in respect of their fishing vessels. They would issue authorisations to all such vessels that wished to fish on the high seas and would keep track of their activities. They would require these vessels to report high seas catches and would provide details of such catches to their own scientists as well as to the scientists and managers of the relevant regional organisation. Most

Box 6. International fisheries instruments



Box 7. United Nations Fish Stocks Agreement

The most important global fisheries agreement is the UN Fish Stocks Agreement, or UNFSA. The Agreement represents a progressive development of the concepts of cooperation, compatibility and responsibility that are inherent in the Law of the Sea Convention. It establishes a framework for the effective management and conservation of straddling and highly migratory fish stocks throughout their range. Conservation and management measures should be established on the basis of a precautionary approach and should use reference points for establishing the level of utilisation of stocks. They should be based on the best scientific information available. For this purpose an essential element in the management procedures is the requirement for the collection and exchange of data and information. The primary objective of the Agreement is to seek compatible conservation and management regimes both inside and outside areas of national jurisdiction.

Conservation and management measures must be adhered to and complied with. They must not be undermined by those who fish for the stocks. It is the collective responsibility of all states concerned in a particular fishery to ensure compliance. In respect of areas under national jurisdiction, there is an identifiable and accountable authority, that is, the coastal state. The responsibilities of the coastal state in its exclusive economic zone, set out in Part V of the Law of the Sea Convention, are further elaborated and reinforced in UNFSA in the form of better management practices. UNFSA goes on to recognise that effective enforcement on the high seas must rely on better cooperation among states in a manner that promotes the community interest but at the same time protects the traditional interests of flag states in a fair and balanced way. To this end, the primary responsibility of the flag state is reaffirmed but a framework for action by states other than the flag state, in the form of a globally-recognised right to board and inspect vessels in support of subregionally, regionally or globally agreed conservation and management measures, is set out with clear safeguards against abuse.

Most importantly, UNFSA accords a key role to RFMOs as the appropriate medium through which states are to cooperate to achieve and enforce conservation objectives both on the high seas and in areas under national jurisdiction. Where no RFMO exists for a particular fishery, states must cooperate to establish one. Where an RFMO does exist, states that wish to fish for straddling or highly migratory fish stocks are obliged to join the RFMO or, at the very least, to conduct themselves in accordance with its rules. At the same time, UNFSA emphasises that states with a “real interest” in the fisheries concerned are entitled to become members of a relevant RFMO. This important and difficult provision is designed to ensure that, on the one hand, UNFSA could not be used to protect the position of states currently fishing on the high seas by freezing out potential new participants, whilst, on the other hand, RFMOs should not be open to all states regardless of the extent of their interest. The theory is that only those states which are members of the relevant RFMO, or which agree to apply the conservation and management measures established by the RFMO, may have access to the fishery resources to which those measures apply.

importantly, flag states would take responsibility for the activities of such vessels. If a complaint of illegal fishing was made by any other state, or through a regional organisation, the flag state would promptly remove the vessel from the fishery, investigate the allegations and take such enforcement action as may be necessary.

The gulf between this idealised world and the reality is immense. Despite the appearance of a strong legal framework based on the Law of the Sea Convention, there are serious concerns about its ability to deliver an effective management regime. An analysis of the discussions that have taken place recently in various international fora⁴ indicates broad agreement that the main governance-related problems are as follows:

- Failure by some states to participate in existing multilateral instruments as a critical constraint to effective implementation and enforcement
- Inadequate implementation of existing instruments at the regional level, including lack of effective institutional arrangements, conservation and management measures that do not meet the standards set by the existing legal framework, lack of coordination between regional bodies and inadequate harmonisation of measures
- Inadequate flag state control over fishing vessels
- The existence of geographical and structural gaps in the system of high seas governance
- Subsidies and other perverse signals that displace rather than eliminate unsustainable fishing

Failure of key states to participate in multilateral instruments

Becoming a party to an international legal instrument is no guarantee of implementation. But failure even to become a party is the starkest possible demonstration of a lack of serious commitment to solving the problem in question. The international community cannot seriously start to talk about enforcing compliance unless recalcitrant states take the basic first step of signing up to outcomes which have been generally agreed by the international community.

Revealingly, many soft law international fisheries instruments which have commanded high levels of sign-up repeat the key concepts and provisions found in binding treaties covering similar subject matter. It seems that states are happy to sign up, voluntarily, to commitments that they would not entertain if they were proposed in the context of a binding treaty. This raises an interesting question about just how determined some states are to confront difficult problems. Soft law mechanisms risk being a diplomatic face saver for countries that can't bring themselves to match their words with action.

The status of the UN Fish Stocks Agreement illustrates the point rather sombrely. As at December 2005, there were 56 parties to the Agreement.⁵ In contrast, as at the same date, there were 149 parties to the Law of the Sea Convention and 122 parties to the 1994 agreement relating to deep seabed mining (an activity in which only a handful of states have a strong economic interest).⁶ Clearly this presents a problem. The Fish Stocks Agreement cannot attain its full potential unless and until the most important coastal, fishing and flag states become parties to it and comply with its obligations. The need for this has been emphasised repeatedly in numerous resolutions of the General Assembly and other international bodies. Regrettably, however, the pace of ratifications and accessions has been very slow, notwithstanding recent statements of the UN Secretary-General placing lawlessness on the high seas alongside human rights abuse, refugees, terrorism and organised crime as key global challenges that need to be addressed.⁷

It is vitally important that all parties to the Law of the Sea Convention become parties to the Fish Stocks Agreement, so that, as originally intended, there will be a seamless connection between the two instruments. Ultimately, the Agreement is intended to lead to the situation where (high seas) fishing can only be engaged in by vessels flying the flags of states that are members of RFMOs or that cooperate with them and act within the rules set by the RFMO. However, as long as many of the states that have an interest in the matters dealt with by the Agreement remain outside the regime, the incentives exist for them to act as havens for IUU fishing and free riders. In this situation, it is likely that unregulated high seas fishing will remain a considerable problem.

In the case of some developing countries, the problem is associated with a lack of capacity to implement the provisions of the Fish Stocks Agreement. They are onerous and costly to implement fully. But in other cases it is clear that states are only too willing to provide opportunities to operate outside the international governance framework. (Box 8)

Inadequate implementation at the regional level

The UN Fish Stocks Agreement has strengthened the paradigm for the adoption of fisheries conservation and management measures centred on RFMOs. The essential purpose of an RFMO is to provide an effective forum within which states can agree on fisheries conservation and management measures. The Agreement defines the desirable institutional characteristics of an effective RFMO by listing, in a legally-binding form,⁸ the matters upon which states are expected to agree in order to achieve sustainable management of fisheries. The important role of RFMOs in combating IUU fishing is also reflected in paragraphs 78 to 84 of the IPOA-IUU. Broadly, these paragraphs encourage states to take the measures and actions summarised in Box 9 through RFMOs in conformity with international law and obligations. The IPOA-IUU also reaffirms that states that are not members of RFMOs have a responsibility to ensure that their

Box 8. Non-parties to the UN Fish Stocks Agreement

Algeria	<i>Egypt</i>	Latvia	Panama
Angola	El Salvador *	Libya *	Peru *
<i>Argentina</i>	Equatorial Guinea	Lithuania	Philippines
<i>Benin</i>	Eritrea *	<i>Madagascar</i>	Poland
Cape Verde	Estonia	Malaysia	<i>Saint Kitts and Nevis</i>
<i>Chile</i>	Gabon	<i>Mexico</i>	Sao Tome and Principe
China	<i>Georgia</i>	Morocco *	Syrian Arab Republic *
Comoros	<i>Ghana</i>	Myanmar	Tanzania
Cote d'Ivoire	Guatemala	Nicaragua	Thailand *
Croatia	Honduras	Niue *	Tuvalu
Cuba	<i>Japan</i>	Oman	Vanuatu
Ecuador *	<i>Korea</i>	Pakistan	Venezuela *

Each of the above countries is a member of at least one of the major RFMOs with high seas coverage, but has not yet become party to the most important global fisheries agreement – the UN Fish Stocks Agreement. Japan, Korea, Mexico, Nicaragua, Panama, Philippines, Poland, Vanuatu and Venezuela are each members of two or more regional arrangements (thus impliedly having a clear fishing interest). Most of the countries on the list could also be considered either fishing states, flag states or potential flag states. Note: states shown in italics are parties to the FAO Compliance Agreement, even though they are not parties to the UN Fish Stocks Agreement.

* indicates NOT a party to the 1982 Law of the Sea Convention

nationals and vessels do not undermine fishery and conservation measures adopted by RFMOs. (Box 9)

Although there are more than thirty regional fishery bodies worldwide, FAO lists 16 RFMOs as having the competence to establish conservation and management measures. Some of these, such as the International Whaling Commission and the North Atlantic Salmon Conservation Organisation have very specific mandates or deal with single species. In this report, we have focused on those RFMOs which have a significant level of competence over high seas areas. These are shown in Box 10.

There is no doubt that significant progress has been made through RFMOs in the fight against IUU fishing.⁹ In fact, it is only the success of the international community in generating RFMOs

Box 9. Actions to be taken through RFMOs to prevent, deter and eliminate IUU fishing

The following actions should be taken by RFMOs

- institutional strengthening of RFMOs to enhance their capacity to prevent, deter and eliminate IUU fishing
- mandatory reporting
- exchange of information on vessels engaged in or supporting IUU fishing
- maintenance of records of vessels operating in the area of competence of the RFMO, including those authorised to fish and those engaged in or supporting IUU fishing
- compiling and using trade information to monitor IUU fishing
- MCS measures, including vessel monitoring systems, monitoring of landings, port control and inspections and regulation of transshipments
- boarding and inspection regimes
- observer programmes
- market-related measures

(Paragraph 80)

Compile and make available to other RFMOs and FAO information relevant to combating IUU fishing, including estimates of the extent, magnitude and character of IUU activities; details of measures to combat IUU fishing; records of authorised fishing vessels; records of vessels engaged in IUU fishing. *(Paragraph 81)*

Encourage non-contracting parties with a real interest in the fishery concerned to join the RFMO and participate fully in its work. Where this is not possible, non-contracting parties should be encouraged to participate in the RFMO and apply its conservation and management measures. *(Paragraph 83)*

Draw the problem of IUU fishing activities to the attention of the flag State where it fails to ensure that its vessels or, to the greatest extent possible, its nationals do not engage in IUU fishing activities that affect the fish stocks covered by the RFMO. If the problem is not rectified, members may agree to adopt appropriate measures. *(Paragraph 84)*

Box 10. Regional Fisheries Management Organisations

Regional Fisheries Management Organisations (RFMOs) are defined by FAO as "intergovernmental fisheries organisations or arrangements, as appropriate, that have the competence to establish fisheries conservation and management measures." (IPOA-IUU)

RFMO	Constituent instrument	Entry into force
CCAMLR	Convention on the Conservation of Antarctic Marine Living Resources, 1980	7 April 1982
CCSBT	Convention for the Conservation of Southern Bluefin Tuna 1993	20 May 1994
GFCM	General Fisheries Council for the Mediterranean (established pursuant to Article XIV of the FAO Constitution)	20 February 1952
IATTC	Convention Between the United States and the Republic of Costa Rica for the Establishment of an Inter-American Tropical Tuna Commission (1950) Antigua Convention (June 2003)	3 March 1950 Not in force
ICCAT	International Convention for the Conservation of Atlantic Tunas, 1969	21 March 1969
IOTC	Agreement for the Establishment of an Indian Ocean Tuna Commission, 1993	27 March 1996
NAFO	Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries 1978	1 January 1979
NEAFC	Convention on Future Multilateral Cooperation in the North-East Atlantic Fisheries Convention, 1980	17 March 1982
SEAFO	Convention on the Conservation and Management of Fisheries Resources in the South East Atlantic Ocean, 2001	30 April 2003
SIOFA	Under negotiation. Not yet established	
WCPFC	Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, 2000	19 June 2004

that has created the definition of high seas IUU fishing. At the same time, however, there is broad consensus that the expansion in the role of RFMOs envisaged by the UN Fish Stocks Agreement and other international fisheries instruments makes strengthening of RFMOs a key priority.

At one level RFMO coverage of high seas areas remains rather incomplete.¹⁰ Although global coverage of RFMOs for some species (notably tunas) is rather comprehensive, coverage for other species is poor, leaving large areas of the high seas potentially unregulated. In addition, despite global consensus on a vision of maintaining and restoring healthy fish stocks and ecosystems, many RFMOs are actually little more than single stock management arrangements and fall well short of international community expectations of broader ecosystem-based fisheries management. (Figures 1 and 2, pages 50-51).

Dealing with these problems is likely to require many existing RFMOs to adjust their mandates and restructure their goals, priorities and operational procedures. As yet, however, there is no consensus on the sort of criteria that might be used to determine, at a global level, whether RFMOs are equipped to manage – and are actually managing – the task that has been set for them.¹¹

However, the core problem that goes right to the heart of concerns relating to IUU fishing is simply that the provisions of the UN Fish Stocks Agreement cannot bind non-parties. As a result, the problem of free riders – i.e. states which fail to join RFMOs, but continue to fish – continues to undermine the conservation measures put in place by the RFMO. In nearly all RFMOs participation is not sufficiently broad to ensure sustainable management of fish stocks. The only way to force cooperation in these circumstances is to use the permissive provisions of the Agreement to take “measures consistent with [the Agreement] and international law” to deter non-parties from undermining the effectiveness of conservation and management measures adopted by an RFMO. The sort of measures that might be invoked include, *inter alia*, trade and market-place measures, such as catch documentation schemes, as well as port state measures, such as inspections. (Some of these were examined in Chapter 2)

The Fish Stocks Agreement, and state practice, takes an equivocal approach to the problem of non-parties. Whilst the Agreement expressly provides the possibility for states to apply conservation measures voluntarily, it also encourages all states fishing in a high seas area to be part of an RFMO. There is a recent trend in RFMOs towards according “cooperating non-party” status to states that are not members of an RFMO but are allowed to cooperate with it. Such cooperation may be solely for the purposes of enforcing RFMO measures (such as cooperating port states) but is often also extended to fishing opportunities for these states. There are advantages and disadvantages on both sides: members may be able to exclude such cooperating non-members from decision-making processes, including those concerning allocation and access. On the other hand, it is of concern to some that non-members are able to gain access to the resource without having to contribute significantly to its management, or take responsibility for wider (e.g. conservation and restoration) issues of concern to the RFMO. Cooperating non-party status may in some cases be able to be justified as an interim solution, but the only long-term solution is for cooperating non-members to become full members of the RFMO.

RFMOs are under increased scrutiny in other areas as well. In many different international fora the international community has made commitments to apply ecosystem and precautionary approaches to fisheries (and ocean) management.¹² Heightened interest by organisations not traditionally associated with fisheries has led to increased criticism of fisheries management methods in view of these commitments, the poor state of world fisheries and the impacts of fishing on other marine species and biodiversity.

Although one of the most important contributions of the Fish Stocks Agreement is the way in which it seeks to operationalise a precautionary approach in the context of fisheries management, there is little concrete evidence of its application in the management action taken by most RFMOs to date. Moreover, most RFMOs continue to apply single species models for fisheries management that focus on the effects of fishing on the target species and seek to identify harvest levels (either in terms of tonnes caught or effort to be expended) that are intended to allow a single stock to maintain over time a sustainable level on average.

This approach to fisheries management falls short of meeting the obligations in the Agreement with respect to bycatch and species associated with or dependent upon the target species. It explicitly ignores the fact that the target species does not exist in isolation and that changes in stock size of a top predator like tunas may affect the growth rates of other predators through reduced competition for food as well as affect prey species abundance.

An alternative approach may be for RFMOs to incorporate more active management rules for species of particular conservation concern. This would mean that in addition to setting reference points for the take of the target species (which are usually dominant species) in a single species context, the reference points are also linked to the sustainability of associated or dependent species, especially those of special concern. At the very least, RFMOs need to show that they are abreast of these issues. The danger is that, as the perception grows that existing fisheries management is failing not only in relation to broader ecosystem impacts but also in relation to sustainable use of target stocks, the justification for more radical solutions grows stronger.

The Task Force recognises that challenges of this nature can only be addressed incrementally through multilateral dialogue. Factors such as globalisation and the increasing convergence between fisheries issues and broader issues of oceans governance and biodiversity conservation bring with them added complications. There is a tendency for issues to hop from forum to forum with different organisations competing to identify solutions that purport to equate fisheries outcomes with sustainable development.

There is a need for institutional reform, but it is essential also to develop a clear understanding of the political economy of reform in fisheries at both national and international level. The OECD Fisheries Committee, amongst others, can be expected to play an important role in analysing the opportunities and challenges for policy reform of domestic and international fisheries governance structures as well as the impacts of globalisation on fisheries management and governance.

Subsidies and overcapacity

The failure to deal adequately with an oversupply of domestic fishing effort combined with the fact that fishing vessels have little, if any, alternative use, has resulted in overcapacity being pushed onto the high seas in search of new opportunities. This overcapacity, coupled with the ready availability of a pool of under-employed but highly specialised labour to direct fishing operations, provides a ready supply of inputs for IUU fishing on the high seas. In some cases, policies aimed at assisting the transition of fishers out of over-exploited domestic fisheries have simply helped them to move into new fisheries on the high seas – a displacement that can be passively facilitated by other states which provide operational bases or free up investment and trade arrangements without regard for what may be traded.

The problem is exacerbated by the closure of some exclusive economic zones (for reasons of over-exploitation) to traditional distant water fleets; thereby further displacing activity onto the high seas. Furthermore, there is considerable and growing concern, especially amongst developing states, that the overcapacity problems of fleets domiciled in developed states are being exported into IUU fishing activities within or adjacent to developing country exclusive economic zones.¹³ Subsidies for vessel construction and modernisation which contribute to overcapacity naturally exacerbate this problem.¹⁴

Once poor domestic fisheries management investments have been made, a self-perpetuating cycle emerges in which governments find it politically difficult to make the necessary economic and social adjustments to manage the use of a dwindling resource. In the past twenty years, rapid improvements in fishing technology and significant increases in fishing effort have been matched by ongoing declines in fish stocks. Less fish and more effort have combined to increase costs and reduce returns for both domestic and high seas fleets and have led to situations where some governments have felt obliged to prop up not only the fish catching and processing sectors but also the regions which have come to depend on them.

