

# Report of the Global Fisheries Enforcement Training Workshop

ISSN: 1728-4392

FAO/FishCode  
Review No. 18

Kuala Lumpur, Malaysia, 18–22 July 2005



Global  
Partnerships  
for  
Responsible  
Fisheries



*Cover graphic by Emanuela D'Antoni*  
*Layout by Nicholas Rubery*

Printed on ecological paper

**Report of the**

**Global Fisheries Enforcement Training Workshop**

**Kuala Lumpur, Malaysia, 18–22 July 2005**

**Global Partnerships for Responsible Fisheries (FishCode)**

**Food and Agriculture Organization of the United Nations  
Rome, 2007**

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

All rights reserved. Reproduction and dissemination of material in this information product for educational or other non-commercial purposes are authorized without any prior written permission from the copyright holders provided the source is fully acknowledged. Reproduction of material in this information product for resale or other commercial purposes is prohibited without written permission of the copyright holders. Applications for such permission should be addressed to the Chief, Electronic Publishing Policy and Support Branch, Communication Division, FAO, Viale delle Terme di Caracalla, 00153 Rome, Italy or by e-mail to [copyright@fao.org](mailto:copyright@fao.org)

© FAO 2007

## **Foreword**

This document reports on the Global Fisheries Enforcement Training Workshop (GFETW), which was held in Kuala Lumpur, Malaysia, from 18 to 22 July 2005. Hosted by the Government of Malaysia in cooperation with the Monitoring, Control and Surveillance Network, the European Union and the FAO FishCode Programme, the Workshop provided participants with training on a wide range of MCS topics and gave them the opportunity to share information and experiences, latest developments and new ways to improve fisheries enforcement. Workshop preparation, implementation and reporting activities were made possible through FishCode project GCP/INT/849/USA ("Support for the Implementation of the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing"), with support from the Government of the United States of America, and the FishCode Trust, MTF/GLO/125/MUL, through contributions provided by the governments of Norway, Sweden and the United States of America. Support was also provided from the European Commission through Grant Agreement No. SI2.409866, which was received separately under FishCode project GCP/GLO/146/MUL, and the Government of Japan, through FishCode project GCP/INT/823/JPN ("Responsible Fisheries for Small Island Developing States").

The assistance of the staff of the Malaysian Department of Fisheries and of the staff of the Intergovernmental Organization for Marketing Information and Technical Advisory Services for Fishery Products in the Asia Pacific Region (INFOFISH) in facilitating logistical arrangements and contributing to a successful outcome is gratefully acknowledged.

The *FishCode Review* series publishes results of studies, missions, consultations, workshops, meetings and other project activities undertaken through the Programme, in furtherance of the objective of facilitating implementation of the 1995 FAO Code of Conduct for Responsible Fisheries and related international fisheries instruments and plans of action. Individual issues in the series are distributed to appropriate governments, regional bodies, meeting participants and Programme partners. For further information on Programme background, publications and activities, please consult the Web site (<http://www.fao.org/fi/fishcode.htm>).

J. Eric Reynolds  
Programme Coordinator, FishCode  
Fisheries and Aquaculture Department  
FAO/UN  
Rome, Italy  
[fishcode@fao.org](mailto:fishcode@fao.org)

### **FAO/FishCode Review, No. 18 Distribution:**

GFETW participants  
RAP  
SAPA  
FI Divisions and Services  
FI Branch Library  
Sponsoring agencies  
Other interested agencies

*FAO/FishCode.*

Report of the Global Fisheries Enforcement Training Workshop. Kuala Lumpur, Malaysia, 18–22 July 2005.

*FAO/FishCode Review.* No. 18. Rome, FAO. 2007. 66p.

Includes a CD-ROM and a DVD.

#### **ABSTRACT**

Illegal, unreported and unregulated (IUU) fishing has been identified as a major constraint to sustainable and responsible fisheries. IUU fishing occurs all over the world and involves a wide range of activities within domestic and international waters. It has harmful consequences on fisheries sustainability, conservation of marine resources and biodiversity and on the economies of developing countries and their efforts to develop sustainable fisheries. Although difficult to quantify, IUU is becoming more rampant with fishers involved using more and more sophisticated methods to conduct illegal fishing and avoid detention.

The Global Fisheries Enforcement Training Workshop (GFETW) brought together operational-level monitoring, control and surveillance (MCS) professionals for the global community who are dedicated to resolving IUU fishing issues. Hosted by the Government of Malaysia in cooperation with the MCS Network, the FAO FishCode Programme and the European Union, the Workshop provided participants with training on a wide range of MCS topics and gave them the opportunity to share information and experiences, latest developments and new ways to improve fisheries enforcement.

Among other subjects, the Workshop reviewed enforcement techniques and MCS operations through individual presentations, case studies and panel discussions. Participants discussed a wide range of tools available to assist countries in dealing more efficiently with IUU fishing, as well as methods of applying these tools through legal systems.

Copies of individual PowerPoint presentations given by GFETW speakers and resource persons are provided on the CD-ROM attached to the inside back cover of the report. Also attached to the inside back cover is a copy of the FAO multi-media DVD (trilingual) on IUU fishing presented during the opening session of the workshop.

***Keywords: IUU fishing, MCS; fisheries enforcement; coastal fisheries; marine fisheries;***

## CONTENTS

|  |           |
|--|-----------|
| Abbreviations/acronyms .....   | vii       |
| <b>Introduction.....</b>   | <b>1</b>  |
| <i>Workshop background</i> .....   | 1         |
| <i>GFETW objectives</i> .....  | 1         |
| <i>Participation and agenda</i> .....  | 2         |
| <b>Opening session .....</b>   | <b>2</b>  |
| <i>Multimedia presentation on IUU fishing</i> .....  | 3         |
| <i>Fisheries enforcement in Malaysia</i> .....   | 4         |
| <i>International framework for MCS cooperation</i> .....   | 4         |
| <b>Session 1 .....</b>   | <b>5</b>  |
| <i>Enforcement in marine reserves and parks: Australia</i> .....   | 5         |
| <i>Enforcement in marine reserves and parks: Malaysia</i> .....  | 5         |
| <i>Fisheries enforcement in Belize</i> .....   | 6         |
| <i>MCS training within the Southern African Development Community (SADC) region</i> .....                | 6         |
| <i>MCS initiatives in the Visayan Sea, Philippines</i> .....   | 6         |
| <i>Marine Reserves Project in Palau</i> .....  | 7         |
| <i>High Seas Task Force Approaches to IUU fishing</i> .....  | 7         |
| <i>The Southern African Development Community (SADC)/ European Union (EU) Fisheries MCS Programme</i> .. | 7         |
| <i>MCS in Indian Ocean large pelagic fisheries</i> .....   | 8         |
| <b>Session 2 .....</b>   | <b>8</b>  |
| <i>China Fisheries Enforcement Authority</i> .....   | 9         |
| <i>Seizures and confiscations under United States (US) fisheries laws</i> .....                          | 9         |
| <i>Integrating information from customs and port authorities: Norway</i> .....                           | 10        |
| <i>Forensic analysis: New Zealand case studies</i> .....   | 10        |
| <i>Port State measures in MCS: the case of Chile</i> .....   | 11        |
| <i>Organized crime in fisheries: the Australian context</i> .....  | 11        |
| <i>Risk assessment to facilitate enforcement</i> .....   | 12        |
| <b>Session 3 .....</b>   | <b>12</b> |
| <i>The use of financial analysis: cases in the USA</i> .....   | 12        |
| <i>Interviews, confessions and evidence: experience in the USA</i> .....                                 | 12        |
| <i>Peru's MCS programme</i> .....  | 13        |
| <i>USA/South Africa Bengis toothfish case</i> .....  | 13        |
| <b>Session 4 .....</b>   | <b>14</b> |
| <i>VMS Problems and Limitations</i> .....  | 14        |
| <i>USA: the use of VMS information in court</i> .....  | 14        |