These circumstances have increasingly led to situations where rather than take tough resource management decisions, governments have found an ever-expanding range of financial and other

Figure 1. Global overview of RFMOs: straddling fish stocks

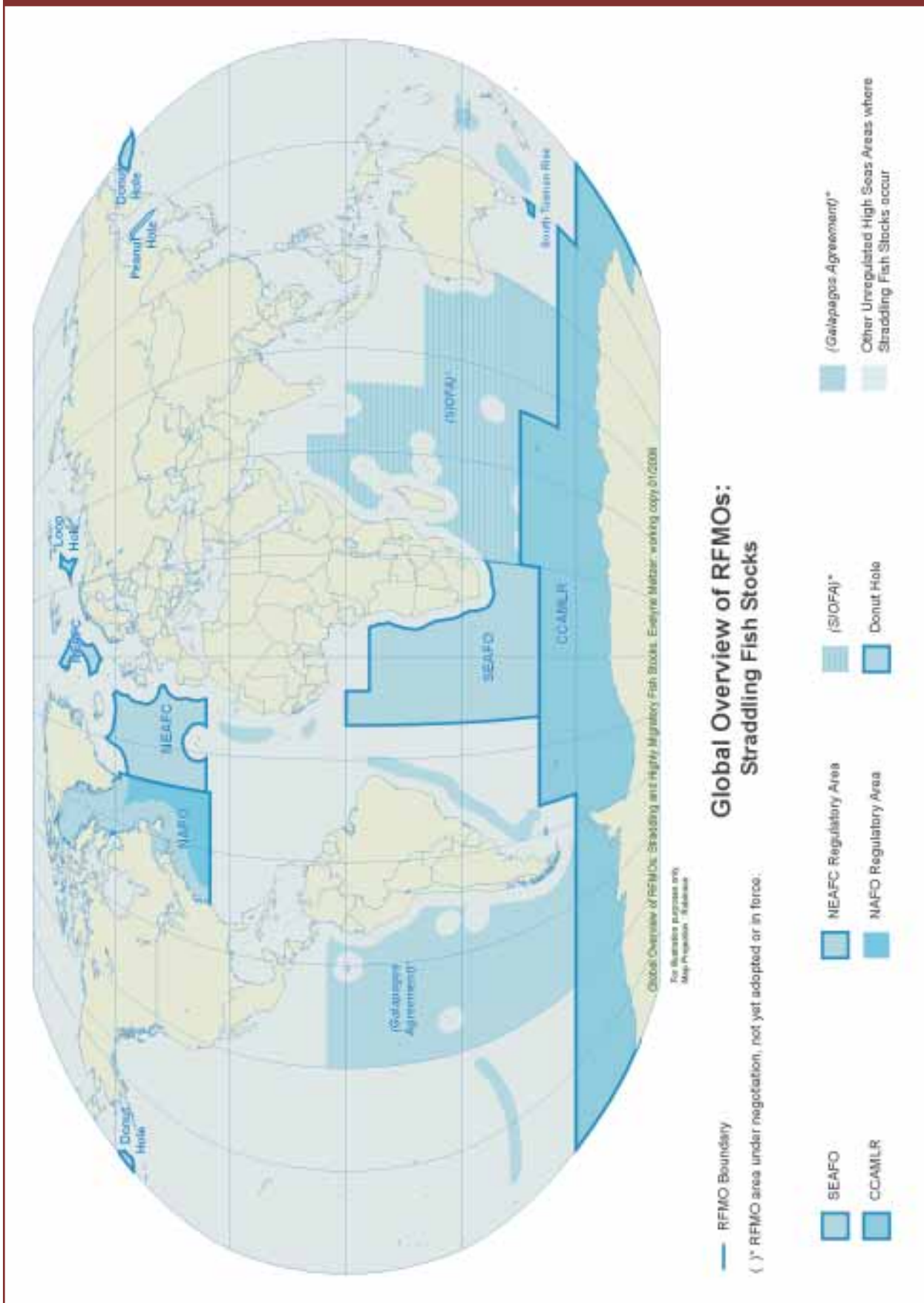
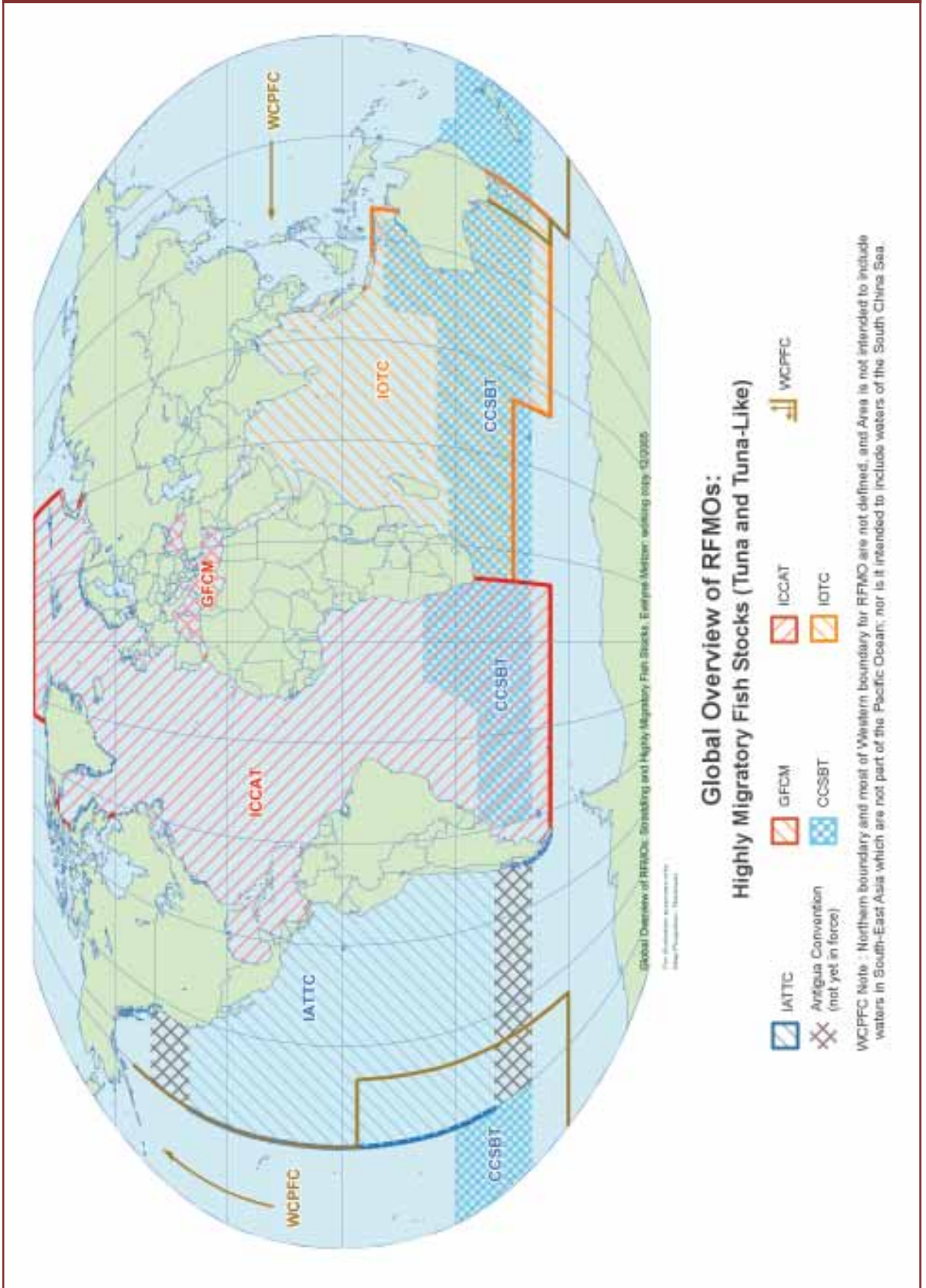


Figure 2. Global overview of RFMOs: highly migratory fish stocks (tuna and tuna-like)



tools to support their domestic and high seas fleets and the regions where they are based. Not only does this send the wrong signals to fishers and new investors but it has deferred the inevitable restructuring thereby making it that much more difficult.

Paragraph 28 of the Doha Declaration provides a mandate for the creation of legally binding fisheries subsidies disciplines requiring that WTO members "... aim to improve WTO disciplines on fisheries subsidies, taking into account the importance of this sector to developing countries." Good progress has been made in the negotiations to date, with members in broad agreement to the prohibition of certain forms of fisheries subsidies, which may contribute to overcapacity and overfishing. While the devil will of course be in the details and success in these negotiations is not assured, the prospect of a legally binding and enforceable prohibition on some fisheries subsidies and disciplines more generally is likely to measurably assist efforts to combat IUU fishing.

Inadequate flag state control

Chapter 2 contained a detailed description of how IUU operators are able to use the fiction of flag state responsibility to avoid compliance. But what lies behind the international system that allows such widespread abuse to happen?

For practical purposes, all legal arguments about the status of vessels on the high seas and the responsibility of governments to control them, start and stop with the Law of the Sea Convention. The Convention asserts that the high seas are open to fishing by all states. Of course, it is not states but fishing boats that go fishing. The Convention asserts the right of all states to flag ships and in doing so underwrites the primacy of flag states as the conduit through which the enforcement of international obligations must pass.

The extent to which the Law of the Sea itself elaborates the responsibilities of flag states is limited, and largely general in nature. For instance there is a general obligation "to protect and preserve the marine environment."¹⁵ In tandem with that provision is a duty to cooperate globally and regionally to elaborate international rules and standards to protect the marine environment.¹⁶ Similarly, the nature of the relationship between states and those authorised to fly their flags is characterised in minimal terms: there must be "a genuine link".¹⁷

The Law of the Sea Convention does contain a specific reference to the need for cooperation in respect of migratory fish stocks but this is tacked on to a part of the Convention dealing with coastal states and their exclusive economic zones. Possibly the only provisions which purport to direct flag states to take responsibility for their boats (and even then it is extremely general) are articles 117 and 118, which impose a duty on all states to take "such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas."

Notwithstanding the generality of the few Law of the Sea provisions that imply flag state responsibilities, there would not be a problem with IUU fishing if states observed them – either by forcing their ships to comply or refusing to flag them. The reality is, however, that many states either **cannot** or **will not** take enforcement action against fishing boats flying their flags even when their activities are clearly damaging to the marine environment or fail to conserve high seas living resources. Bluntly put, they are happy to claim the rights and benefits of sovereign states to confer flag status without accepting the accompanying responsibilities.

The enforcement action that may be taken by coastal states against vessels suspected of illegal fishing on the high seas is quite limited. Unlike the cases of piracy and slavery, there is no general power of enforcement on the high seas except in the very limited circumstances of hot pursuit, or if the vessel is stateless (that is, flies no flag or flies the flag of two or more states, using them according to convenience). This leads to an obvious weakness when some flag states are

unable (through lack of resources, as in the case of some developing countries) or irresponsibly unwilling (because they offer a safe haven to illegal fishers and organised crime) to act.

The inadequacy of the current system of flag state responsibility is well-documented and widely recognised; and not just in the fisheries sector.¹⁸ Effective flag state control is also a vital factor for ensuring safety of life at sea, reducing substandard shipping, protecting the marine environment through control of pollution and securing the welfare of seafarers.

Many in the fisheries world continue to pin their hopes for a solution to the problem of irresponsible flagging on a better definition of the requirement in the Law of the Sea Convention for a “genuine link” between vessel and shipowner. History suggests that their hopes are ill-founded. There has already been one diplomatic attempt to define the elusive genuine link. The UN Convention on Conditions for Registration of Ships, adopted in 1986, spelled out minimum requirements for economic links between a ship and the flag state and required flag states to ensure that the owners and operators of ships on its register were “adequately identifiable for the purpose of ensuring their full accountability.” However, effective lobbying by flag states with large tonnages in respect of which they did not wish to exercise greater control saw the insertion of entry-into-force provisions which meant their own failure to accede to the treaty would effectively kill it. This cynical tactic had precisely the desired effect. Twenty years on, and with only 14 countries (none of them major maritime powers and only one, Liberia, a major flag state) having ratified the Convention, it must now be regarded as a dead letter.

There seems little point, therefore, in FAO Ministerial Declarations which “agree on the need” for “further international action” to require that a genuine link be established, but contain no practical suggestions as to exactly how that might be achieved.¹⁹ International organisations within the UN family do not even speak the same language. The view of the IMO, which is the body responsible for maintaining international standards in maritime safety, navigation and pollution, is that “questions relating to the ownership of vessels should be considered as subject matters of an economic corporate nature that clearly fall beyond the purview of the law of the sea and the mandate of the international organisations as identified in the Convention on the Law of the Sea.”²⁰

None of this prevented the UN General Assembly, in 2003, from inviting a “consultative group” consisting of the IMO and other relevant international organisations to “study, examine and clarify the role of the genuine link in relation to the duty of flag states to exercise effective control over ships flying their flag, including fishing vessels.” Needless to say, in 2006, the consultative group continues to consult with no clear outcome in sight.

A better definition of the genuine link for fishing vessels may eventually strengthen the ability of states to deal with IUU fishing, but this is most unlikely to be achieved in the short term. A more fruitful line of investigation to explore may be the hypothesis that failure by a state to perform its duties under article 94 provides evidence of the absence of any genuine link between that state and the vessel concerned under article 91. In the *Grand Prince* case,²¹ the International Tribunal for the Law of the Sea declined to recognise the *Grand Prince* as having the nationality of Belize because of uncertainty as to whether the vessel was validly registered in Belize. This suggests that if states were prepared to be more questioning about whether vessels engaged in IUU fishing on the high seas are validly registered in the claimed flag state it might be discovered that there are more vessels fishing on the high seas that may be considered stateless (and thus susceptible to arrest) than previously thought. In the case of such an arrest, if the flag state fails to act, at least one fishing vessel will have been removed from the high seas and other vessels registered under the same flag might decide to change registry. If the flag state later claims jurisdiction, it might be further argued that its previous poor compliance record places it in breach of its international legal obligations with regard to conservation of high seas resources.

The reluctance of the international community to tackle the problem of inadequate flag state control over fishing vessels is difficult to understand. The International Commission on Shipping, in its final report, noted that since the events of 11 September 2001 “the world has seen a substantial change in the way shipping is viewed.” Recognising the vulnerability of shipping and maritime infrastructure to terrorist threats, governments and the shipping industry have made major efforts to implement far-reaching measures to make shipping more secure.²²

A secure maritime environment rests on four pillars: transparency, authenticity, control and supervision. Of these, transparency – knowing who controls and who benefits from a ship – is possibly the most important in dealing with IUU fishing. There is a clear link between transparency and security. In recent years, a worldwide demand for greater transparency has created opportunities for pressure to be brought to bear on the shipping industry to eradicate substandard shipping through enhanced measures adopted through IMO and other competent international organisations. These include a code for implementation of mandatory IMO instruments and a voluntary audit scheme.²³

Few, if any, of these measures have percolated through to fishing vessels, which continue to be exempted from the requirements of the IMO numbering scheme,²⁴ the Torremolinos Convention (which regulates construction safety standards), the International Ship and Port Facility Security (ISPS) Code and the recent amendments to the International Convention for the Safety of Life at Sea (SOLAS). This is disturbing given that, by any measure, the presence of large numbers of unregulated, anonymous fishing boats represent a substantial security threat. In general, high seas fishing also has an appalling safety record and IUU fishing boats provide an ideal platform for illicit activities such as people-smuggling and smuggling of drugs, arms and contraband.

It might well be thought that one of the most basic prerequisites to better understanding the problem of IUU fishing on the high seas would be the ability to quantify the size of the potential fishing fleet. Vessels engaged in high seas fishing need to be large enough to fish in distant waters and in bad weather conditions. Surprisingly, there is no single and complete database or register of high seas fishing vessels in the world, even though most management, surveillance and enforcement authorities recognise the benefits of being able to identify definitively the vessels authorised to participate in a particular high seas fishery down to the level of individual vessels and their characteristics, especially their ownership and control. (Box 11)

There have been a number of attempts at global and regional levels to establish registers of fishing vessels authorised to operate on the high seas. The most important global fisheries-related initiative is the Compliance Agreement adopted in 1993 through FAO.²⁵

Under article III of the Compliance Agreement, states parties are not supposed to authorise fishing vessels to fly their flags “unless the Party is satisfied that it is able ... to exercise effectively its responsibilities under this Agreement in respect of [those vessels].” A key feature of the Compliance Agreement, which supplements and reinforces the similar obligation in article 18 of the UN Fish Stocks Agreement, is the obligation on each state party to maintain a record of all fishing vessels entitled to fly its flag and authorised to be used for fishing on the high seas. This information is then to be transmitted to FAO which, as the responsible global organisation, is to maintain a register of all such authorisations that have been issued by states parties – the High Seas Vessel Authorisation Record or HSVAR.

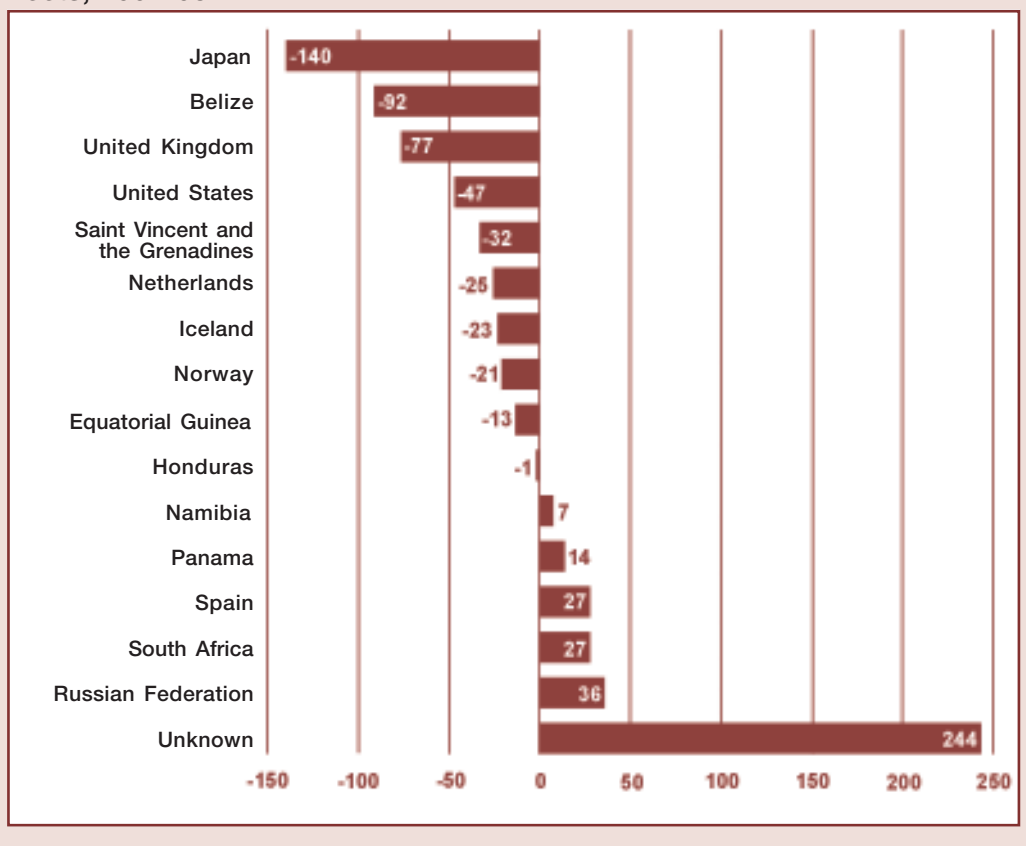
Unfortunately, by 2004, more than 11 years after its adoption, only 30 states had accepted the FAO Compliance Agreement. Whilst this (just) exceeds the 25 acceptances required to bring the Agreement into force, it is hardly enough to make the Agreement broadly effective. By mid-2004 only 19 countries had supplied FAO with the required information on vessels authorised to fish on

Box 11. The size of the world's high seas fishing fleet

FAO estimates that, after years of expansion in the world fishing fleet until the early 1990s, the number of decked fishing vessels worldwide has remained fairly stable at around 1.3 million (FAO, 2004). This figure, though, includes many smaller vessels that would not venture onto the high seas. According to information held on Lloyd's Register, the number of large marine fishing vessels (considered to be those above 100 gross tons) has remained fairly stable since the 1990s at around 24,000. At the same time, however, the average age of the larger marine fishing vessel fleet has continued to increase. In 2003, 28 per cent of these vessels were more than 30 years old, compared to 6 per cent in 1992.

Since entry on Lloyd's Register is not mandatory, there is no guarantee that these statistics present an accurate picture of the level of high seas fishing activity. Furthermore, what the bare statistics do not show is a marked trend away from traditional distant water fishing fleets such as Japan, Norway and Russia (mainly as a result of capacity reduction programmes) and towards so-called flags of convenience, often recorded in Lloyd's Register as "unknown".

Change in numbers of fishing vessels of 100 GT and above in selected fleets, 2002-03



FAO, 2004

the high seas. In September 2005, the HSWAR contained records of 5 792 authorised high seas fishing vessels. Many of these records had not been updated for several years; recent information suggests that some states, for example, last provided information on their fleets in 2001. (Box 12)

Since the UN Fish Stocks Agreement was adopted, most of the RFMOs with high seas coverage have also established regional registers of fishing vessels authorised to fish in their respective

areas of competence. These registers take a number of different forms. ICCAT, for example, maintains a positive “white” list of vessels authorised to fish for ICCAT species in the Convention Area and a negative or “black” list of vessels of non-contracting parties presumed to have carried out IUU fishing activities. CCAMLR, on the other hand, has taken the approach of establishing a blacklist of vessels considered to have engaged in IUU fishing.²⁶ Vessels placed on the IUU vessel list will, among other things, be denied fishing licences by CCAMLR members. In common with some other RFMOs, CCAMLR also maintains a list of vessels authorised to fish in the Convention Area.²⁷ In a similar vein, the regional register maintained by the South Pacific Forum Fisheries Agency (FFA) works on the basis that FFA member countries agree that they will only issue licences to vessels that are listed in good standing on the regional register. (Table 3)

Box 12. The FAO High Seas Fishing Vessel Authorization Register (HSVAR)

The HSVAR suffers from four major impediments:

Like the regional registers maintained by RFMOs, it is dependent upon the quality of information provided by flag states.

Information on the database is accessible only by other parties to the Compliance Agreement.

Like the majority of RFMO registers, the essential purpose of the HSVAR is to passively record the existence of authorisations to fish, not critical vessel, ownership and operational details relating to individual vessels.

The Compliance Agreement is limited to fishing vessels over 24 metres in length, thus creating a significant loophole in its application.

What all these arrangements have in common is that, to a greater or lesser extent, the positive lists all rely on the authenticity of the information provided by the flag state, while the negative lists usually rely on information provided by contracting parties about activities of all vessels. FAO's HSVAR, whilst in theory providing a valuable “one-stop” source of information on whether a particular vessel is in possession of a national authorisation to fish on the high seas, is built on a legal framework (the Compliance Agreement) that currently places significant limitations on the extent, content and use of the data contributed to it.

With respect to RFMO lists, in many cases, the lists are subject to approval by RFMO members (giving ample scope for sanitising). Few, if any, of the RFMOs seek to go beyond the lists provided to them and independently verify or add to information provided by the flag state of the vessel. This is a critical weakness in existing arrangements. Furthermore, the information contained in the registers is generally not broadly accessible. Lists compiled within one cooperative framework are not necessarily available even to other management regimes.²⁸ When the Task Force Secretariat requested basic administrative information from NAFO and NEAFC on the number of vessels on their registers and the type of information held, it was told in both cases that the request would have to be considered by a meeting of the contracting parties.

The situation in RFMOs (and the point of our questions to NEAFC and NAFO) is exacerbated by the fact that many of the registers hold different or inconsistent pieces of information in incompatible data formats. This means that, even where data are accessible, it is not necessarily easy to make comparisons between vessels and to establish linkages between movements of vessels from one register to another (for example, by reflagging) or from one region to another. This is demonstrated by the difficulties that the tuna RFMOs have encountered in trying to coordinate their individual vessel lists. These factors not only significantly reduce the benefits of national and regional vessel registration, but also hamper surveillance and contribute to conditions under which IUU operations can thrive. Even in CCAMLR, which has probably the most restrictive measures in place to prevent reflagging, at least some IUU vessels formerly flagged to flags of

Table 3. Vessel records and registers maintained by selected RFMOs

CCAMLR	CCAMLR maintains publicly available lists of IUU vessels, established under Conservation Measures 10-06 and 10-07. These are divided into lists of contracting party vessels and non-contracting party vessels. They may be accessed at www.ccamlr.org
CCSBT	CCSBT maintains a record of vessels that are authorised to fish for Southern bluefin tuna. Fishing vessels not on the list are deemed to be not authorised and trade documents from such vessels will not be validated. The list may be accessed at www.ccsbt.org
FFA	Regional register of fishing vessels. A vessel that is not in “good standing” may not be licensed to fish in the jurisdiction of any FFA member country. The register may be accessed at www.ffa.int
IATTC	IATTC maintains separate records of purse seine and longline vessels that are authorised to operate in the Convention Area. In 2005, a resolution was adopted to establish a list of vessels that are presumed to have conducted IUU fishing activities in the IATTC Area. The lists are available at www.iattc.org
ICCAT	ICCAT maintains a record of vessels over 24 m that are authorised to operate in the Convention Area. Each ICCAT Contracting Party, Cooperating non-Contracting Party, Entity or Fishing Entity is required to submit annually a list of its large-scale fishing vessels that are authorised to operate in the Convention Area. ICCAT also maintains a public list of vessels presumed to have carried out IUU fishing activities in the Convention Area. These lists may be downloaded from the ICCAT website, www.iccat.int .
IOTC	IOTC maintains a record of fishing vessels authorised to fish in the Convention Area. IOTC also maintains a list of vessels presumed to have conducted IUU fishing, compiled on the basis of information provided by its member states. These lists are available at www.iotc.org
NAFO	NAFO’s regulations make provision for an IUU vessel list to be compiled and published. The list is not presently available on NAFO’s website.
NEAFC	NEAFC’s regulations contain procedures for compilation of “A” and “B” lists of non-contracting party IUU activity. These are available at www.neafc.org/measures/ (in part password protected for contracting parties only)
WCPFC	WCPFC maintains a record of fishing vessels authorised to fish in the Convention Area. A vessel not on the list is presumed not to be authorised to fish. The list is not yet publicly available.

convenience have found ways to reflag to CCAMLR members in order to be able to continue to fish for toothfish, but have not necessarily changed their ownership.²⁹ (Box 13)

Other, less formal, initiatives aimed at “naming and shaming” IUU fishers have been partially successful in influencing the approach of international management bodies. The best examples of these are the “Rogue’s Gallery” maintained by COLTO (see page 23) and the less melliflously named International Southern Oceans Longline Fisheries Information Clearing House (ISOFISH).

Box 13. The mystery of the missing fishing vessels

In 2005, 416 fishing vessels over 24 metres in length appeared on the Honduras shipping register. Three of these operated in the Atlantic under charter to Brazilian companies and appeared on the ICCAT list of vessels authorised to fish. Eight Honduras-flagged purse-seine vessels were authorised to fish for tuna in the Eastern Pacific in the IATTC area. No Honduran flagged vessels were listed as authorised to fish for tuna in the Indian Ocean or in the area of the South Pacific Forum countries. Assuming that, of the remaining 405 large-scale fishing vessels on the Honduran registry in 2005, many, if not most, are likely to be tuna fishing vessels, where were they fishing? If not the Atlantic Ocean, Indian Ocean, South Pacific, Eastern Pacific, Mediterranean or Caribbean Sea tuna fisheries, where could they be?

In total, in 2005, 1 267 large-scale fishing vessels were identified as being flagged to the 14 most significant open register countries. A detailed analysis of the lists of authorised fishing vessels maintained by ICCAT, IATTC, the South Pacific Forum Fisheries Agency, IOTC and CCAMLR revealed that (assuming there was no duplication in the lists) 188 of these vessels were authorised to fish for toothfish, tunas and other highly migratory fish stocks in the Atlantic Ocean (including the Mediterranean and Caribbean Seas), Indian Ocean, South Pacific, Eastern Pacific and Southern Ocean. Where were the other 1 079 vessels fishing?

Both initiatives aim to compile and make available to the general public information about the corporate structures and activities of illegal fishers. Whether IUU operators are vulnerable to this kind of pressure is difficult to quantify. Anecdotal evidence exists to suggest that a number of Norwegian vessel owners disengaged from IUU activities in the Southern Ocean partly as a result of ISOFISH publicity (although undoubtedly strong action by the Norwegian government also played an important part).³⁰ On the other hand, one of the biggest operators targeted by COLTO and even implicated by the International Tribunal for the Law of the Sea in illegal fishing activities, Pacific Andes, has been recently reported as further expanding its operations in China.³¹

One of the biggest problems with this sort of initiative is that incriminating information about illegal activities can be very difficult to substantiate. Publishers of such information run the risk of liability for defamation or negligence. Notwithstanding, initiatives such as ISOFISH, COLTO, the Organisation for the Promotion of Responsible Tuna Fisheries (OPRT)³² and the activities of international NGOs demonstrate the inadequacies of some of the more formal vessel registers. They are also a powerful indication of why it is important to find a way to obtain and publicise information on the corporate structures and activities of illegal fishers as well as the vessels that they use.

CHAPTER 4

Where does the analysis lead? – The rationale behind the Task Force’s proposals for action

At the root of the problem of IUU fishing on the high seas lies the reality that this is a highly profitable economic activity. IUU fishers take advantage of weak institutions, inappropriate management regimes and a near absence of enforcement in many parts of the world. Input costs that are already low are further lowered through the malign influence of subsidies that have created substantial overcapacity in world fishing fleets. With a low probability of being caught and an even lower probability of sanctions being applied, IUU fishing on the high seas is a low-risk activity with potentially high rewards.

How should we interpret the current state of play?

The search for points of leverage against IUU fishing proceeds against the reality that international law has underlined the status of the high seas as a global commons to which individual sovereign states have been universally assigned access together with national responsibility for enforcement. At the same time, attempts to avert a “tragedy” in that commons¹ have of necessity been conceived as regional cooperative initiatives between those who choose to join them. The challenge is to bring into some sensible relationship a top-down assertion of rights by the international community as a whole to ensure sustainable use of these collective goods with bottom-up attempts at regional management by those directly involved in the fisheries to halt the depletion of fish stocks or restore already depleted stocks.

In the absence of a high level of accession to the international treaties and regional agreements, there is only a very partial and patchy level of enforcement. Put simply, a large part of the problem is that states have been reluctant to sign up to international instruments and even where they have signed up, they have failed to do what they have agreed to do.

Even with comprehensive accession to the relevant treaties and regional organisations, there remains a more fundamental question: how can a web of regional organisations – some covering specific species only, some whole fisheries – work together to bring pressure to bear on a problem that extends to the high seas as a whole? Each specific regional initiative to tackle IUU fishing risks displacing it to a less well managed – or wholly unmanaged – area.

In practical terms, where RFMOs exist, enforcement is as strong (or as weak) as the measures adopted by them. Where they don’t exist, the curtailment of grossly unsustainable practices is as strong (or as weak) as the determination of flag states to exercise control over vessels flying their flags.

The rationale behind the Task Force proposals

IUU fishing will continue to be extremely difficult to reduce unless action is underpinned by serious political determination. This, of course, is an oft-repeated truism behind which negotiators frequently shelter. In setting up the Task Force, its members decided that they at least wished to give the lie to that charge.

Whilst genuinely multilateral solutions to the problems identified in this report would clearly be ideal, Task Force members detect no conviction that such solutions will be swiftly forthcoming or necessarily any more effective. Given the strong evidence of failure to achieve significant progress through multilateral processes, the weight of the proposals is on measures that Task Force members, and other interested partners, can implement immediately, without waiting for widespread acceptance by the international community. As such, they are largely capable of enforcement within current management systems and build on currently available technology and resources. None of the proposed measures will undermine multilateral processes – quite the reverse, nearly all of them could complement such efforts or help to provide impetus to them.

The Task Force has also consciously developed measures that can be advocated to others as effective tools to amplify the benefits that will flow from the lead Task Force members have taken; in other words, they are measures designed to have a powerful coalition-building effect.

Each of the major proposals is intended to have one or both of the following effects:

- It will enhance enforcement, sharply increasing the risk of exposure of IUU operations and the potential for successful interdiction
- It will make IUU operations less profitable, increasing the capital and operating costs and reducing the revenues from IUU fishing

What all the proposed measures have in common is a capacity to minimise the key economic incentives to participate in IUU fishing. Since we know from both anecdotal and evidentiary sources that IUU fishing operations can easily provide opportunities for broader illegal activity such as money laundering, weapons smuggling, trade in illicit drugs and illegal migration, the proposed measures also seek to ensure that IUU fishing receives the same public profile as other illegal activities.

Each measure is thus designed in some way to expose IUU fishing activities, deter them and improve enforcement against those responsible.

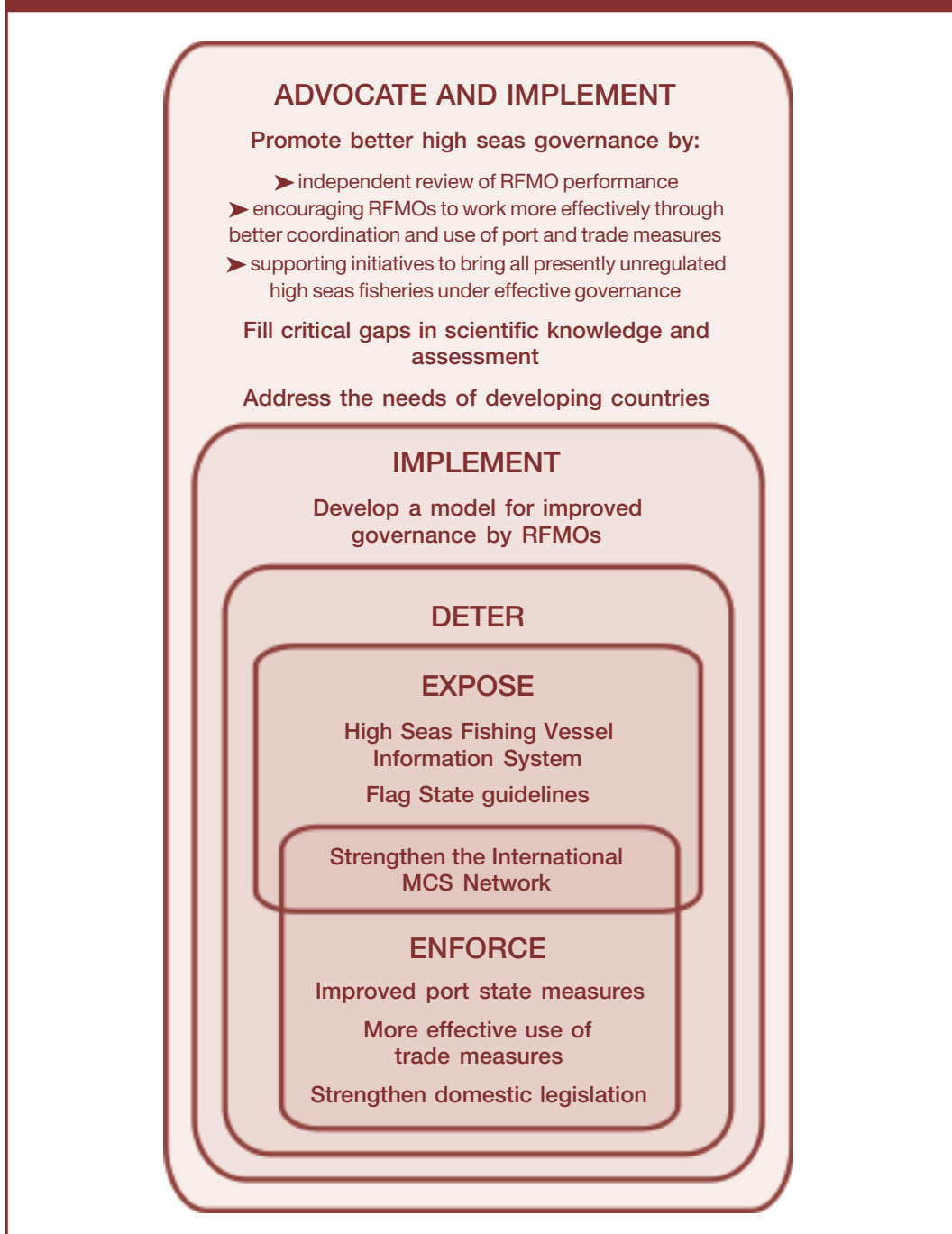
There is clearly extensive overlap between the various proposals, with some measures best viewed as a continuum. The way in which the proposals have been designed to fit together is shown diagrammatically in Figure 3 (page 62).

The proposals are set out in the form of an action plan in Table 4, followed by a detailed explanation of each of the main proposals.

The proposals summarised

The first priority is to act swiftly to stem the worst abuses. The analysis set out in this report makes it clear that as a precondition for this, the international community needs to radically improve the quality of information available and access to it. Proposals 1 and 2 therefore focus on ways to promote better coordination of monitoring, control and surveillance and sharing of intelligence. This would be achieved by committing resources to the existing voluntary International MCS Network to enable it to become an international network with dedicated resources, analytical capacity and the ability to provide training and support to developing countries. Closely

Figure 3. Synergies between proposed measures



associated with this is a proposal to develop a global database of information on high seas fishing vessels.

These measures would operate alongside proposals (4c, 5 and 6) to strengthen in-port measures against IUU fishing and adopt guidelines on flag state performance. These areas have been selected because they provide opportunities for Task Force members to act individually and collectively even if other countries are not similarly minded.

To improve the reach of current governance arrangements, in particular UNFSA, Task Force members intend to work together to ensure that specific countries become party to key interna-

Table 4. Summary of the Task Force proposals

Proposal	Summary of action plan
1 Strengthen the International MCS Network	The Task Force, working together with other like-minded countries, proposes to provide the resources to enhance the existing MCS Network by providing it with dedicated analytical capacity and the ability to provide training and technical support to fisheries enforcement agencies in developing countries
2 Establish a global information system on high seas fishing vessels	The Task Force proposes to establish a publicly-available database of information relating to the global high seas fishing fleet, drawing together existing fisheries-related information from a range of sources and making it available on the Internet. In the long-term, the system should be capable of integration with the MCS Network and any future evolution of the FAO HSVAR
3 Promote broader participation in the UN Fish Stocks Agreement and FAO Compliance Agreement	Task Force members will make special efforts to encourage key countries to become party to the UN Fish Stocks Agreement and, where appropriate, the FAO Compliance Agreement, as soon as possible
4 Promote better high seas governance by: (a) developing a model for improved governance by RFMOs (b) independent review of RFMO performance (c) encouraging RFMOs to work more effectively through better coordination (d) supporting initiatives to bring all unregulated high seas fisheries under effective governance	<p>The Task Force recommends best practice guidelines for RFMOs. Following the launch of its report, Task Force members will also establish a high-level panel to develop a model RFMO based on a more comprehensive analysis of best practices</p> <p>Support the concept of a regular independent review of RFMO performance as a follow-up to the development of a best-practice model</p> <p>Task Force members will work individually and collectively on a regional basis within RFMOs to achieve these objectives</p> <p>Support the application of the basic standards of the UN Fish Stocks Agreement to unregulated high seas areas and fisheries (including through existing RFMOs where appropriate) Support initiatives to create RFMOs in currently unregulated areas</p>
5 Propose guidelines on flag state performance	As a statement of best practice, the Task Force proposes basic guidelines on flag state performance with respect to high seas fishing vessels, based on the obligations set out in international fishery instruments

Continued on next page

Table 4, continued

Proposal		Summary of action plan
6	<p>Support greater use of port and trade measures by:</p> <p>(a) Promoting the concept of responsible port states</p> <p>(b) Promoting the FAO Model Port State Scheme as the international minimum standard for regional port state controls and supporting FAO's proposal to develop an electronic database of port state measures</p> <p>(c) Reviewing domestic port state measures to ensure they meet international minimum standards</p> <p>(d) Strengthening domestic legislation controlling import of IUU product</p>	<p>Task Force members will promote the concept of responsible port states and encourage the implementation of port state control schemes based on the FAO Model Scheme</p> <p>An inventory and analysis of Task Force members' and RFMOs' port state measures will be provided to FAO</p> <p>Task Force members have published a review of their domestic port state measures.</p> <p>Task Force members will consider adoption of Lacey Act type legislation</p>
7	Fill critical gaps in scientific knowledge and assessment	Task Force members propose the establishment of a small network of institutions to develop models and carry out meta-analysis of IUU fishing
8	Address the needs of developing countries	<p>Target improvements in MCS and flag state control</p> <p>Address broader governance issues in developing countries</p> <p>Accommodate legitimate interests of developing countries in high seas fisheries</p>
9	Promote better use of technological solutions	<p>Enhance VMS security</p> <p>Promote better sharing of data within RFMOs</p>

tional fishery instruments (proposal 3). International consensus is already gathering in support of the reform of RFMOs and the initiation of processes for improving their performance. As an initial step, and to provide momentum to existing international processes, the Task Force will recommend summarised best practice guidance for RFMOs. The guidance, which are intended to aid discussion of internal reform, will reflect a number of best practices in terms of implementation of international fishery instruments. Task Force members will actively promote the application of the guidance through the RFMOs of which they are members as well as through existing multilateral fora. To provide added impetus, the Task Force proposes to commission an independent high-level panel to develop a model RFMO based on a more comprehensive assessment of best practices worldwide (proposal 4a and 4b).

Task Force members have, from the outset, recognised that their wish to take the lead in a number of areas should always be supportive of broader multilateral efforts. The initiatives that Task Force members have committed to implement are therefore not being promoted as solutions in isolation from more broadly-based activities. A number of proposals and recommenda-

tions can be achieved only if their implementation is effected at a multilateral level. Clearly, it is beyond the Task Force members alone to secure such an outcome. With that in mind the Task Force set out to ensure that its recommendations would be fully compatible with multilateral processes and that its members would lend their collective weight to those processes by taking wherever possible a common advocacy position. These proposals, therefore, include proposals intended to encourage RFMOs to work more effectively (4c), support initiatives to bring all unregulated high seas fisheries under effective governance (4d), fill critical gaps in scientific knowledge and assessment (7) and address the needs of developing countries (8). These are couched as positions that Task Force members will advocate by way of a clear, united position in regional organisations and multilateral fora.

Implementation

In the first place the Task Force members will work together to advance these proposals and recommendations. But they will also seek to engage a broader group of like-minded countries and organisations in their implementation. Task Force members are developing a strategy to promote the broader acceptance of this report and build support for its proposals. The Task Force also proposes to convene, with like-minded countries and organisations, regular meetings to review progress.

PROPOSAL 1

Strengthen the International MCS Network

One of the key economic incentives that allows IUU fishing activity to thrive is the low risk of being caught. Creating an effective deterrent relies on developing a perception that there is a much higher likelihood that IUU fishing or IUU product will be detected and that, once detected, severe penalties will be applied. Sanctions such as blacklisting, denial of port or market access and criminal prosecution have all been tried. Some countries and RFMOs have been more proactive than others. But even where serious efforts have been made, IUU fishers continue to be able to operate with relative impunity. The fact is that the likelihood of detection remains low. Despite advances in technology, the possibility of apprehension at sea is always going to be compromised by the sheer size of the area to be policed. IUU fishers are adept at finding loopholes in enforcement regimes, infiltrating markets and seeking out ever more remote locations for offloading catch. Our conclusion is that it is beyond the capacity of individual states to create an effective deterrent that enhances both the likelihood of detection and the effectiveness of sanctions.

The rise in illegal activities that has accompanied globalisation underscores the need for cooperative law enforcement across national borders. One key element is to radically improve the quality of information available to enforcement agencies and their access to it. The use of human intelligence is vital in directing technology to the most effective deployment. Governments and RFMOs must work together to establish which vessels are fishing where, what those vessels are catching, who the beneficial owners of those vessels are and to track their catches. If they can do so the chances of catching and prosecuting IUU operators will be substantially increased. The Task Force's first proposal, therefore, is to strengthen the flow of effective information and intelligence about high seas fishing activity.

There is currently a voluntary network – the International MCS Network – that provides a forum for MCS professionals from some 50 member countries and organisations. The MCS Network coordinates a wide array of fisheries law enforcement information through meetings, training

programmes and a website. Most importantly, the MCS Network attempts to maintain a database of contact points for each member country which can be accessed through a secure website as well as information on domestic management arrangements and legislation.