|   |           |
|---|-----------|
| <i>Remote sensing of fishing vessels</i> .....  | 15        |
| <b>Session 5</b> .....  | <b>16</b> |
| <i>Legislation: powers of enforcement officers</i> .....  | 16        |
| <i>USA experience with the Lacey Act</i> .....  | 16        |
| <i>Lacey-type clauses in the Pacific region</i> .....   | 17        |
| <i>Administrative sanctions in civil law countries</i> .....  | 17        |
| <i>USA administrative procedures</i> .....  | 18        |
| <i>Shark finning: a USA case study</i> .....  | 19        |
| <b>Session 6</b> .....  | <b>19</b> |
| <i>Illegal fishing and the media</i> .....  | 20        |
| <i>High seas enforcement and the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)</i> .....                                    | 20        |
| <i>Global MCS: the obligation to cooperate</i> .....  | 21        |
| <i>VMS and Regional Fisheries Management Organizations: North East Atlantic Fisheries Commission (NEAFC)</i> .....  | 22        |
| <i>VMS and Regional Fisheries Management Organisations: International Commission for the Conservation of Atlantic Tunas (ICCAT)</i> .....                   | 22        |
| <b>Session 7</b> .....  | <b>23</b> |
| <i>Using VMS in a Regional Vessel Register</i> .....  | 23        |
| <i>MCS planning in developing nations</i> .....   | 24        |
| <i>Education, outreach and enforcement</i> .....  | 25        |
| <i>Fisheries Monitoring Control and Surveillance Network</i> .....  | 26        |
| <b>Closing session</b> .....  | <b>27</b> |
| <b>Appendix A: Workshop agenda</b> .....  | <b>28</b> |
| <b>Appendix B: List of participants</b> .....   | <b>37</b> |
| <b>Appendix C: Welcoming remarks by Dato Junaidi Bin Che Ayub, Director General, Department of Fisheries, Malaysia</b> .....                                | <b>50</b> |
| <b>Appendix D: Opening session speech by J. Eric Reynolds, Coordinator, FAO FishCode Programme</b> .....  | <b>52</b> |
| <b>Appendix E: Opening speech by the Honourable Tan Sri Dato' Hj. Muhyiddin Bin Hj. Mohd. Yassin, Minister of Agriculture and Agro-based Industry</b> ..... | <b>54</b> |
| <b>Appendix F: The 2005 Rome Declaration on Illegal, Unreported and Unregulated Fishing</b> .....   | <b>59</b> |
| <b>Appendix G: GFETW evaluation by participants</b> .....   | <b>63</b> |