The Network is a voluntary organisation with no membership fee that has experienced accelerated growth over a short period of time. The principal shortcoming of the Network to date is that it remains an informal body that has no dedicated resources to carry out the tasks expected of it. Since all its officers also have full-time jobs they are unable to adequately service the demands of a rapidly growing organisation. The consensus among the current Network officers, members and website users is that, whilst the current structure has served the Network well, given the size of the Network and increased demand for timely information, it has probably reached the limits of its effectiveness under current arrangements. It has no independent resources. This creates a vicious circle; as up to date relevant information is not posted on the website, national agencies use it less and become less diligent in submitting new information. In short, the model is sound, but resources are lacking. (Box 14)

If we look at how international cooperation has developed in response to other forms of cross-border crime, we can see a clear trend towards increasingly sophisticated arrangements for cooperation in intelligence gathering, evidence sharing, law enforcement and mutual assistance in response to threats such as trafficking in illicit narcotics, trafficking in persons, arms smuggling, tax evasion, serious fraud and cross-border motor vehicle theft. The need for a forum for enforcement agencies to meet, exchange information and adopt universal standards and practices led to the establishment of bodies such as Interpol and the World Customs Organisation (WCO).² Interpol links police forces around the globe and provides assistance in criminal investigation and analysis. The WCO seeks to combat customs and related transnational crimes. It does this by promoting and facilitating communication and cooperation among members and with other international organisations. Both Interpol and the WCO maintain databases of criminal information (for example counterfeit currencies) and collect and disseminate information to contact points in member countries. Their purpose is to move information across borders. They are also able to analyse data in order to provide a global view on specific crimes, patterns of criminal activity and trends. Neither Interpol nor the WCO have the right to carry out investigations or to conduct enforcement and they do not participate in operational activities. Many other newer institutions, for example, the European Drugs Unit, established in 1994, do have such functions, usually based on treaty.

The key to dramatically enhancing the effectiveness of the International MCS Network is to give it dedicated resources and a measure of independent functioning as well as more sophisticated analytical capability. Such a dedicated international resource would be able to act as a central communications hub for the exchange of information between national enforcement authorities as well as a reference point for the collection and analysis of intelligence. Dedicated data analysts would be able to draw conclusions from seemingly unrelated streams of information to provide intelligence to Network members and to identify areas for further work. It would add significantly to national enforcement capability and would sharply increase the likelihood of successfully detecting and interdicting IUU fishing activity on the high seas. The provision of training and technical support to enforcement authorities in developing countries would dramatically improve the reach and scope of the proposed Network.

Ultimately, what is needed by MCS practitioners is a fully-resourced network with dedicated financial resources, analytical capacity and the ability to provide training and technical assistance to all MCS practitioners and especially those in developing countries.

Task Force members, working together with authorities of the United States Government, have therefore decided to provide the resources to enhance the existing MCS Network to improve its

Box 14. The International MCS Network

The International MCS Network (International network for the cooperation and coordination of fisheries-related monitoring, control and surveillance activities) is an arrangement of national organisations in charge of fisheries-related MCS activities, which have been authorised by their countries to coordinate and cooperate in order to prevent, deter and eliminate IUU fishing. It was formed in 2001 on the initiative of a small group of national enforcement agencies with a view to trying to improve the efficiency and effectiveness of MCS activities through enhanced cooperation, coordination, information collection and exchange among national bodies.

The Network has an informal, operational, focus. Like Interpol and the World Customs Organisation, it provides a forum for professionals to meet and discuss current MCS issues. However, it is not intended to replace formal government to government arrangements. Training is also an important part of the Network's activities and at each meeting there are dedicated training presentations. Most importantly the MCS Network maintains a database of contact points for each member country as well as information on domestic management arrangements and legislation.

From small beginnings, the Network has grown to include agencies and organisations from some 50 countries. Since its establishment, the administrative costs have been borne by the network administrator, which is presently the National Oceanic and Atmospheric Administration (NOAA) in the United States. The website is hosted and maintained on a voluntary basis by NOAA. The United States, which has played a significant role in the success of the Network to date, also provides the chair of the Network's advisory committee, while Sernapesca (*Ministerio de Economía*, Chile) provides the services of an Executive Secretary.

Some of the intended benefits from the Network include intelligence sharing, access to databases of relevant information, access to experts in a range of disciplines, access to information on fishing vessels, rapid personal contact with officers in other countries during investigations. The apprehensions of the IUU vessels *Viarsa I* and *South Tomi* were assisted by effective linkages developed through the MCS Network between enforcement officers in Australia, South Africa and the United Kingdom.

effectiveness and give it the capacity to provide training and technical support to fisheries enforcement agencies in developing countries. Importantly, it will be provided with dedicated analytical capacity. The principal functions of the enhanced International MCS Network would include the following:

- Maintenance of a secure website as a central communications hub for rapid exchange of data and information
- Circulation of up to date information on sightings and activities of IUU vessels
- Monitoring of information on vessel and product movements
- Seasonal predictions of vessel concentrations
- Maintenance of libraries and databases on: prosecutions, sanctions imposed, domestic legislation, vessel masters and beneficial owners, crew lists, corporate data and media reports
- Collection and analysis of non-fisheries data drawn from a variety of public and other sources

- Convening regular meetings of practitioners to exchange views on current MCS problems and develop international standards, protocols and best practices
- Provision of training and technical support, especially to personnel from developing countries

The Task Force is hopeful that other like-minded countries will also see the value in this initiative, which is consistent with commitments made at the St. John's Conference to strengthen and improve MCS programmes around the world, and contribute to the enhanced MCS Network.³

PROPOSAL 2

Establish a global information system on high seas fishing vessels

One of the greatest obstacles in the battle against IUU fishing is lack of access to transparent and authoritative information about the ownership, control and movements of fishing vessels. The Task Force is convinced that for committed countries to effectively tackle IUU fishing on the high seas, a coordinated effort is required to collate and make available objective and impartial information on the characteristics, current and previous ownership and operations of high seas fishing vessels.

The Task Force proposes therefore the establishment of a publicly-available, Internet-based, database of information relating to the global high seas fishing fleet. The database would draw together information presently available from a range of sources, including shipping registries, national and regional vessel registers, insurance records and corporate records. The aim is to build up a catalogue of objective and impartial information on the characteristics, current and previous ownership and operations of high seas fishing vessels.

This is a core proposal that cuts across and reinforces all the other proposals. The key insight underlying this initiative is the fact that while it is possible for illegal operators to disguise their identities, it is difficult to do so identically and with seamless accuracy to multiple parties. The ability to compare information from multiple sources is a critical forensic capability needed by enforcement agencies. We expect that the information held on the database would rapidly become a critical resource for national enforcement authorities, port authorities, RFMOs and other sectors involved in the fishing industry. And while this initiative focuses on vessels fishing on the high seas, the information system will likely also be useful to officials in coastal states responsible for managing foreign fishing in exclusive economic zones.

Although the proposed global information system should be viewed as entirely different in purpose from the existing registers and records maintained by the various RFMOs as well as the FAO HSVAR (Box 12, page 56), there are obvious synergies. Those registers, which are built around legal frameworks that govern the supply and use of information contained in them, exist for specific and clearly-defined purposes. In most cases, registration carries with it explicit or implicit legal consequences. That would not be the case with the global information system, which would not be a register in the traditional sense, but a depository of information and links to other sources of information. A user of the system would thus be able to see whether a particular vessel has been issued with a national high seas fishing authorisation or appears on one or more RFMO lists. Importantly, however, neither the user nor the administrator of the information system would have any role to play in the qualitative decision to place the vessel on or off the RFMO list in question.

We would expect that both FAO and the RFMOs would be key providers of data to the global information system. In the long term, we would hope that a global information system could be fully integrated with both the enhanced MCS Network and any future evolution of the FAO HSVAR. The Task Force's proposal has been designed with this objective in mind.

A potential model for a global information system already exists in the form of the European Quality Shipping Information System (Equasis). Equasis was established in 2000 by a small group of major maritime administrations⁴ to assist in the fight against substandard shipping by providing an objective, independent and impartial source of information on the world merchant fleet. This enables all sectors of the industry – insurers, charterers, cargo owners, banks, port administrations – to make informed decisions about whether to conduct business with particular ships or shipowners. It has the capacity to expose substandard shipping and promote positive discrimination in favour of quality vessels. It is not an enforcement agency and the information it provides is factual: it does not attempt to rate ships or evaluate the quality of the data provided to it.

Information is available on Equasis on a ship by ship basis on merchant vessels of over 100 GT (some 75 000 vessels are presently in the database). Data is obtained from over 36 public and private data providers, including the secretariats of the regional memoranda on port state control, the U.S. Coast Guard, the major ship classification societies, P&I Clubs (the insurers of merchant ships) and Lloyd's Register.⁵ These data are updated regularly by the providers.

The Task Force is confident that the Equasis model could be applied with relative ease to high seas fishing vessels. In addition to general information of the type held by Equasis on merchant vessels, information to be displayed might include, for example:

- Flag state authorisations to fish
- Status of vessel on RFMO registers
- Information on previous blacklistings by RFMOs and coastal states
- Status of entry on the FAO HSVAR
- Reports of national inspections, convictions and fines
- Reports of port state inspections and detentions
- Reports of boardings and inspections within RFMO regulatory areas
- Details of captain and fishing master
- Details of VMS hardware and data depository
- Colour photographs of the vessel
- Details of beneficial as well as direct ownership

The vessel information system is intended to help to expose and deter IUU fishing. By using the best features of existing databases and drawing on best practices in the merchant shipping industry the database can enable national enforcement agencies, port administrations and RFMOs to have more ready access to information about fishing vessels and their operators than currently

available and without the need for multiple searches of shipping registers and fishing vessel registers. Some of the benefits that might be achieved include the following:

- The broad availability of information on the registration history and ownership profile of fishing vessels would make it more difficult for IUU operators to do business. For example, information on current RFMO blacklisting and deregistration could be made available to shipbrokers and prospective purchasers of vessels, or to states considering their registration or flagging. Where domestic legislation allows, this could be coupled with prohibitions on purchase or registration of such vessels.
- Information relating to previous port inspections could alert port states and enforcement authorities to the need to exercise particular vigilance with respect to specific ships or flags. Vessels whose beneficial ownership is obscure could be targeted for intensive scrutiny or port access could be restricted altogether.
- A global information system would support efforts by RFMOs to establish reliable lists of authorised fishing vessels and to prevent IUU fishing vessels from operating in their areas of competence. RFMOs would be both data providers and data users and the global information system would support efforts to harmonise regional registers.
- Open public access to the global information system would overcome some of the limitations on current registers without damaging their integrity. It would enable the naming and shaming of IUU operators as well as the making of informed decisions about access to particular fisheries.

In addition to the obvious benefits of open access to unbiased and transparent information on fishing vessels, a global information system has the potential to evolve into a powerful management and compliance tool in the longer term. If there is broader support for a global database, it is conceivable that entry in good standing upon the global database could become a mandatory requirement for any vessel fishing on the high seas. The status of a vessel on the database could itself provide a strong basis for unilateral or regionally coordinated action (e.g. prohibition on import of product caught by a non-registered vessel or denial of port access). Ultimately, applying the precedent of articles 21 and 22 of the UN Fish Stocks Agreement, if there is a watertight system of global registration for fishing vessels, it could be argued that lack of registration creates a *prima facie* right for other states to take action against an unregistered vessel on the high seas.

PROPOSAL 3

Promote broader participation in UN Fish Stocks Agreement and the FAO Compliance Agreement

The need for universal participation in the UN Fish Stocks Agreement has been emphasised repeatedly in numerous resolutions of the UN and other international bodies. It is simply not acceptable that, ten years after its adoption, only 56 states have signed up to its provisions. Recent accessions by Belize, Estonia, Kiribati, Guinea and Liberia are encouraging, but much more needs to be done to speed up the pace of accession by other states with important fisheries interests.

The Fish Stocks Agreement is without doubt the most comprehensive global agreement relating to the conservation and management of high seas fish stocks. As a product of multilateral negotiations it may not be perfect, but it is indisputably a giant step in the right direction. Nevertheless, it cannot attain its full potential unless the most important coastal, fishing and flag states

are parties to it. Unless and until all key fishing states become party to the Agreement and comply with its obligations, unregulated high seas fishing will remain a considerable problem.

In the long-term it is important that all parties to the Law of the Sea Convention (currently 149) become parties to the Agreement, so that, as originally intended, there would be a seamless connection between the provisions of the Convention and the provisions of the implementing agreement. This is likely to take time. In the short-term it is especially important that all high seas fishing nations and actual and potential flag states – particularly those that have a history of relationships with IUU fishing – become parties to the Agreement and implement its provisions for their fleets. The opportunities for free riding can thereby be minimised through binding as many high seas actors as possible into the existing web of legal obligations.

As an immediate measure, the Task Force will make special efforts, including through joint diplomatic representations, to encourage the following countries to become party to the Fish Stocks Agreement and, where appropriate, the FAO Compliance Agreement, as soon as possible. These key countries include those that are already members of two or more regional high seas

Table 5. Non-parties to UNFSA and/or FAO Compliance Agreement

	Non-party to UNFSA	Non-party to FAO Compliance Agreement
Argentina	●	
Bolivia	●	●
Cambodia	●	●
Equatorial Guinea	●	●
Georgia	●	
Honduras	●	●
Japan	●	
Korea	●	
Mexico	●	
Nicaragua	●	●
Panama	●	●
Philippines	●	●
Poland	●	●
Saint Vincent and the Grenadines	●	●
Sierra Leone	●	●
Vanuatu	●	●
Venezuela	●	●

arrangements (thus having a clear high seas fishing interest) as well as those that are flag states of high seas fishing vessels. (Table 5)

The prospect of a United Nations conference to be convened in May 2006 for the purpose of assessing the effectiveness of the Agreement provides an ideal opportunity for members of the Task Force to raise the issue of broader participation.

PROPOSAL 4

Promote better high seas governance by:

- (a) developing a model for improved governance by RFMOs**
- (b) independent review of RFMO performance**
- (c) encouraging RFMOs to work more effectively through better coordination and use of port and trade-related measures**
- (d) supporting initiatives to bring all unregulated high seas fisheries under effective governance**

Notwithstanding the critical role allocated to them, the effectiveness of RFMOs varies widely. There has been growing international recognition of the need for RFMOs to perform better both individually and collectively, as well as the need for increased cooperation between them on issues of common concern. Nevertheless, it remains the case that the mandates of many RFMOs established prior to the entry into force of the UN Fish Stocks Agreement still do not adequately reflect the minimum requirements set out in article 10 of that Agreement or the principles for management set out in article 5. This has been recognized by FAO. As long ago as 2002, a group of international experts concluded that, to implement international fishery instruments effectively, it is necessary to strengthen regional fishery bodies to ensure that they meet the standards set for them by the relevant international instruments, possess the necessary mandates, and are equipped to carry out the functions ascribed to them.⁶

The Fish Stocks Agreement relies on a divergent network of RFMOs to implement its provisions. The drawback, however, is the absence of a systematic approach in most RFMOs to implementation of the Agreement. This was noted as an important obstacle to implementation by the UN Secretary-General in his 2004 report on the status of the Agreement.⁷ There is no effective means for cross-learning among RFMOs about best practices. Nor is there a mechanism whereby members of RFMOs (and states who fish in an area but fail to join the relevant RFMO) can be held to account for their management of high seas or transboundary resources.

A model for improved governance by RFMOs

It is clearly not possible to reform RFMOs through some sort of top-down, global process. That would be both interminable and ignore the reality that to be effective, reform has to be progressive, based on the political dynamics within each region and informed by a process of rigorous

self-evaluation against objective and broad-based criteria. The members of each RFMO have to own the mandate they grant it.

International consensus is already forming around the need to reform RFMOs and to initiate processes for improving their performance. Indeed, reform processes have already been launched in some RFMOs, such as NAFO, NEAFC and ICCAT. Task Force members have played an important role in pressing for such processes. What the Task Force has tried to do is to identify where it can bring leverage to bear and provide added impetus to ongoing international processes.

As an initial step, the Task Force recommends guidance for assessing the performance of RFMOs. This is set out in Appendix 3. The guidance is not comprehensive, but is intended to be reflective of best practices in the implementation of international fishery instruments. It is offered with a view to encouraging self-evaluation by RFMOs and to aid internal RFMO discussions of reform in the near term. The objective is to encourage change from within.

Task Force members will actively promote the application of this guidance through the RFMOs of which they are members and through other multilateral fora. In particular, they will encourage the RFMOs of which they are members to conclude an initial self-assessment no later than July 2007. Task Force members also believe that review and assessment processes should be transparent, with the findings and outcomes of such processes made available widely.

To enable the guidelines to be further developed, the Task Force also proposes to commission, immediately following the launch of this report, an independent high-level panel to develop a model RFMO based on a more comprehensive assessment of best practices worldwide.

Independent review of RFMO performance

Task Force members are of the view that it is incumbent on all stakeholders to demand effectiveness and accountability by setting clear goals for states to achieve in respect of the RFMOs of which they are members. Statements of best practice for RFMOs can provide objective criteria to encourage a more systematic and consistent approach to ensuring that regional arrangements conform with standards set by international fisheries instruments. However, any assessment of performance that simply provides a snapshot of the state of the world at a particular date is of limited use.

To this end, the Task Force will encourage the launch of an independent review and evaluation process for RFMOs aimed at producing critical assessments of their performance against the developing model. A regular review of an evolving model RFMO would enable the international community to identify clearly the areas in which RFMOs fall short of the standards required by the Fish Stocks Agreement and other relevant international fishery instruments, the obstacles to be overcome and how to remedy the situation. To be effective, such a process would need to have sufficient credibility to draw attention at the political level to trends and gaps in effective conservation and management of high seas resources.

Encouraging RFMOs to work more effectively through better coordination and use of port and trade-related measures

Regional bodies have proliferated around the geographical range of stocks or species. This reflects the notion that the unit of management is the fish stock; and that to be effective, conservation and management measures should be effective throughout the range of the stock concerned. It is increasingly being recognised however, that, in the case of some species, particularly highly migratory species, there are important interactions between fish stocks in different regions as well as between species associated with or dependent upon target stocks.

The species-specific approach also seems to be fundamentally inconsistent with the ecosystem approach to management.⁸

Interactions among stocks and species make for interactions among management measures, whether in relation, for example, to quotas set for tuna species that migrate between regions or in relation to measures taken to avoid bycatch of migratory seabirds. When fishing vessels move between regions and operate under different RFMOs, there are likely to be consequent effects on measures taken to reduce excess fishing capacity and address IUU fishing. Even without direct interactions between species and management measures, there would be substantial benefit in a more systematic sharing of knowledge among RFMOs. New developments in management approaches, fishing practices, and assessment techniques as well as new research findings of broader potential significance need to be shared widely.

Another particularly compelling justification for greater coordination between RFMOs is the fact that only the most developed countries are in a position to service the ever-growing list of international bodies. This perpetuates the advantage of developed countries – especially those that are members of all RFMOs – over developing countries, many of which are unable to service even one RFMO. Even in developed countries, it is recognised that there is insufficient scientific expertise to service multiple high seas RFMOs properly if these continue to be created at too fine a spatial scale.

Factors of this nature argue strongly in favour of the need for better coordination between RFMOs. There has been increased recognition of this need in recent years. For example, FAO sponsors a biennial meeting of regional fishery bodies and Japan proposes in 2007 to convene a meeting of tuna RFMOs.

A first step forward might involve examining the synergies between the five RFMOs with jurisdiction over highly migratory tunas (CCSBT, IATTC, ICCAT, IOTC and WCPFC) with a view to finding areas for future cooperation. With the recent establishment of the WCPFC, coverage by tuna RFMOs is almost global and there are significant opportunities for closer cooperation in a number of key areas. Tuna is an international commodity, traded on a relatively small number of international markets irrespective of its source. The fleets that fish for tuna are highly mobile and readily transfer their efforts from one region to another (recently, for example, 60 Taiwanese vessels displaced from the Eastern Pacific moved to the Indian Ocean).

Interestingly, the need for greater consistency between tuna RFMOs has also been noted by industry. In November 2004, for example, three of the largest European tuna producing companies made a joint representation to ICCAT, IOTC, IATTC and WCPFC commenting on the “degradation of the decision-making process” in RFMOs and recommending a series of steps to improve the quality of international regulation.⁹

All the tuna RFMOs have provisions in their constituent instruments that encourage cooperation with other RFMOs. To date, however, cooperation has largely been confined to administrative cooperation between secretariats. If RFMOs are going to assemble black lists of flags or vessels, should these not be shared with other RFMOs? Similarly, if labelling measures are to be developed to provide a means of distinguishing legal from IUU product in the market place, why not link these schemes? Why not shift them all to the most exacting standard used so far?

Some of the areas where strengthened cooperation is likely to produce tangible results most quickly are:

Shared vessel registers: All tuna RFMOs either operate, or are considering operating, registers of fishing vessels. In addition, different vessel registers are maintained by the South Pacific Forum Fisheries Agency in the Pacific region and, globally, by FAO (HSVAR). Given the movements of vessels between oceans, as well as reflagging, these registers need to be made compatible. It should be possible for related RFMOs to maintain a common vessel list from which individual RFMOs would have an identified subset of vessels authorised to operate in its fishery. This vessel list could be linked to other common measures, such as catch documentation schemes and port inspection schemes as well as to the global information system on high seas fishing vessels.

Common catch documentation schemes: Several RFMOs have developed trade information schemes and catch documentation schemes at varying levels of complexity (ICCAT, CCSBT, CCAMLR). Although preliminary indications are that some such schemes can work as a means of combating IUU fishing, much more work needs to be done in terms of ensuring compatibility between catch documentation schemes in different regions and ensuring that such schemes are watertight.¹⁰ We believe that such schemes should be applied to all of the principal IUU species and should cover all phases of production, trade and marketing. To combat abuse, the basic design of catch and trade documentation needs to be standardised and made more secure. FAO has developed useful principles which may be applied for this purpose.¹¹

Analysis of trade and finance flows: The seasonal and migratory nature of the global tuna fishery means that tuna is a global commodity. Raw material for canneries is frequently transported long distances by sea, from the fishing grounds to the main processing regions. Detailed analysis of these trade flows might help to determine useful points of intervention for exposing or influencing the underlying financial flows supporting unsustainable fishing.

The fundamental structure for this sort of coordination already exists. What is needed is better operational cooperation by RFMOs and relevant decisions by their governing bodies. Task Force members will work with other countries to achieve this.

At a broader level, relevant to all RFMOs, trade-related measures can play an important role in promoting sustainable fisheries practices. We saw in Chapter 2 that measures may range from trade restrictive measures and catch documentation schemes applied by RFMOs to consumer boycotts, ecolabelling schemes and industry-based initiatives based on notions of corporate social responsibility.

The Task Force is less sanguine about the effectiveness of other trade and market-place measures. Instinctively, a combination of the exercise of corporate social responsibility, sound purchasing choices by major wholesalers, chain-of-custody schemes and consumer action, backed up by government action to support enforcement of conservation rules, would appear to offer a solution to limit the ways in which IUU product can reach the market, but there remain serious questions about the application of such measures to developing countries and major new markets, such as China.

Whilst the work commissioned by the Task Force¹² has helped us to identify some of the characteristics of successful schemes, it is clear that little is known about whether corporate demand for sustainable fish is driven by consumer demand for sustainable products, or whether corporate supply is for other reasons such as corporate social responsibility. There is a need to be able to more accurately quantify the precise effect of trade and market-place measures in helping to achieve conservation and management goals.

There is also a need to assemble hard evidence with which to test the effect on the market, as well as on sustainability, that voluntary ecolabelling schemes such as the Marine Stewardship Council initiative really have. Research also needs to focus on the actual economic costs of such schemes, including the direct, indirect, one-off, and recurring costs of compliance, as well as the potential WTO implications of government funding for independent schemes.

Support initiatives to bring all unregulated high seas fisheries under effective governance

The existence of significant geographical and biological gaps in RFMO coverage of the high seas has already been noted (see page 47 and Figures 1 and 2, pages 50-51). Some high seas fisheries are completely unregulated. Of particular concern are deep sea bottom trawl fisheries which target seamounts, oceanic ridges, banks and other deep ocean features in the North Atlantic, Southeast Atlantic, North and South Pacific and Southern Indian Ocean. Most of the high seas areas in which this fishing takes place are not covered by RFMOs with competence to regulate the fisheries and in some areas it is recognised that there are serious problems with misreporting and under-reporting of catches to flag states.¹³

What is necessary is to establish management measures where none exist, and enforce them effectively, before unregulated fisheries are depleted. It is important that all presently unregulated high seas fishing is brought under effective management, either by creating new RFMOs where none exist, or by extending the coverage of existing RFMOs. It is also important to ensure that RFMOs take on board the need for conservation and management measures that also address bycatch and protect biodiversity. These may include, where necessary, the adoption of scientifically-based criteria to designate closed areas around sensitive seamounts and prohibit the use of certain damaging gear types.¹⁴

The UN Fish Stocks Agreement, notwithstanding its emphasis on an ecosystem-based and precautionary approach to fisheries and ocean management, applies only to straddling fish stocks and highly migratory fish stocks. Nevertheless, states fishing for discrete high seas stocks are already subject to the general duty set out in the Law of the Sea Convention to cooperate to conserve and manage the fisheries. In so far as the Fish Stocks Agreement is an instrument that gives effect to and elaborates upon principles that were already inherent in the Convention as part of that general duty, then it follows that the principles for conservation and management that are elaborated in the Agreement should be applied to discrete high seas stocks as well as to straddling and highly migratory fish stocks. This includes the basic obligations to conserve biological diversity and to apply the precautionary approach.

Indeed, in a significant step, the South East Atlantic Fisheries Convention (SEAFO) has already applied the principles of the Fish Stocks Agreement to manage discrete fish stocks found on the high seas. The SEAFO Convention does not explicitly distinguish between straddling and discrete high seas fish stocks, but applies the management principles set out in the Fish Stocks Agreement to both.

Ultimately, it is up to the countries with the most immediate interests to take the lead in bringing presently unregulated fish stocks under international management. This is being done in the Southern Pacific, for example, by Australia, Chile and New Zealand, who recently took the initiative to convene consultations among interested states on the establishment of a new RFMO for the conservation and management of hitherto unregulated fish stocks in the Southern Pacific Ocean.

PROPOSAL 5

Adopt and promote guidelines on flag state performance

Compared to the global merchant fleet, the global high seas fishing fleet is comparatively unregulated and suffers from a lack of transparency about who owns and manages these boats. Fishing vessels as a class are exempt from many of the IMO conventions that apply to merchant vessels. In a world that is increasingly conscious of the importance of maritime security, safety and respect for human rights, this situation is anomalous and troubling.

Because of the relative lack of regulatory measures aimed specifically at fishing vessels, a number of international fisheries instruments include provisions aimed at requiring flag states to exercise greater control over fishing vessels. There is a clear trend to require that (a) high seas fishing is expressly authorised by the flag state, (b) the flag state maintains records of all vessels to which an authorisation has been issued and (c) these records are collated at regional and global levels by RFMOs and the FAO. Unfortunately, these obligations are reflected in different ways in different instruments and are not yet universally or consistently applied by flag states.

To help tackle the problem of flag states that fail to live up to their international responsibilities, the Task Force proposes a preliminary set of guidelines on flag state performance with respect to high seas fishing vessels. The proposed guidelines, which are set out in Appendix 4 are based on the obligations of flag states with respect to fishing vessels set out in international fishery instruments. It should be emphasised that the suggested guidelines relate only to the fisheries-related obligations of flag states. They are not intended to duplicate action being taken by IMO to develop vessel-related guidelines on flag state performance for vessel safety and pollution control.

The proposed guidelines constitute criteria which could be used by Task Force members and by others to independently evaluate the performance of flag states with respect to fisheries. In effect, the guidelines are a statement of best practice for flag states of high seas fishing vessels. They could be used to determine, objectively and transparently, whether flag state administrations are taking their fisheries-related responsibilities seriously. This will enable all sectors involved in high seas fishing to make appropriate decisions including: flag state administrations themselves, port states (which might adopt a policy of inspecting under-performing flags), RFMOs, NGOs, responsible fishing companies (which may not wish to be associated with certain flag states), responsible corporate buyers and consumers. These efforts could be supported by a broadly-based public education campaign to explain the problem of under-performing flag states and catalyse public support for action. This is an area where NGOs and industry groups have particular expertise and can be of considerable assistance.

There is a precedent for this type of action. The Round Table of Shipping Industry Organisations, which represents a substantial proportion of global tonnage and a broad cross-section of shipping interests¹⁵ has recently developed its own set of guidelines on flag state performance. The stated objectives of these guidelines are to encourage ship owners and cargo owners to examine whether a flag state has sufficient substance before using it; and to encourage shipowners and operators to put pressure on their flag administrations to effect any improvements that might be necessary, especially in relation to safety of life at sea, the protection of the marine environment and the provision of decent working and living conditions for seafarers.

Setting and applying standards rooted in best practice not only reinforces efforts to expose and deter IUU fishing but also supports initiatives to expose and deter irresponsible flag states from

accepting fishing vessels onto their registers. The aim must be to exert pressure to get all flag states to comply with their obligations regarding their registered fishing fleets. In the final analysis, broad acceptance of international minimum standards – for example through FAO's Committee on Fisheries – would enhance the possibility of taking legal action against flag states that consistently fail to live up to their responsibilities.

PROPOSAL 6

Support greater use of port and trade measures by:

(a) promoting the concept of responsible port states, promoting the FAO Port State Model Scheme as the international minimum standard for regional port state controls and supporting FAO's proposal to develop an electronic database of port state measures

(b) reviewing domestic port state measures to ensure they meet international minimum standards

(c) strengthening domestic legislation controlling import of IUU product

Proactive use of port state controls can be an effective weapon against IUU fishing operations. However, the way in which loopholes in the CCAMLR catch documentation scheme have been exploited by IUU operators suggests that better harmonisation and coordination between states will be essential if the practical limitations of such schemes are to be overcome. The key is to ensure that port state controls are applied widely and consistently in order to avoid the development of so-called ports of convenience. At present, whilst the Law of the Sea emphasises the primacy of flag state jurisdiction, port state jurisdiction is optional, with some limited exceptions. As long as port state jurisdiction remains optional, some port states will be able to attract the business of ships that are operated in violation of international standards.

Responsible port states

The Task Force considers that a **responsible port state is committed to making the fullest possible use of its jurisdiction under international law in furtherance of its own rights and interests as well as the international community's interests in sustainable management and conservation of high seas marine living resources**. Once a vessel is in one of its ports, the port state needs to be able to act decisively. To do this, effective domestic legislation must be in place as well as cooperative mechanisms to coordinate action with other port states, flag states and market states.

FAO Port State Model Scheme

At the regional level, and within RFMOs, the Task Force strongly supports the adoption of FAO's Port State Model Scheme as the international minimum standard for port state controls. Task Force members will work together to promote the broadest possible application of the Model Scheme.

The Task Force also supports the proposal by FAO to establish an electronic database to make available to port states, coastal states, flag states and RFMOs information on the measures that other port states have applied in order to develop their own programmes to address IUU fishing. Exchanging information on state practice in this manner sets trends and induces other states to take similar action in future. Progress on establishing the database has to date been slow due to lack of funds. As a practical demonstration of support for FAO's proposal, and as a contribution to FAO's work in this regard, the Task Force has prepared an inventory and analysis of the port state measures applied by Task Force members and high seas RFMOs.¹⁶

While several RFMOs have begun to adopt more comprehensive schemes of port state control, for the most part these schemes remain procedurally weak and are, in some cases, voluntary. For this reason, port state measures will continue to be only as strong as the states that enforce them.

There is an urgent need to develop regional port state control arrangements along the lines of the FAO Model Scheme which specify the monitoring and enforcement actions to be taken by port states, including inspection guidelines. To close off existing loopholes, such arrangements must be comprehensive and encourage the cooperation of port states that are not also fishing states or even members of the RFMO concerned. Where necessary, RFMOs may need to consider cost-sharing mechanisms to assist developing port states in implementation of regionally-agreed schemes. Regional arrangements would ideally develop around existing global movements of trade, thereby aligning common interests and stock management and ensuring cohesion between existing trade and catch documentation schemes. For example, cooperation already exists between some of the tuna RFMOs, with ICCAT and IOTC utilising identical catch documentation schemes. These arrangements could be further enhanced.

Review domestic port state arrangements

An analysis of the port state measures applied by Task Force members shows that, in general, they meet current international standards as set out in the FAO Model Scheme. The Task Force supports making better use of currently under-utilised areas of port state jurisdiction, including departure state jurisdiction, routinely requiring VMS data to be provided and imposing financial penalties for furnishing false information. Specific recommendations are set out in the report commissioned for the Task Force. More effective use of port state controls by Task Force members will increase the effectiveness of many of the other measures recommended in this report. For example, as regional port state inspection regimes consistent with the FAO Model Scheme are established, information from port state inspections can be fed into the proposed global information system on high seas fishing vessels. To this end, the functional specifications for the global information system have been designed in order to be fully compatible with the data protocols of the FAO Model Scheme. Such information in turn can provide invaluable material for analysis by the MCS Network.

Strengthen domestic legislation controlling import of IUU product

It was noted in Chapter 2 that one of the most effective weapons in the fight against IUU fishing has been the U.S. Lacey Act. The use of this type of "long-arm" approach to enforcement is recommended in the IPOA-IUU, which recognises that port states should use their ability to sanction vessels that conduct IUU fishing beyond the jurisdiction of the port states. Lacey Act-type provisions have already been enacted by a number of other countries besides the United States, including Papua New Guinea, Nauru and Federated States of Micronesia. In 2000, Papua New Guinea successfully prosecuted an IUU fishing vessel operator for illegal fishing in waters under the jurisdiction of Solomon Islands.¹⁷

We recommend that Task Force members, and other like-minded countries, consider adopting domestic legislation similar to the Lacey Act. To assist in this process, the Task Force commissioned a comprehensive study of the Lacey Act and its implementation in the United States which includes draft clauses for a Model Port State Fisheries Enforcement Act (Ortiz, 2006).

PROPOSAL 7

Fill critical gaps in scientific knowledge and assessment

The Task Force's analysis of the impacts of IUU fishing on ecosystems and future science needs¹⁸ suggests that there is an urgent need to improve reporting on high seas catches, including bycatch. The greatest gap in scientific knowledge in relation to IUU fishing stems from the lack of reporting of catch of target and bycatch species, their size composition and where and when such catches are made.

All RFMOs are faced with dealing with fish caught by non-parties that is unregulated and most likely unreported. A significant part of this catch can clearly be attributed to IUU fishing by fleets that are not constrained by the state whose flag they are flying. The failure of flag states to join and then effectively participate in RFMOs provides such states with an excuse for inaction, including failure to report. While international observer programmes could help, the difficulty that all RFMOs (except CCAMLR) have experienced with implementing such programmes suggests that increased monitoring through such programmes will not occur in the short term. If this bottleneck to basic data collection could be overcome, the resultant data would go a long way to reducing uncertainty about IUU catches and its impact on specific stocks and fisheries.

The bycatch reporting problem is more difficult to resolve. Many RFMOs have not yet developed reporting formats that include bycatch reporting as called for in international fishery instruments. Solving the IUU problem will thus have a relatively small effect on most bycatch problems unless the RFMOs concerned also solve the bycatch problems of regulated fisheries. In that case the major bycatch effects would be created by IUU vessels, presumed not to be following the RFMO regulations. This is currently the case with CCAMLR, where the majority of the estimated seabird mortality is coming from IUU fishing rather than legal fishing.

Regardless of whether an effective international observer programme could be implemented, determining IUU fleet size, area and times of operation through enhanced surveillance methods could be used to improve estimates of catch and likely ecological impacts. While this would be largely based on assumptions of equivalent practices on legitimate vessels and hence still retain some uncertainty it would be a significant step forward in improving assessments.

But to further increase the accuracy of estimates of IUU catch and its effects there is a need to systematically develop new risk-based assessment methods to estimate IUU catch, based if necessary on a combination of data sources, capable of providing statistically robust estimates of IUU fishing and its ecological impacts, as well as the variance of these estimates.

We have already made the point in this report that there are simply too few scientists with sufficient experience to provide reliable and consistent advice to a growing number of RFMOs. This suggests that the best way to develop new estimation methods in the short term would be to set up a small network of institutions and agencies capable of undertaking monitoring of the impact of IUU activities in various categories for different ocean regions.¹⁹ Such a network would

also enable us to measure improvements in international governance by reference to improved estimates of levels of IUU fishing and ecological impacts by category, region and species.

In the long term, consideration should be given to the establishment of an expert scientists' panel to advise on high seas fisheries at the global level. Such a panel could be drawn from existing RFMO scientific advisory bodies, FAO, research institutes and so on and could be used to improve scientific advice and assessment to support ecosystem based and precautionary management approaches.

PROPOSAL 8

Address the needs of developing countries

The serious impact of IUU fishing (both on the high seas and within exclusive economic zones) on the economies and livelihoods of developing countries has already been noted. In countries like Guinea, it is estimated that between 20 and 60 per cent of vessels fishing within the exclusive economic zone are unlicensed. Losses from these illegal activities are estimated at USD 27 million in shrimp catches, USD 49 million in octopus catch and USD 8 million in discarded demersal fish taken as bycatch. These may be compared against income from fisheries licences of USD 5.8 million and USD 3 million from the bilateral fisheries access agreement with the EU.

BOX 15. Somalia

Somalia has the longest coastline in continental Africa – 3 300 km – and, with it, abundant marine resources thanks to an annual upwelling of cool, nutrient rich water off the Horn of Africa. From 1991 until 2005, the country has been in a state of civil war, with no functioning central government and power split between rival groups of armed militia. During this time there has been no effective authority over Somalia's territorial waters. One of the consequences of this state of affairs is that for over a decade foreign fishing vessels have been able to plunder the seas off Somalia with impunity. It is estimated that some 700 foreign-owned vessels are engaged in unlicensed and unregulated fishing in Somali waters, exploiting high value species such as tuna, shark, lobster and deep-water shrimp. It is highly unlikely that these resources are being fished sustainably. Many of these foreign vessels are equipped with anti-aircraft cannon and machine guns to defend themselves against Somali pirates who patrol the coast, seizing vessels and kidnapping crews, for which they demand ransoms.

EJF, 2005

There is a striking relationship between the level of domestic governance within developing countries and the vulnerability to IUU.²⁰ Good governance appears to go hand in hand with good monitoring, control and surveillance systems, the political will to enforce regulations, cooperation with neighbours on surveillance and active participation in regional arrangements. This is demonstrated by the experience of coastal states of the SADC region, who are actively investing in better monitoring, control and surveillance, resulting in a lower incidence of IUU fishing. Unless aid is targeted at improving both governance and monitoring, control and surveillance it is unlikely to have a lasting effect on IUU fishing. (Box 15)

The other side of the coin is that developing countries may be seen as part of the problem of inadequate high seas governance. As we have noted, a significant problem generally is the presence of non-compliant fishing vessels flagged to open registries. Many of the open registers used by fishing vessels are based in developing countries. The countries operating open registers derive only minimal benefit from flagging fishing vessels (one estimate is

USD 3.5 million shared between 20 countries), whereas there is a huge potential economic benefit to the operators of those vessels from not having to meet responsible fishing standards.²¹

A particularly worrying phenomenon is the emerging practice of some distant water states reflagging their vessels to so-called “joint venture” operations in developing states as a means of increasing their catch allocations. The benefit of such operations to the developing states concerned, which are often unable to exercise effective control over the activities of the vessels, is, at best, debatable. In some cases, multilateral lending institutions have also contributed to the situation by encouraging developing countries to invest in industrial fishing (over) capacity regardless of the environmental consequences and without regard to underlying governance problems.²²

Developing countries want access to high seas resources, but existing fishing countries are loathe to reduce their holdings in already fully subscribed fisheries. The result is that allowed catch levels are pushed higher to accommodate both in the hope of a later mutual phasedown being agreed. In the meantime stocks are put at risk.

These factors strongly suggest that greater, more decisive, engagement with developing countries is essential if the problems of international fisheries governance are to be resolved. The analysis prepared for the Task Force suggests that relatively modest inputs of aid could make significant contributions, but only if broader governance issues, including the rule of law and tackling corruption within the fisheries management system, are addressed.²³ This message needs to be driven home to national and multilateral donors.

Assistance should be directed at creating the institutional, management and technical capacity for developing countries to effectively control their own vessels throughout the world as well as foreign vessels within their own waters, and fostering the active cooperation of developing countries with regional management arrangements.²⁴ These needs are foreseen in the UN Fish Stocks Agreement, which, compared to the Law of the Sea Convention, gives more explicit guidance as to the forms of assistance that are to be given to developing countries and the objectives of that assistance. Since the Agreement was adopted, states parties have also acted to establish a voluntary fund, jointly administered by FAO and the UN, to assist developing countries in its implementation. Task Force members are among those who have committed resources to the Fund. In this respect, the Fish Stocks Agreement reflects a general trend in environmental treaties since the late 1980s towards an increased emphasis on the role of developing countries and the introduction of funding mechanisms aimed at assisting developing states to meet their treaty obligations.²⁵

PROPOSAL 9

Promote better use of technological solutions

If a single enforcement technology has captured the imagination of policy makers and the broader public alike, it is VMS. The ability to monitor where boats are in real time seems on the surface to be such a powerful oversight tool. The reality is rather different. VMS by itself is a guarantee of very little. It is the other supporting measures that will determine the value it is able to add to enforcement strategies.

The Task Force has come to the conclusion that if VMS is to realise its full potential, the time has come to propose some quite fundamental measures to reinforce VMS and, by extension, MCS and fisheries management. Success will be the result of rigorous planning and application of

monitoring control and surveillance schemes and fisheries management plans into which VMS makes a valuable contribution. Actions that would seem to be in the interest of all parties include:

- The agreement, at international level, of a code of practice for the implementation and operation of VMS
- The development of norms and standards for fishing vessel VMS equipment, addressing issues of reliability and resistance to tampering. These norms could form the basis for an international approach to type-approval of shipboard equipment
- The establishment of a research and development project aimed at extensive analysis of VMS data in an effort to identify falsified VMS data
- The designation of an international authority or intergovernmental organisation to take the lead role in formalising requirements for shipboard equipment, research and development of VMS capacities, and distribution of data on an international level

NOTES

Executive summary

¹ Fisheries ministers from Australia, Canada, Chile, Namibia, New Zealand and the UK.

² The Earth Institute, IUCN-World Conservation Union and WWF International.

Chapter 1

¹ FAO (2004)

² FAO (2002)

³ The Round Table on Sustainable Development was established in 1998. It is an independent body hosted by the OECD. The Round Table aims to provide a forum for frank, in-depth discussions between ministers, senior private sector executives, NGO leaders and academics that are grappling with environmental and developmental issues at the global level. For information on the Round Table on Sustainable Development at the OECD, visit www.oecd.org/site/0,2865,en_21571361_33995336_1_1_1_1_1,00.html

⁴ Upton and Vitalis (2003).

⁴ Upton and Vitalis (2003).

⁵ MRAG (2005a)

⁶ Bours (2004)

⁷ MRAG (2005b)

⁸ RFMO (Regional Fisheries Management Organisation) is an acronym that cannot be avoided in this discussion. It will reappear many times in this report. Although most RFMOs are intergovernmental organisations, the term can be used to refer to any sort of cooperative mechanism between two or more states set up for the purposes of conserving and managing fish stocks. A list of the principal RFMOs concerned with managing high seas fish stocks appears in Box 10.

⁹ The terms “straddling fish stocks” and “highly migratory fish stocks” are shorthand terms for the types of transboundary fish stocks referred to in articles 63 and 64 of the UN Convention on the Law of the Sea. In simple terms, “straddling fish stocks” are those which are found straddling the exclusive economic zone and the high seas (such as cod). “Highly migratory fish stocks” refers to fish such as tuna which migrate through the high seas and the exclusive economic zones of several states. A list of highly migratory fish stocks appears in Annex I of the Convention.

¹⁰ The part of the Grand Banks that lies outside Canada’s 200-mile exclusive economic zone is known as the nose and tail. This part constitutes about 10 per cent of the total area of the Grand Banks. Since 1979, conservation of the straddling fish stocks (mainly cod) outside the 200-mile limit has been the responsibility of the Northwest Atlantic Fisheries Organisation (NAFO).

¹¹ EJF (2005), Balton (2004).

¹² It is disappointing that generally people are told much more about the loss of fishing stocks than they are told about the suffering of fishermen on board the boats. ICONS (2005).

¹³ “Survivors of sunken poached longliner begin legal demand,” *MercoPress*, 2 October 2005, www.mercopress.com. Subsequent investigations revealed that vessel had left port in Montevideo, Uruguay, under the name of Sils, flagged to Belize, but had changed its name and flag whilst at sea.

¹⁴ There is no shortage of published material on IUU fishing. Perhaps the most comprehensive and up-to-date analysis currently available is the work done by the OECD Committee on Fisheries between 2003 and 2005. OECD (2004), OECD (2005).

Chapter 2

¹ Much of the introductory analysis in this chapter is based on the conclusions of a workshop on the nature and control of environmental black markets held at the Royal Institute of International Affairs in 2002. Hayman and Brack (2002).

² See Box 15, page 81

³ COLTO (2005). The COLTO website, www.colto.org, in general, although a little out of date, contains a wealth of information on IUU fishing.

⁴ *Information paper on fish laundering activities by large-scale tuna longline vessels*, Submitted by the delegation of Japan to the seventh session of the Preparatory Conference for the Establishment of the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Central and Western Pacific Ocean, WCPFC/PrepCon/DP.34, 29 November 2004. Cited in Gianni and Simpson (2005).

⁵ Gianni and Simpson (2005).

⁶ "DNA test by Japanese authorities revealed the false report by a Chinese vessel." OPRT, 5 January 2006, www.oprt.or.jp/eng/e_news_060105.html.

⁷ Australia's exclusive economic zone is 8.6 million km², compared to a land mass of 7.8 million km².

⁸ "Prime Minister John Howard announced a two-year armed patrol program in December 2003, and funding of A\$47.8 million in 2004-05 and A\$41.4 million in 2005-06 was confirmed in the federal Budget earlier this year." *National Nine News Press Release*, 21 November 2004. "P&O contract extended for southern fisheries patrols", *Fishing Future*, November 2005.

⁹ Sumaila *et al.* (2004).

¹⁰ The Global Positioning System consists of a constellation of 24 satellites that orbit the earth in 12 hours. The system was designed for and is still operated by the U.S. Department of Defense, but is also available for civil use.

¹¹ *Rome Declaration on Illegal, Unreported and Unregulated Fishing*, adopted by the FAO Ministerial Meeting on Fisheries, 12 March 2005. Why it was necessary to make this part of a ministerial declaration is not clear. There are very few major high seas fishing nations that do not currently operate a VMS.

¹² This was the case of the *Viarsa I*, found fishing illegally in the Australian Fishing Zone off Heard Island and arrested 2 000 nautical miles off Cape Town following a three-week hot pursuit across the Southern Ocean in August 2003. In 2001, the *Aurora Australis*, Australia's Antarctic research and supply vessel, discovered two vessels fishing off the Antarctic coast when their flag state VMS positions put them 600 to 1 000 nautical miles to the northwest (and outside the CCAMLR Area).

¹³ Gallagher (2005)

¹⁴ The Forum Fisheries Agency VMS suffered a major setback when Japan was able to negotiate fishing access directly with one of the FFA member countries, thus avoiding full compliance with the FFA VMS requirements. In the EU, such independent action by a member state would be out of the question.

¹⁵ In recent years NEAFC and NAFO have been leading the way in the development of a common reporting format for fishing vessels operating in the North Atlantic.

¹⁶ See Molenaar (2006) for an excellent analysis of the current status of port state jurisdiction.

¹⁷ *Memorandum of Understanding on Port State Control*, Paris, 26 January 1982. In effect 1 July 1982, as regularly amended; text at www.parismou.org.

¹⁸ IMO Assembly Resolution A.682(17) (1991) *Regional Cooperation in the Control of Ships and Discharges*. Global coverage of port state control (PSC) regimes is now virtually complete. In addition to the Paris MOU, the following regions are covered: Asia and Pacific (Tokyo MOU); Latin America (Acuerdo de Viña del Mar); Caribbean (Caribbean MOU); West and Central Africa (Abuja MOU); the Black Sea region (Black Sea MOU); the Mediterranean (Mediterranean MOU); the Indian Ocean (Indian Ocean MOU); and the Arab States of the Gulf (Riyadh MOU).

¹⁹ CCAMLR Conservation Measure 10-03 (2005) *Port inspections of vessels carrying toothfish* and Resolutions 15/XXII, 17/XX and 19/XXI (the texts of all CCAMLR Conservation Measures and Resolutions are available at www.ccamlr.org).

²⁰ National Environmental Trust (2004).

²¹ This refers to the two vessels discovered by *Aurora Australis* in 2001; see note 12. In that case, false VMS data had been certified as accurate by Uruguayan officials.

²² A good example of how this can happen is found in Australia. Tourists in organised tour groups from a particular Asian country are each given 10 kg of abalone (the maximum weight for personal export) to take out of the country, which is then collected from them when they arrive home.

²³ See page 33 for a discussion of the Lacey Act. See also Ortiz (2005).

²⁴ After the trade ban was imposed, first Panama (1998), then Honduras (2001) and most recently Belize (2005) have gone on to join ICCAT.

²⁵ This might be considered ironic, since the application of non-discriminatory trade restrictions to members, with the consent of members, is less likely to be inconsistent with WTO rules than applying the same measures to non-members, who have not consented to the trade restrictions.

²⁶ For example, in the shrimp/turtle case, the WTO Appellate Body interpreted the GATT rules as allowing, under certain conditions, one WTO member to restrict imports on environmental grounds where the aim was to protect shared natural resources (in this case, migratory turtles) even those located outside the territory of the importing state. *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WTO Case Nos. 58 (and 61). Ruling adopted on 6 November 1998.

²⁷ Although the term “multilateral environmental agreements” (MEA) is often used as a term of art, there is no precise definition of the term, nor is there any agreement as to which RFMOs qualify as MEAs. In general, the term can be applied to describe any agreement between two or more states that is intended to mitigate transboundary environmental problems. The WTO secretariat has published a very useful matrix of the trade measures pursuant to 14 MEAs (Document WT/CTE/W/160/Rev.3, available at www.wto.org/english/tratop_e/envir_e/mea_database_e.htm). The real issue is not whether an RFMO qualifies as an MEA, but whether the measures it applies violate WTO rules. In this regard, future and ongoing initiatives within RFMOs that have a trade component to them will need to take into account any outcomes from the ongoing WTO-based negotiations on the relationship between existing WTO rules and specific trade obligations set out in MEAs. Tarasofsky (2003) suggests that on the basis of the current WTO jurisprudence, most trade measures emanating from RFMOs should be able to survive WTO challenges. This is because most RFMO trade measures have been developed after efforts to deal with a serious environmental problem have failed. They have been developed as a result of a multilateral process, in which, in general, all fishing nations have had an opportunity to participate. They tend to be tailored to the particular species in question and are subject to review.

²⁸ Like health and safety, WTO rules are cloaked in an aura of impenetrability and mystique which permits them to be invoked to close down discussion on any issue that may have the slightest potential for interaction with the global trading system.

²⁹ One of the reasons for this is the sheer cost of litigating before the WTO Appellate Body.

³⁰ The most rigorous and elaborate scheme we have come across is the certification and chain of custody requirements of the South Georgia Patagonian toothfish fishery. This MSC-certified fishery, which takes place within UK waters around the South Georgia and South Sandwich Islands, is subject to CCAMLR conservation measures but is managed by the government of the UK overseas territory. A detailed description of the fishery and the chain of custody scheme is given in Roheim and Sutinen (2005).

³¹ The Marine Stewardship Council (MSC) was launched in 1997 as a joint initiative by the World Wildlife Fund and Unilever. The goal was to establish a standardised mechanism to certify the sustainability of wild fisheries against credible criteria, thereby creating a market-based incentive to maintain sustainable fish stocks. A fishery seeking MSC certification must submit to rigorous third-party evaluation by an MSC-accredited certification body. Once the fishery is certified, it is entitled to use the MSC label. Several fisheries have been certified, including the UK Thames herring driftnet fishery, Southwest England mackerel handline fishery, Western Australia rock lobster fishery, New Zealand hoki, South African hake, South Georgia Patagonian toothfish fishery and, most recently, the Bering Sea and Gulf of Alaska pollock fisheries. The MSC is not without controversy: it covers a very small proportion of world fisheries; it covers very few fisheries in developing countries; it is costly to implement; the sustainability criteria are not universally accepted. MSC’s latest report (2005, available at www.msc.org) suggests that the organisation is aware of these problems and is seeking to address them.

³² Launched in 1996, Unilever’s stated objective was to source 100 per cent of its fish from sustainable seafood sources by 2005. As a result of the initiative, Unilever has intensified its purchasing of hake from

Chile, which is undergoing MSC certification, and reduced volumes from Argentina. It stopped buying cod from the North Sea altogether as of 2000. Although Unilever has failed to meet the 100 per cent target (it actually achieved 60 per cent), a recent assessment is optimistic about the lessons learned to date and the prospects for the future. Porrit (2005).

³³ In 2002, Sainsbury's made a public commitment to source all its wild fish from sustainable sources. The company is working closely with MSC to achieve this objective. www.j-sainsbury.co.uk/csr/index.asp?pageid=58.

³⁴ Royal Ahold owns the Stop&Shop supermarket chain in the United States. In 2001, in partnership with the New England Aquarium, it launched the Ecosound project. The aim is to identify sustainable fish sources and delist suppliers with inadequate traceability systems.

³⁵ As we shall see in the discussion of flag states, there is no general power of arrest on the high seas, so the discussion in this section is on the premise that a vessel is arrested for illegal fishing in the exclusive economic zone of a coastal state.

³⁶ In the case of *Volga*, for example, a Russian-flagged longline vessel arrested by Australia in the Southern Ocean, which later became the subject of a prompt release application to the International Tribunal for the Law of the Sea, the value of the vessel and fuel on board was estimated at A\$1.9 million. The value of the catch on board (130 tonnes of Patagonian toothfish) came to exactly the same amount.

³⁷ Under article 73 of the Law of the Sea Convention, arrested vessels and their crews shall be promptly released on the posting of a reasonable bond or security. In the event of any dispute, the flag state of the vessel may apply to the International Tribunal for the Law of the Sea (based in Hamburg, Germany) for an order for prompt release under article 292. Since its establishment in 1996, the Tribunal has dealt with six such applications.

³⁸ United Nations Convention on the Law of the Sea, article 73.

³⁹ Anderson and McCusker (2005). Interestingly, Canada conducted a series of focus groups in European cities in March 2005. The majority of participants believed that financial penalties for overfishing on the high seas were too lenient and should be revised to "fit the crime". See www.overfishing.gc.ca.

⁴⁰ Originally enacted in 1900 to deal with interstate trafficking in illegally-caught wildlife, the Lacey Act was supplemented in 1926 by the Black Bass Act. The two acts were joined in 1981 creating the current statute, the Lacey Act Amendments of 1981. 16 United States Code § 3371, *et seq.* See Ortiz (2006) and Anderson (1995).

⁴¹ *United States v Arnold Bengis, David Bengis, Jeffrey Knoll, Hout Bay Fishing Industries, Icebrand Seafoods Inc. et al.*

⁴² Kuemlangan (2000).

⁴³ Both the U.S. Pacific Insular Areas Act and the Papua New Guinea Fisheries Act permit penalty-sharing.

⁴⁴ United Nations Convention on the Law of the Sea, article 94.

⁴⁵ It is a firmly established rule of international law that a ship on the high seas is subject to the exclusive jurisdiction of the flag state. This is an essential adjunct to the principle of the freedom of the high seas that has been the cornerstone of the international law of the sea for some five hundred years. The right to intervene in the case of piracy, the right of visit on the high seas and the right of hot pursuit have long been recognised as part of international law and were already recognised in the 1958 Geneva Convention on the High Seas. To these, the 1982 Convention added a duty to cooperate in the suppression of illicit traffic in narcotics and the right to arrest ships engaged in unauthorised broadcasting on the high seas. The latter, which seems anomalous today, is an interesting illustration of how treaties reflect their historical context. Illegal radio and television broadcasts from ships anchored beyond the territorial sea became a particular problem for some Western European states during the 1960s, leading to a European treaty to prevent the practice in 1965 (European Agreement on the Prevention of Broadcasts Transmitted from Stations Outside National Territories, 634 UNTS 239 (1965)).

⁴⁶ Notably the 1995 Agreement for the implementation of the provisions of the UN Convention on the Law of the Sea relating to the conservation and management of straddling fish stocks and highly

migratory fish stocks. Part VI of that Agreement contains novel provisions allowing members of RFMOs to board and inspect the fishing vessels of states parties to the Agreement on the high seas. Hayashi (1996) gives a detailed account of the evolution of these provisions and their significance in international law.

⁴⁷ For an interesting historical account of the development of open registers from the early 1920s onwards see Alderton and Winchester (2002).

⁴⁸ The term “flag of convenience” was first coined by the International Transport Workers’ Federation (ITF) at its 1948 World Congress in Oslo. The ITF defines an FOC broadly as where beneficial ownership of a vessel is found to be elsewhere than in the country of the flag the vessel is flying.

⁴⁹ Statistics for the period 1999-2003, for example, indicate that the 35 most important (in terms of tonnage) maritime countries accounted for 94 per cent of the world’s merchant fleet. In 2003, 76.4 per cent of that was flagged out to the six major open registers: Panama, Liberia, Bahamas, Malta, Cyprus and Bermuda. UNCTAD data cited in UN document A/59/63 (2004), *Report of the Consultative Group on Flag State Implementation*.

⁵⁰ The advantages of doing business in this way are clear. For example, evidence that emerged following the apprehension by Australian authorities of the vessels *Maya V* and *Viarsa I* established a strong connection between the vessel chartering companies and shipping agents in Uruguay which managed the operations of the vessels, and beneficial owners based in Galicia, Spain.

⁵¹ Gianni and Simpson (2005).

⁵² The number of large-scale fishing vessels on Lloyd’s Register of Shipping whose flag is listed as “unknown” has grown by approximately 46 per cent since 1999, from 1 100 vessels to over 1 650 vessels in 2005. It is not only the number of these vessels that is increasing. The overall tonnage of these “flag unknown” vessels, as a percentage of global tonnage, has increased from 3.66 per cent in 1999 to 8.5 per cent in 2005. Gianni and Simpson (2005).

⁵³ In February 2003, Belize enacted a High Seas Fishing Act, based on model legislation recommended by FAO, requiring mandatory licensing of all high seas fishing activity and active monitoring of the activities of high seas fishing vessels through a vessel monitoring system. It also adopted a domestic regulation which made it an offence to violate fishing regulations and conservation measures put in place by a number of RFMOs, including ICCAT, CCAMLR, IOTC, NAFO and NASCO. Recently, Belize cooperated fully in the investigation of illegal transshipments of IUU-caught fish by Belize-registered vessels in the NEAFC area. Belize became a member of ICCAT in 2003 and in July 2005, Belize finally acceded to the UN Fish Stocks Agreement and the FAO Compliance Agreement. The jury is still out on whether these measures have been effective. Belize claims that between 2001 and 2002 it deregistered 513 fishing vessels and that it now has only 139 large-scale fishing vessels on its registry. This is not consistent with the information on Lloyd’s Register, which shows 241 large-scale fishing vessels flagged to Belize, nor with the IATTC IUU vessel list, which shows 48 Belize-flagged vessels as at June 2005. It is quite possible that some vessels that have been deleted from the Belize registry are continuing to fly the Belize flag, while others have simply moved on to up and coming open registers or have moved into the “flag unknown” category.

⁵⁴ Mongolia established its registry in 2003. Like many other open registers, the register is franchised to a commercial entity located outside the territory of the so-called flag state, which obviates the need to have a functional maritime administration. In the December 2004 update of its Shipping Industry Flag State Performance Table, the Round Table of International Shipping Associations, states “A recent arrival amongst flags offering services to shipping is Mongolia, which is listed by the Round Table for the first time and is already amongst those with the poorest performance.” (www.bimco.dk).

⁵⁵ Alderton and Winchester (2002).

⁵⁶ The Taiwanese government announced in November 2005 that it would conduct a formal probe into allegations that Taiwanese fishing vessels are using flags of convenience as a cover for IUU fishing. The pressure continued to grow on Taiwan later in the month as a result of drastic cuts to the Taiwanese quota for tuna agreed by ICCAT at its annual meeting the same month. In December 2005, the Taiwanese Parliament adopted a resolution calling for a comprehensive investigation of all Taiwanese fishing vessels flying a flag of a third country that have allegedly overfished on the high seas or intentionally

under-reported catches and recommended that ships found to have engaged in such practices be subject to sanctions, including revocation of their fishing licenses. “New resolution aims to eliminate illegal practices in tuna fishing”, *Taiwan News*, 14 December 2005, english.www.gov.tw/TaiwanHeadlines/index.jsp?catid=10&recordid=89471

⁵⁷ “Taiwanese fishing companies have now deliberately built a fleet of vessels that fall just under the 24 meter minimum length for application of most ICCAT measures. These 23.9 meter vessels have operated extensively in the Caribbean decimating shark stocks and causing serious billfish bycatch problems ... The government of Taiwan either lacks the means or will to control this situation.” Statement of Glenn Roger Delaney, U.S. Commissioner to ICCAT before the Committee on Resources, Subcommittee on Fisheries Conservation, Wildlife and Oceans, U.S House of Representatives, October 30, 2003. Washington, DC. resourcescommittee.house.gov/108cong/fish/2003oct30/delaney.htm

⁵⁸ *Parliament Wire (New Zealand)*, 29 August 2005

Chapter 3

¹ United Nations (1992), Anderson (1996), Orrego-Vicuña (1999), Lodge (2004).

² See Chapter 1. For a more graphic description of the effects of some of the major stock collapses in the past fifty years, see Clover (2004).

³ 1995 Agreement for the implementation of the provisions of the UN 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, New York, 4 August 1995. In force 11 December 2001, 34 *International Legal Materials* 1542 (1995); www.un.org/Depts/los

⁴ Examples from the annual UN General Assembly resolutions on sustainable fisheries are A/58/14, A/59/25 and, most recently, A/60/30 of 29 November 2005 (all at www.un.org/Depts/los). Also significant are the St. John’s Declaration of 5 May 2005 and the Bali Plan of Action (2005).

⁵ It might be noted that sixteen out of the 56 parties represent the European Community and its member States that ratified UNFSA collectively on 19 December 2003.

⁶ Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, A/RES/48/263, Annex (adopted 28 July 1994). Reproduced in the *Law of the Sea: Compendium of Basic Documents*, International Seabed Authority/The Caribbean Law Publishing Company, 2001, p.206.

⁷ *In larger freedom: towards development, security and human rights for all*, Report of the Secretary General, A/59/2005, para. 136. www.un.org/largerfreedom/report-largerfreedom.pdf

⁸ UN Fish Stocks Agreement, article 10

⁹ This section explores some of the problems inherent in the current system of RFMOs. Despite the problems, many RFMOs are actively addressing issues such as IUU fishing, the implementation of the precautionary approach and the ecosystem approach. For example, NEAFC has recently agreed to amend its Convention to incorporate the ecosystem approach; ICCAT has adopted regulations to limit the bycatch of sharks in tuna fisheries; and CCAMLR and the tuna commissions have established IUU vessel lists or other mechanisms to combat IUU fishing.

¹⁰ The United Nations suggests that there are potential gaps in RFMO coverage in the South-East Pacific Ocean, South-West Atlantic, South-West Indian Ocean (discrete high seas stocks), Western Pacific (discrete high seas stocks), Caribbean and the high seas adjacent to the CCAMLR zone. See UN Doc. A/58/215.

¹¹ The Task Force identified some of the reasons why some RFMOs have been less effective than they might otherwise have been in its analysis of high seas governance issues, HSTF/09 (March 2005).

¹² The so-called ecosystem approach to fisheries management is implicit in the FAO Code of Conduct for Responsible Fisheries. Since the 2001 Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem, FAO has developed Technical Guidelines on the ecosystem approach to fisheries. FAO (2003). See also Sainsbury and Sumaila (2001) and Sissenwine and Mace (2001).

¹³ Whilst hard evidence is hard to come by, a European Parliament report of 2001 found that 231 Community-flagged fishing vessels had been exported to unidentified third countries as part of EU capacity reduction programmes. An example is given of one vessel which received €1.1 million in public subsidies when it was transferred to the Ivory Coast, with no change in beneficial owner. European Parliament Report on the Role of Flags of Convenience in the Fisheries Sector (Resolution 2000/2303(INI), document reference A5-0405/2001)

¹⁴ OECD (2000).

¹⁵ United Nations Convention on the Law of the Sea, article 192.

¹⁶ United Nations Convention on the Law of the Sea, article 197.

¹⁷ United Nations Convention on the Law of the Sea, article 91.

¹⁸ See for example, ITF (1999), ICONS (2005). In the 1994 report of the inquiry into the loss of the tanker *Braer*, Lord Donaldson said “In an ideal world flag States, whose flags are worn by the world’s shipping, would lay down and enforce upon their own shipowners, standards of design, maintenance and operation which would ensure a very high standard of safety at sea. ... The present system of flag State control falls well short of this ideal ... regrettably it is beyond argument that not all flag States live up to their responsibilities.”

¹⁹ *Rome Declaration on Illegal, Unreported and Unregulated Fishing*, adopted by the FAO Ministerial Meeting on Fisheries, 12 March 2005.

²⁰ UN Doc. A/AC.259/11, 11 May 2004.

²¹ ITLOS, Case No. 6, *The Grand Prince Case* (Belize v. France). Judgments available at www.itlos.org.

²² ICONS (2005). ICONS describes the post 9/11 response as “unprecedented” since governments gathered to consider responses to the loss of RMS Titanic.

²³ In November 2005, the IMO Assembly adopted a Voluntary Member State Audit Scheme, including a Code for the Implementation of Mandatory IMO Instrument. In June 2004 the Maritime Transport Committee (MTC) of the OECD issued a major report on options to improve transparency in ownership and control of ships (DSTI/DOT/MTC(2003)61/Rev.1). The report noted that all shipping registers are vulnerable to potential misuse by terrorists or organised crime, but that open registers are inherently far more vulnerable, especially those promoting the fact that they are committed to protecting the anonymity of beneficial owners of vessels. It proposed a number of measures aimed at increasing transparency in the ownership and control of ships. These include, in relation to open registers (a) scrutiny of ship-owning arrangements that involve foreign corporate vehicles to ensure that beneficial ownership details are available; (b) elimination of the use of devices such as bearer shares, nominee directors, office holders and shareholders; and (c) requiring a substantial and robust local presence by the shipowner in the jurisdiction. Recognising that, by the very nature of the problem, flag States that continue to promote anonymity are unlikely to voluntarily implement the above recommendations, the MTC also proposed a number of measures that may be taken against jurisdictions that provide corporate mechanisms that facilitate anonymity. These include relatively soft measures, such as encouraging flag States to address transparency of ownership, to more intrusive and disruptive measures such as targeting ships where beneficial ownership is obscure, or even ships from particular flag States, for intensive scrutiny and restricting port access to ships which offer full disclosure of beneficial ownership.

²⁴ The IMO ship identification numbering scheme (operated in collaboration with Lloyd’s Register) was introduced by IMO resolution A.600(15) of 19 November 1987. The scheme gives each ship a unique identification number which remains the same for the life of a vessel, no matter how often it changes names, flags, insurers, etc, and is unique to that vessel alone.

²⁵ Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, approved by the Twenty-seventh Session of the FAO Conference, 24 November 1993.

²⁶ CCAMLR Conservation Measure 10-06 (2004) and 10-07 (2003).

²⁷ The list can be seen at www.ccamlr.org/pu/E/sc/fish-monit/iuu-vess-list.htm.

²⁸ Stokke and Vidas (2004).

²⁹ Gianni and Simpson provide details of four vessels (two reflagged to Russia and two reflagged to Ukraine) which continue to be owned or managed through an interconnected web of trading companies that have been previously involved in IUU fishing. See Gianni and Simpson (2005), p.32.

³⁰ Stokke and Vidas (2004).

³¹ "Pacific Andes starts work on China's biggest fish factory", *Fishing News International*, January 2005.

³² The Organisation for the Promotion of Responsible Tuna Fisheries is an international NGO established in Tokyo on December 8, 2000. It is comprised of tuna longline producers from Japan, Taiwan, Republic of Korea, the Philippines, Indonesia, China and Ecuador as well as traders, distributors and public interest organisations in Japan. www.oprt.or.jp.

Chapter 4

¹ The so-called "tragedy of the commons" as a metaphor for the inevitable depletion of fisheries resources where access is unregulated and open to all derives from the title of an often cited 1968 essay by the American ecologist Garret Hardin (Hardin (1968)). In his essay, Hardin used the hypothetical example of a common pasture open to all herders as a parable to demonstrate how unrestricted access to a resource ultimately dooms the resource because of over-exploitation.

² Other examples are the Egmont Group (www.egmontgroup.org) which deals with money laundering and the International Network for Environmental Compliance and Enforcement (www.inece.org)

³ St. John's Ministerial Declaration, May 2005. A commitment to the MCS Network and broader participation in it was also made by ministers in the Plan of Action issued from the second APEC Ocean-related Ministerial Meeting in Bali, October 2005.

⁴ Equasis was established on 17 May 2000 as a joint initiative by the maritime authorities of France, Japan, Singapore, Spain and the United Kingdom, the United States Coast Guard and The Directorate-General for Energy and Transport of the European Commission. www.equasis.org.

⁵ Equasis uses as a unique identifier for each vessel the IMO identification number that is issued by Lloyd's Register and assigned to vessels upon construction. One practical problem that the Task Force's proposal runs into is that fishing vessels are exempt from the requirement to obtain an IMO number, so many do not register. IMO numbers can be obtained voluntarily. While various short-term solutions are possible, in the long-term, Task Force members will seek to impose requirements on all fishing vessels to obtain IMO numbers, e.g. through RFMOs.

⁶ FAO (2002a).

⁷ *Report of the Secretary-General on Sustainable Fisheries*, 26 August 2004. UN Doc. A/59/298.

⁸ If the precautionary principle in fisheries lacks operational clarity, it is even more doubtful that we have sufficient scientific knowledge to properly apply an ecosystem approach to management.

⁹ Open letter from OPAGAC (Spain), OPTUC-ANABAC (Spain) and ORTHONGEL (France) to IATTC, ICCAT, IOTC and WCPFC, dated 24 November 2004.

¹⁰ One area of current concern is trade flows in bigeye tuna caught in the Indian and Pacific oceans.

¹¹ In March 2005, the Twenty-sixth session of the FAO Committee on Fisheries (COFI) adopted a set of Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries. Available at <ftp://ftp.fao.org/docrep/fao/008/a0116t/a0116t00.pdf>

¹² Sutinen and Roheim (2005).

¹³ The reported high seas bottom catch in 2001 was approximately 215 000 mt, which represents only about a quarter of a per cent of the global marine fisheries production reported by FAO. Although the species targeted by this method are often high-value, such as orange roughy and alfonsino, the overall value of the fishery is not likely to exceed \$300 - \$400 million, about half a per cent of the value of the global marine fish catch. It should be possible to regulate this fishery by concerted action among states to expand the mandates of existing RFMOs or to establish RFMOs in areas where none exist at present. CCAMLR, for example, already has in place a moratorium on bottom trawl fisheries in the Southern

Ocean which can only be lifted on a case-by-case basis through a permitting system that requires an impact assessment prior to fishing activity. NEAFC began to regulate fisheries for deep sea species in 2003 and has established closed areas for bottom trawling on the high seas on five seamounts and a section of the Reykjanes Ridge. In February 2005, the GFCM prohibited bottom trawling in areas deeper than 1 000 metres in the Mediterranean.

¹⁴ One suggestion is that FAO should be asked to develop technical guidelines under the Code of Conduct relating specifically to the sort of conservation and management measures that need to be taken for deep sea fish stocks on the high seas as a matter of urgency.

¹⁵ The Round Table of shipping industry organisations is an industry body which consists of the following: BIMCO, INTERCARGO, International Chamber of Shipping, International Shipping Federation and INTERTANKO. BIMCO's membership spans 123 countries and includes more than 2 550 companies, 1 500 brokers and agents and 100 club and associate members. Owner members alone control 65 per cent of the world merchant fleet. INTERTANKO members represent 70 per cent of the world's independent tanker fleet. The performance of flag States against these criteria is evaluated by the Round Table and a flag State performance table is issued. The most recent was issued in December 2004. The Round Table periodically evaluates the performance of flag states against its criteria and issues a comparative performance table. The table does not attempt to rank flag States, but negative performance indicators are highlighted and the flag States with the highest number of negative performance indicators are indicated. See www.marisec.org/flag-performance/.

¹⁶ *Responsible Port States*, report prepared for the High Seas Task Force, Paris, 2006. Available at www.high-seas.org

¹⁷ Ortiz (2006).

¹⁸ MRAG (2005b)

¹⁹ A large network would be unmanageable. In making this proposal, we would have in mind to begin with a more informal network of individuals from some four or five institutions, including FAO and key RFMOs. In a similar vein CCAMLR has initiated a meeting of a joint assessment group on IUU fishing incorporating both the science and surveillance communities, which will meet in Namibia in July 2006.

²⁰ MRAG (2005a).

²¹ An FAO report (FAO, 2002b) states that the top four open registers generated approximately USD 2.65 million from registration of fishing vessels, an average of USD 2 500 from each vessel. Gianni and Simpson (2005) make the point that the cost to a flag state to effectively carry out its responsibilities, including costs associated with ensuring proper safety standards and working conditions, is far in excess of this figure. To put the matter in context, it is interesting that in each of the cases on prompt release of fishing vessels flagged to open registers to have come before the International Tribunal for the Law of the Sea, international legal teams were retained by the notional flag states of the vessels at expenses out of all proportion to the means of the flag state or the benefits it received from giving its flag to the vessel concerned. *The M/V Saiga Case* (Nos. 1 and 2) (Saint Vincent and the Grenadines v. Guinea), *The Camouco Case* (Panama v. France), Case No. 5, *The Monte Confurco Case* (Seychelles v. France), Case No. 6; *The Grand Prince Case* (Belize v. France), Case No. 8; *The Chaisiri Reefer 2 Case* (Panama v. Yemen), Case No. 9; and *The Volga Case* (Russian Federation v. Australia), Case No. 11.

²² See, for example, the analysis by Ovetz and Jennings of how four investment projects in Pacific island countries by the Asian Development Bank and International Finance Corporation have contributed to overfishing in the Pacific. Ovetz and Jennings (2005).

²³ MRAG (2005a).

²⁴ Australia's work with Mauritius in 2005 to provide practical assistance and training in the implementation of the CCAMLR catch documentation scheme is a successful example.

²⁵ But, compared to the financial mechanisms established by article 21 of the Convention on Biological Diversity and the Global Environment Facility, for example, the Fish Stocks Agreement establishes no formal financing mechanism which would allow states parties to determine such matters as the policy, strategy, programme priorities and eligibility criteria for access to and utilisation of financial resources.

APPENDIX 1

Illegal, unreported and unregulated fishing (IUU)

The term IUU is generally considered to have originated in 1997 in CCAMLR, where it was used to describe unauthorised fishing for Patagonian toothfish in the CCAMLR Convention Area by non-contracting parties as well as undeclared or misreported catches by CCAMLR members.

In 1999, Australia brought the IUU issue to the UN Food and Agriculture Organisation (FAO). In the same year, an FAO Ministerial Meeting on Fisheries adopted the Rome Declaration on the Code of Conduct for Responsible Fisheries, which declared the intention of its subscribers to “develop a global plan of action to deal effectively with all forms of illegal, unreported and unregulated fishing including fishing vessels flying flags of convenience.” This led to the development in 2000 of the FAO International Plan of Action on IUU Fishing (IPOA-IUU), which was finally adopted in 2001.

As finally adopted, the IPOA-IUU describes IUU fishing in a quasi-legalistic manner (see Box A). The use of the IPOA-IUU description of IUU fishing as an aggregated definition has become pervasive in most current usage of the term. This is notwithstanding the appearance in the chapeau of the qualifying phrase “[I]n this document”, which was evidently intended to make it clear that the description of IUU in this context does not in its own right have an impact beyond the document itself. It is perhaps questionable whether the more legalistic approach adds much to the more general statements of the scope of the problem that were used in earlier discussions about IUU fishing. For example, the first draft of the IPOA-IUU stated quite succinctly that:

“The scope of the IUU fishing problem encompasses fishing and related activities, including:

- fishing in areas under national jurisdiction without the authorisation of the coastal state;
- fishing which contravenes or undermines conservation and management;
- failure to effectively exercise the required jurisdiction or control over vessels and nationals;
- failure to fully and accurately meet fishery and fishing vessel data collection and reporting requirements.”

Whilst many feel that this is an oversimplification of the problem, it is a useful and concise statement of its scope.

Box A. Nature and scope of IUU fishing in the International Plan of Action

In this document:

Illegal fishing refers to activities:

- conducted by national or foreign vessels in waters under the jurisdiction of a State, without the permission of that State, or in contravention of its laws and regulations;
- conducted by vessels flying the flag of States that are parties to a relevant regional fisheries management organisation but operate in contravention of the conservation and management measures adopted by that organisation and by which the States are bound, or relevant provisions of the applicable international law; or
- in violation of national laws or international obligations, including those undertaken by cooperating States to a relevant regional fisheries management organisation.

Unreported fishing refers to fishing activities:

- which have not been reported, or have been misreported, to the relevant national authority, in contravention of national laws and regulations; or
- undertaken in the area of competence of a relevant regional fisheries management organisation which have not been reported or have been misreported, in contravention of the reporting procedures of that organisation.

Unregulated fishing refers to fishing activities:

- in the area of application of a relevant regional fisheries management organisation that are conducted by vessels without nationality, or by those flying the flag of a State not party to that organisation, or by a fishing entity, in a manner that is not consistent with or contravenes the conservation and management measures of that organisation; or
- in areas or for fish stocks in relation to which there are no applicable conservation or management measures and where such fishing activities are conducted in a manner inconsistent with State responsibilities for the conservation of living marine resources under international law.

IPOA-IUU

The work of the High Seas Task Force has focused on IUU fishing on the high seas. At the outset of its work, the Task Force chose to define IUU fishing as an aggregate concept which included the elements shown in Box B. Whilst this clearly reflects the principal focus of the Task Force on the high seas, rather than IUU fishing in EEZs (except to the extent that such activity may represent a continuous activity), it has been rightly pointed out that there is considerable overlap between the various components identified.

Box B. Task Force approach to the definition of IUU fishing

- Fishing in violation of international laws and obligations
- Fishing of high seas fish stocks where there are no formal management arrangements in place but which is in contravention of the broader responsibilities of States under the law of the sea to conserve and manage the marine living resources of the high seas
- Fishing conducted by vessels without nationality, or by those flying the flag of a State not party to a relevant regional fishery management organisation (RFMO), or by a fishing entity, in a manner inconsistent with, or which contravenes, the conservation and management measures adopted by the RFMO or broader international obligations
- Fishing conducted by nationals of or vessels flying the flag of States that are parties to a relevant RFMO in contravention of the conservation and management measures adopted by that organisation or relevant provisions of the applicable international law
- Fishing, including fishing within the area of an RFMO, which has not been reported, or has been misreported, to the relevant national/international authorities, in contravention of international laws and regulations

It is worth observing that, in its work on the economics of IUU fishing, the OECD Fisheries Committee also decided to consider only IUU fishing activities on the high seas and foreign fishers' activities within national EEZs. However, considering the very broad range of activities covered by considering the various elements of IUU fishing in aggregate, the OECD Fisheries Committee attempted to provide operational definitions of each of the three components of high seas IUU fishing – illegal high seas fishing, unreported high seas fishing and unregulated high seas fishing – as shown below. Using this approach:

Illegal fishing is

- Operations by vessels flagged to members of an RFMO (including cooperating non-parties) but which operate in violation of the rules established by the RFMO
- Unauthorised foreign fishing within EEZs

Unreported fishing is

- Catch not reported or misreported by foreign vessels within EEZs
- High seas catches not reported or misreported to national authorities or RFMOs

Unregulated fishing is

- Fishing on the high seas by stateless vessels or vessels flagged to non-members of RFMOs outside the rules of the RFMO

Whether we take an aggregate approach, or attempt to differentiate between the I, U and U of IUU fishing, there is always going to be considerable overlap between the categories.

APPENDIX 2

The methodology for developing the proposals

The Task Force was launched in December 2003. Subsequently, a small secretariat was established to service the Task Force, hosted at OECD headquarters in Paris by the Round Table for Sustainable Development at the OECD. The secretariat started its work in late February 2004. A website was established at www.high-seas.org

Drawing on the mass of material already available, the secretariat sought initially to identify the key drivers which facilitate IUU activity on the high seas and the substantive issues for consideration by the Task Force. This led to the issue of a working paper (HSTF/01) in July 2004. This paper was circulated to members of the Task Force, officials in Task Force member countries, members of four expert advisory groups set up to assist the secretariat in its work and analysis (see below) and others with specific expertise in the subject matter. The responses to that paper indicated that, in general, the key issues and drivers had been correctly identified.

A second substantive paper was issued in September 2004 (HSTF/02). Again, the paper was circulated widely to members of the Task Force, officials and the expert groups. It was also published on the Task Force website. This paper, which was based on a detailed analysis of the comments and suggestions made in response to document HSTF/01, sought to identify potential areas of intervention. Five broad areas were identified, namely: sharing of intelligence and better coordination of monitoring, control and surveillance; development of a global register of high seas fishing vessels; strengthening of in-port measures and control over nationals; trade-related measures; and RFMO-based initiatives and governance issues. These areas were selected for further study because it was felt that they provided opportunities for HSTF members to act individually and collectively even if other countries are not similarly minded.

The first substantive meeting of the Task Force took place in Paris on 9 March 2005. The purpose of that meeting was to enable the members of the Task Force to consider specific proposals for action that could form an interlinked set of solutions in the fight against IUU fishing on the high seas. The outcomes of the meeting were issued in the form of a summary report (HSTF/10).

Subsequently, the proposals identified by the Task Force were further elaborated by the secretariat in consultation with Task Force members and officials.

List of documents and working papers issued by the Task Force

HSTF/01	Consolidated list of legal, science, economics and trade, and enforcement issues for consideration by the High Seas Task Force
HSTF/02	Proposed areas of focus for the work of the High Seas Task Force
HSTF/03	Annotated agenda and summary of proposals
HSTF/04	Better high seas monitoring, control and surveillance: an improved MCS Network
HSTF/05	How to get better information on high seas fishing vessels
HSTF/06	Promoting responsible port States
HSTF/07	How well are flag States performing?
HSTF/08	Do we need to control nationals?
HSTF/09	High seas governance
HSTF/10	Summary of outcomes from the March 2005 meeting of the Task Force
HSTF/11	Background paper: Introduction to the draft criteria for flag state assessment
HSTF/12	Improving governance by RFMOs

APPENDIX 3

Guidance for assessing the performance of RFMOs

The following guidance for assessment of RFMO performance in relation to international fishery instruments sets out a limited number (six) of categories of assessment, with related guidelines for topics to be examined in each category.

- I. International Cooperation
- II. Conservation and Management
- III. Compliance and Enforcement
- IV. Review and Evaluation
- V. Institutional Mechanisms
 - A. Routine issues of structure and procedure
 - B. Issues requiring further definition
- VI. Cross-cutting Issues
 - A. Special requirements of developing States
 - B. Transparency
 - C. Adequacy of resources

The guidance is offered to facilitate some measure of comparability and comprehensiveness in assessing the performance of RFMOs, whilst recognising that there are differences among them and that flexibility will be required in applying the guidance. It is also recognised that some RFMOs may choose to apply this guidance in a phased approach, concentrating on some categories initially as they work toward a more comprehensive assessment.

In applying this guidance, any assessment should cover steps taken collectively (decisions) by members of the RFMO to implement the international fishery instruments, and any impediments to their effective implementation, reflected in:

- The mandate of the organisation

- The organisation's institutional structure and mechanisms (including decision-making and other procedural rules)
- The conservation and management measures adopted by the organisation

The proposed guidance does not aim to provide a basis to assess individual state performance. It is recognised that disparities in the capacities of RFMO members may affect individual state implementation of conservation and management measures as well as a state's contributions to the organisation. How members provide for addressing these disparities is a measure of the organisation's performance.

It is also understood that at the present time varying mandates and an overall lack of scientific data and information on many high seas fish stocks and associated and dependent species and habitat may make it inappropriate to assess the performance of RFMOs in relation to status and trends information on these stocks, species, and habitats. Every effort should be made to improve data collection and assessment within each RFMO's area of competence and to establish a baseline for the ecosystem approach to fisheries management.

International fishery instruments

The international fishery instruments that form the basis for this guidance are noted below. It is acknowledged that not all members of each RFMO will be parties to all the binding legal instruments listed. Nevertheless, in light of obligations to cooperate in the conservation and management of high seas marine living resources (LOSC, article 118), and to take into account any generally recommended international minimum standards in establishing conservation measures (LOSC, article 119(1)(a)), the Task Force believes that the list below should be utilised in developing objective benchmarks to monitor and review RFMO performance:

UN Convention on the Law of the Sea (LOSC)

UN Fish Stocks Agreement (UNFSA)

FAO Compliance Agreement

FAO Code of Conduct and IPOAs (seabirds, sharks, capacity, IUU)

FAO Strategy for Improving Information on Status and Trends of Capture Fisheries

FAO Standard Specifications and Guidelines for the Marking and Identification of Fishing Vessels

FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations

FAO Model Scheme on Port State Measures to Combat IUU Fishing

Guidance

I. International cooperation

Objective: To determine the extent of cooperation by states fishing in the Convention Area, including relevant coastal states, through and with the organisation and any impediments to such cooperation. To assess the relative involvement in fishing in the Convention Area by members, cooperating non-parties, and non-cooperating non-parties.

Guidelines:

- Integrity of membership
- Openness to new members
- Compatibility of conservation and management measures
- Cooperation regarding new fisheries or unregulated fisheries (over which the RFMO has competence)
- Cooperation with adjoining or overlapping RFMOs and other relevant international bodies

Analysis: What are the gaps in cooperation of membership? How do any gaps in cooperation and membership limit the effectiveness of the organisation? Do the mandate and structure influence this? Do institutional mechanisms foster participation by all States with a real interest in the fishery? By relevant port and market States? What changes may be required in mandate and structure? What measures could be adopted that would encourage cooperation with the RFMO by all states fishing in the Convention Area and by relevant coastal, port and market states? With other relevant RFMOs and international bodies?

II. Conservation and management

Objective: To evaluate the effectiveness of conservation and management measures and their scientific basis. To consider whether the mandate is broad enough to permit ecosystem and precautionary approaches, and how these are reflected in provision for scientific assessment, data collection and research, and in conservation and management measures. To consider how socio-economic factors are incorporated into advice to management and in conservation and management measures. To evaluate the effectiveness of institutional mechanisms in ensuring that decisions are based on timely and well-founded advice, and that they are taken in a timely and effective manner.

Guidelines:

- Scientific basis for conservation and management, including:
 - best available scientific information
 - ecosystem and precautionary approaches
- Scientific data collection and exchange, scientific research
- Socio-economic analysis for conservation and management
- Management approaches and tools:
 - total allowable catch, limits on size of fish caught
 - individual national quotas, criteria for allocation
 - effort management
 - spatial and temporal measures
 - bycatch management

- o fishing gear and technology
- o capacity management

Analysis: To what extent are the ecosystem and precautionary approaches, and the requirement to base conservation and management measures on best available science, reflected in the mandate of the RFMO or its decision-making procedures? Has the mandate been an impediment to implementing these approaches? Is there provision for monitoring, assessment, and data collection and exchange adequate to support these approaches, and for commensurate fishing opportunities? Is there adequate provision for scientific and socio-economic analysis? Is there a mandate to address the management of fishing capacity? What changes may be required in the mandate? In conservation and management measures?

Do the RFMO's institutional mechanisms and procedures facilitate management based on a sound analytical basis, ecosystem and precautionary approaches, and commensurate fishing opportunities? Do they facilitate adoption of conservation and management measures in a timely and effective manner? What changes may be required in the RFMO's institutional mechanisms and procedures to improve their effectiveness? (Section V)

III. Compliance and enforcement

Objective: To assess the status of national reporting on fisheries and fishery-related activities and of cooperative measures to ensure compliance with the RFMO's conservation and management measures. To evaluate whether the RFMO provides adequately for the centralised collection and analysis of information at the regional level in order to detect and deter non-compliance by members, cooperating non-parties, and non-cooperating non-parties. To assess the collective response by RFMO members to detect and deter non-compliance with RFMO measures. To identify gaps, problems and options to address them.

Guidelines:

- National reporting
- Cooperative mechanisms to detect non-compliance with RFMO conservation and management measures: monitoring, surveillance, and collective review
- Cooperative measures to deter non-compliance with RFMO conservation and management measures: collective review and sanction

Analysis: What types of compliance and enforcement problems exist? Do the RFMO mandate or institutional mechanisms pose any impediments to dealing with them effectively? Are there any RFMO measures that may encourage illegal or unreported fishing? Have cooperative measures to detect and deter non-compliance led to more effective implementation and enforcement of conservation and management measures? What further conservation and management measures, consistent with international law, could help detect, expose, and deter non-compliance and activities that undermine the effectiveness of RFMO conservation and management measures?

IV. Review and evaluation

Objective: To assess any requirements and procedures for regular review and evaluation established by the RFMO. To determine the scope of these evaluations, who carries them out, and how they are carried out. To determine the extent to which the results of the evaluation are utilised by the organisation and made available more widely.

Guidelines:

- Effectiveness of conservation and management measures
- Quality and adequacy of scientific data and assessment methods, socio-economic analysis, and management approaches
- Effective functioning of the organisation (secretariat)
- Effective implementation of RFMO decisions and measures

Analysis: What is the nature and scope of any evaluations carried out under the auspices of the RFMO and have they led to changes in the mandate or operation of the organisation or modifications in conservation and management measures? Has member follow-up been adequate? Have these evaluations contributed to broader knowledge of obstacles to effective high seas fisheries governance and how to overcome them?

V. Institutional structures and mechanisms

Several aspects of institutional structures and mechanisms are considered in this guidance. They can be divided into two groups. The first covers issues that RFMOs deal with routinely, even though the details may vary between organisations. The second covers questions of management that have not been studied in any detail yet clearly have bearing on the effectiveness of RFMO conservation and management measures and high seas fisheries governance. RFMO assessments could be especially useful in eliciting key issues and best practices in these areas.

A. Routine issues of structure and procedure

The primary institutional mechanisms of RFMOs are the decision-making body, usually a Commission, the mechanism(s) employed to obtain scientific advice, and the secretariat (staff) of the organisation. A number of RFMOs have established additional organs to consider, for example, issues of monitoring, control, and compliance. The main bodies often establish other subsidiary organs, on a permanent or short-term basis, to help them advance their work. Most RFMO agreements also provide procedures for settling disputes.

The rules and procedures adopted by these bodies are another important institutional component. These may govern whether and how non-parties may take part in meetings of the various organs of the organisation, which may facilitate their transition toward membership.

Rules and procedures governing representation by other stakeholders (e.g., fishing industry, conservation organisations) at meetings of various organs of the organisation, and wider public access to documentation and results, are other important institutional aspects.

The secretariat is a vital part of the organisation. Members need to be clear on what they expect from the staff and in what time frame: they need to provide sufficient resources so that expertise and facilities are adequate for carrying out assigned responsibilities; and they are responsible for overseeing the effective functioning of the staff.

B. Issues requiring further definition

A first issue relates to decision-making; that is, what are the decision-making procedures, and to what extent are criteria, strategies, or procedures set out in advance for dealing with different decisions; for example, criteria to guide allocation decisions or strategies for dealing with risk and

uncertainty. Such rules can expedite sound, fair, and transparent decisions, including timely revision of existing conservation and management measures based on new research findings. Other types of procedures can resolve conflicts over pending or recent decisions before they escalate. They serve as cushions to relieve tension and avoid unfair discrimination among members.

A second issue is the interaction and dialogue between Commission members and scientific advisory mechanism(s); that is, does an interactive relationship exist between the decision-making body and the scientific advisory mechanism – to clarify for both bodies the questions for which decision-makers need, and can obtain, scientific advice, and to ensure that decision-makers fully comprehend scientific findings and uncertainties. A similar analysis may be needed with respect to other forms of expert advice provided to decision-makers.

A third issue is the extent to which each RFMO centralises certain functions within the secretariat; that is, in addition to asking staff to simply receive and compile information received from individual members, to what extent is the secretariat expected to play a proactive role in collecting and analysing information on research findings or catch and effort, on the one hand, or in relation to compliance with RFMO conservation and management measures, on the other.

Objective: To sharpen the issues and best practices related to decision-making procedures and management strategies, dialogue between decision-makers and advisory mechanisms, and the benefits and drawbacks of centralised secretariat functions.

Guidelines:

- Decision-making and review
- Scientific advisory mechanisms
- Cooperative review mechanisms

Analysis: Do the organisation's decision-making procedures facilitate timely adoption of effective conservation and management measures? Are procedures and criteria for decisions spelled out in sufficient detail, and are management strategies in place, to facilitate and expedite sound decisions? How are the organisation's needs for scientific and other expert advice provided for and met? Do opportunities and procedures for dialogue between advisers and decision-makers promote mutual understanding of needs and limitations?

VI. Cross-cutting issues

A. Special requirements of developing states

Objective: To ensure effective participation by developing states in the RFMO and their effective implementation of its conservation and management measures.

Guidelines: Initiatives to identify and address specific needs of developing country members.

Analysis: To what extent are developing state members gaining the capacity to participate effectively in the organisation and implement and enforce its conservation and management measures? What steps could be taken to improve this?

B. Transparency

Objective: To evaluate the effectiveness of institutional mechanisms in ensuring that decisions are taken in a transparent manner and in consultation with all relevant stakeholders, and that reports and documents are publicly available.

Guidelines:

- Representation of non-parties fishing in the RFMO area in meetings of the organisation
- Representation of fishing industry, intergovernmental and non-governmental organisations
- Public availability of documents and results

Analysis: Does the RFMO allow for representation by non-parties? Do its institutional mechanisms and procedures facilitate that relevant IGOs and NGOs take part in meetings of its various organs in accordance with procedures that are not unduly restrictive? Do they provide for timely public access to records and reports? What changes may be required in the RFMO's institutional mechanisms and procedures to improve their effectiveness?

C. Adequacy of resources

Objective: To determine how the organisation defines and meets resource needs.

Guidelines:

- Defining programmes and budgets and setting priorities (allocating financial, staff, and time resources)
- Fee structure
- Consequences of failure to meet financial obligations

Analysis: How does the organisation determine and fund activities to be carried out by the secretariat and/or member governments – in relation to data, research, and assessment as well as efforts to detect and deter non-compliance with RFMO conservation and management measures? How does it set priorities among them? Does funding take the form of mandatory assessments or voluntary contributions? By members, cooperating non-parties? Are the resources made available through the RFMO and/or bilateral and multilateral funding mechanisms? Are they sufficient to ensure that agreed priorities are carried out effectively in the agreed time frames? Are any changes required in the RFMO's mandate or institutional structure? What additional steps could be taken?

APPENDIX 4

Proposed guidelines on flag state performance

All flag states can achieve greater control over their fishing vessels. The tools for them to do so are widely available in current international instruments, in particular: the UN Fish Stocks Agreement, the FAO Compliance Agreement, regional fisheries agreements, the FAO Code of Conduct for Responsible Fisheries and the International Plan of Action to Prevent, Deter and Eliminate IUU Fishing. To achieve greater control, however, a state must have the political will to do so. These proposed guidelines are designed in part to encourage flag states to implement these controls.

As a first step, flag states should ratify the relevant international instruments, including those just mentioned, that embody the modern norms relating to flag state responsibility. However, there are a number of other basic steps a responsible flag state would also be expected to take, including, among others: full and effective participation in international fisheries organisations, and implementation of the measures agreed by them; adoption of National Plans of Action on IUU fishing and the carrying out of the actions identified in such plans; and the effective implementation of national measures and systems for the regulation (e.g. authorisation), surveillance and control of fishing vessels on the high seas.

The guidelines consider flag State performance in three broad categories:

1. Participation in global fisheries agreements
2. Participation in regional fisheries agreements and organisations
3. Domestic implementation and regulation

Within each category a number of basic indicators of performance can be elaborated. The following sections describe these indicators and outline how an assessment of performance could be made against them.

1. Participation in global fisheries agreements

Participation in international fisheries agreements is an important first step for responsible flag states. Although participation in an agreement does not necessarily guarantee compliance by the flag state with the provisions of that agreement, the act of ratification itself is an important political statement. It also brings the flag state into a system of reciprocal obligations with other states which are also seeking to bring about improved fisheries governance. This section considers

the three major global agreements related to fisheries (the UN Law of the Sea Convention, the UN Fish Stocks Agreement and the FAO Compliance Agreement) and global agreements concerned with fishing vessel safety.

Ratification of or accession to the Law of the Sea Convention

The 1982 United Nations Convention on the Law of the Sea (“LOSC”) is the principal international convention dealing with matters related to ocean use. Its provisions on fisheries provide the general framework for the international law of fisheries, codifying long-standing principles such as the freedom of fishing, the primacy of flag state jurisdiction over its vessels on the high seas and setting out general duties to cooperate in the conservation and management of living marine resources. It also provides the framework for all other agreements concerning fisheries, which on the whole have been designed to be consistent with the Convention. Given the extensive scope of the LOSC, it is recognised that there may be reasons unconnected with fisheries that lead a particular state to decide not to ratify the Convention. Nevertheless, it is considered that full participation in the Convention should be encouraged as a means to improve international fisheries governance.

Ratification of or accession to the UN Fish Stocks Agreement

The United Nations Fish Stocks Agreement (“UNFSA”) is the most important international agreement governing high seas fisheries and ratification of or accession to it must be regarded as one of the most fundamental steps a flag state can take towards responsible performance. UNFSA has much more extensive provisions than LOSC on the duties of flag states, as well as a great many other rules expanding on those of LOSC, aimed at ensuring the sustainability of fisheries for straddling and highly migratory fish stocks. The Agreement also contains a compulsory dispute settlement mechanism which extends beyond LOSC, in particular that it also applies, as amongst parties to it, to disputes arising in other fisheries agreements where no mechanisms exist under such agreements.

Acceptance of the FAO Compliance Agreement

Like UNFSA, the FAO Compliance Agreement is an agreement of fundamental importance to high seas fisheries. There is some degree of overlap between this Agreement and UNFSA, both of which focus extensively on flag state responsibilities on the high seas, although the Compliance Agreement also contains a number of unique provisions, particularly relating to data collection. Importantly, the provisions of the Compliance Agreement apply to all high seas stocks, including discrete stocks not covered by the UN Fish Stocks Agreement.

Ratification or accession to maritime safety agreements

There are a number of international agreements which concern the safety of fishing vessels and the welfare of fishing crews. Of these, two agreements, both elaborated under the auspices of the International Maritime Organisation, are of particular importance: the International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel; and the International Convention for the Safety of Fishing Vessels. Participation in these Conventions should be encouraged as a function of responsible flag state action.

2. Participation in regional fisheries agreements and organisations

Whilst ratification of the major global treaties is an important indicator of flag state performance, it is clearly not in itself sufficient: a flag state must also implement the obligations contained in

those treaties effectively, in particular by ratifying relevant regional agreements (which seek to implement the global agreements) and by participating in relevant regional fisheries agreements. This is not in itself sufficient, of course, since the flag state must also comply with and implement the measures adopted by those regional organisations.

Ratification of relevant regional fisheries agreements

Both LOSC and UNFSA envisage cooperation between states in the conservation and management of high seas fish stocks taking place primarily at the regional level, through international fisheries agreements, arrangements and organisations. The most basic step towards this is ratification of relevant regional treaties. Indeed, under UNFSA any state which has a “real interest” in a fishery must join the relevant organisation (or cooperate with it) and such participation is a pre-condition, under the Agreement, to access to the resources for which the organisation is responsible.

Possible negative performance may exist where a state with a “real interest” in a particular fishery has not ratified or acceded to a relevant regional agreement. In order to identify states having a “real interest” in particular fisheries, the guidelines must be led by the determinations of the states parties and RFMOs themselves. Thus, in addition to the parties themselves, states considered to have an interest may include any cooperating non-parties identified by the contracting parties/members; any non-cooperating non-parties identified by the contracting parties/members; and any other flag states identified by the contracting parties/members as having vessels fishing within the area of competence of the regional agreement.

Membership of relevant RFMOs or participation as a cooperating non-member

Along with ratification of relevant treaties, membership of relevant RFMOs or participation in such organisations as a cooperating non-member is the most basic method by which a flag state can implement its obligations to cooperate. Of course, in most cases a flag state which is a party to a regional agreement will be a member of the organisation established by that agreement (and so a degree of overlap with the previous criterion is inevitable). However, a number of cases may be distinguished, justifying separate evaluation. First, some RFMOs are created not by treaty but by a resolution of another organisation, such as FAO Article VI bodies (which include, for example, SWIOFC, CECAF and WECAFC); and, conversely, some agreements do not establish a regional organisation: a separate evaluation thus catches these situations. Second, the evaluation in this section includes cooperating non-contracting parties/members, recognising – whilst not equivalent to formal participation in the agreement itself – the responsible discharge of flag state duties by non-members cooperating with RFMOs. Finally, while some treaties automatically make their parties members of the RFMO they create, there are exceptions, including NAFO and CCAMLR.

Compliance with RFMO measures

Membership of, or formal cooperation with, RFMOs is not in itself sufficient. In order for a flag state to fully meet its responsibilities to other users of high seas fisheries, it must also implement the measures agreed within RFMOs.

Such measures might include, *inter alia*: transposition and enforcement of quotas and other RFMO conservation and management measures; fulfilling the catch, effort and other data reporting requirements of RFMOs; participation in RFMO-mandated observer programmes, inspection schemes or other monitoring, control and surveillance measures; or participation in catch documentation schemes either as a member of the RFMO or, where the RFMO permits (CCAMLR, for example), as a non-member.

Again, the guidelines rely on determinations made by the RFMOs themselves. Thus, possible negative performance would be indicated where the flag state has been subject to a specific citation by a RFMO for failure to implement, comply with or enforce regulations established by the organisation.

3. Domestic implementation and regulation

The final area in which these guidelines provide a framework to evaluate flag state performance is in domestic implementation and regulation. There are a wide range of actions a flag state might be expected to take: these guidelines focus on a small number of actions, which might be considered amongst the more fundamental obligations relating to preventing IUU fishing on the high seas. They include: adoption of a NPOA-IUU; maintenance of national records of fishing vessels; requirement for the standardised marking of fishing vessels; and a system of high seas fisheries regulation.

Adoption of a NPOA-IUU

As an action called for by the FAO (see, specifically, paras. 25-27 of the IPOA-IUU), and thus one to which responsible flag states should accord priority, a National Plan of Action against IUU Fishing (NPOA-IUU) is a means whereby a flag state can bring to the attention of both its fishing fleet and the general public the necessity for high seas fishing to be conducted only within RFMO frameworks, develop effective domestic policy to prevent and deter IUU fishing and achieve the necessary coordinated action of its internal regulatory organs to ensure that these objectives occur.

Maintenance of a national record of fishing vessels and its availability to the FAO and/or RFMOs

As required by Articles IV and VI of the FAO Compliance Agreement and other instruments, and not least as an expression of the principle of the international responsibility of the flag state for the activities (both lawful and unlawful) of its vessels and nationals on the high seas commons, it is suggested that a responsible flag state should as a matter of course keep the international community regularly informed, through the FAO and/or RFMOs, about the identity of those it has licensed or authorised to fish on the high seas.

As an ultimate objective, this information should form part of a detailed and publicly accessible national record of all fishing vessels. Work at a global level on developing standards for such records is still in progress, however, and very few states have developed comprehensive national records. Nevertheless, there is still much a flag state can do, including contributing records of fishing vessels to RFMOs, where such information is collected by the organisation, and – where appropriate – contributing to the FAO High Seas Vessels Authorisation Record (HSVAR), established pursuant to the FAO Compliance Agreement. Possible negative performance would be taken to exist where a flag state does not contribute to the HSVAR database or, where it has a real interest, as determined above, does not provide record information to the appropriate RFMO.

Requirement for the standardised marking of fishing vessels

Standardised marking of fishing vessels aids monitoring, control and enforcement by enabling the easy identification of fishing vessels at sea or in port. It is a basic technical provision which a flag state could be expected to meet with relatively little difficulty.

System of fisheries regulation on the high seas, including a prohibition on fishing on the high seas without licence/authorisation

As a minimum, responsible flag states should not claim they were unable to exercise control over their vessels or nationals fishing on the high seas for lack of domestic legislation. This is an application of one of the most basic principles of international law: that a state may not plead its domestic law as an excuse for failure to comply with its international obligations. The requirement of a positive act of licensing or authorisation ensures at least some level of consciousness by the flag state of the level of fishing pressure it exerts on the high seas, and engenders awareness that the state is internationally responsible for the fishing activities on the high seas by a vessel it flags, i.e. that the freedom of fishing carries with it responsibilities.

Assessment of this criterion does not involve a detailed assessment of the effectiveness of high seas fisheries regulation by the flag state. For the purposes of assessment, it should be considered sufficient if the flag state has a formal system (i.e. at least in part provided for in law or administratively) for regulating fishing on the high seas, which must as a minimum include licensing/authorisation requirements. (Possible negative performance will be taken to exist where there is no such system).

APPENDIX 5

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