## Abbreviations/acronyms

|             |  |
|-------------|--|
| AFMA        | Australian Fisheries Management Authority  |
| ALC         | Automatic Location Communicator  |
| C-VMS       | centralized satellite-based vessel monitoring system   |
| CARICOM     | Caribbean Community and Common Market  |
| CCAMLR      | Commission for the Conservation of Antarctic Marine Living Resources   |
| CCRF        | Code of Conduct for Responsible Fisheries  |
| CCRVMA      | Convención sobre la Conservación de los Recursos Vivos Marinos Antárticos  |
| CDS         | catch documentation scheme   |
| CEDER       | Catch, Effort and Discards Estimates in Real-time  |
| CFEA        | China Fisheries Enforcement Authority  |
| CITES       | Convention on International Trade in Endangered Species of Wild Flora and Fauna  |
| COFI        | Committee on Fisheries (FAO)   |
| CONVEMAR    | Convención de las Naciones Unidas sobre el Derecho del Mar   |
| CP          | Contracting Party  |
| DFWP        | Division of Fisheries and Wildlife Protection  |
| DW          | distant water  |
| DWFN        | distant water fishing nations  |
| EC          | European Commission  |
| EEZ         | exclusive economic zone  |
| EU          | European Union   |
| FFA         | Pacific Islands Forum Fisheries Agency   |
| FishCode    | FAO Programme of Global Partnerships for Responsible Fisheries   |
| FKNMS       | Florida Keys National Marine Sanctuary   |
| FMC         | fisheries monitoring centre  |
| FOC         | flag of convenience  |
| GFETW       | Global Fisheries Enforcement Training Workshop   |
| GIS         | geographical information system  |
| GMDSS       | Global Maritime Safety and Distress System   |
| GPS         | global positioning system  |
| ICCAT       | International Convention for the Conservation of Atlantic Tunas  |
| HSTF        | High Seas Task Force   |
| ICT         | information and communication technology   |
| IMO         | International Maritime Organization  |
| IMPAST      | Improving fisheries monitoring through integrating passive and active satellite-based technologies                                       |
| IOC         | Indian Ocean Commission  |
| IOTC        | Indian Ocean Tuna Commission   |
| INFOFISH    | Intergovernmental Organization for Marketing Information and Technical Advisory Services for Fishery Products in the Asia Pacific Region |
| IPOA        | International Plan of Action   |
| IUU fishing | Illegal, unreported and unregulated fishing  |
| IRCS        | International Telecommunication Union Radio Call Sign  |
| MCS         | monitoring, control and surveillance   |
| MCS Network | International Fisheries Monitoring, Control and Surveillance Network   |
| MEERT       | Marine Environmental Enforcement Response Team   |
| MP          | marine park  |
| MPA         | marine protected area  |
| NAFO        | North Atlantic Fisheries Organization/Organización de Pesquerías del Atlántico Noroeste  |

|          |  |
|----------|--|
| NCP      | Non-Contracting Party  |
| NEAFC    | North East Atlantic Fisheries Commission                           |
| NOAA     | National Oceanic and Atmospheric Administration                    |
| NOVA     | Notice of Violation and Assessment                                 |
| NPOA     | National Plan of Action  |
| OCEAN    | Ocean Conservation Education Action Network                        |
| RA       | Regulatory Area  |
| RFB      | regional fishery body  |
| RFMO     | regional fisheries management organization                         |
| SADC     | Southern African Development Community                             |
| SAR      | synthetic aperture radar   |
| SHEEL    | Secure and Harmonised European Electronic Logbook                  |
| SICA     | Sistema de Integracion Centroamericana (SICA).                     |
| SMEAC    | Situation, Mission, Execution, Admission and Control)              |
| SOLAS    | International Convention for the Safety of Life at Sea             |
| SWIO     | Southwest Indian Ocean   |
| SWIOC    | South-West Indian Ocean Fisheries Commission                       |
| TAC      | total allowable catch  |
| UNCED    | United Nations Conference on Environment and Development           |
| UNCLOS   | United Nations Convention on the Law of the Sea                    |
| UNDP-GEF | United Nations Development Programme – Global Environment Facility |
| UNFSA    | United Nations Fish Stocks Agreement                               |
| US       | United States  |
| USA      | United States of America   |
| VDR      | vessel data recorder   |
| VDS      | vessel detection system  |
| VHF      | very high frequency  |
| VMS      | vessel monitoring system   |
| VTMS     | vessel tracking and monitoring system                              |
| WTO      | World Trade Organization   |

## Introduction

1. This document reports on the Global Fisheries Enforcement Training Workshop (GFETW), which was held in Kuala Lumpur, Malaysia, from 18 to 22 July 2005. The Workshop was hosted by the Department of Fisheries, Government of Malaysia, in cooperation with the International Network for the Cooperation and Coordination of Fisheries-Related Monitoring Control and Surveillance Network (MCS Network), the European Union, and the FAO FishCode Programme.<sup>1</sup>

## Workshop background

2. Illegal, unreported and unregulated (IUU) fishing has been identified by the international community as being a major constraint to the achievement of sustainable, responsible fisheries. IUU fishing occurs throughout the world, and encompasses a wide range of activities within domestic waters and on the high seas.

3. As recognized in the 2005 Rome Declaration adopted on 12 March 2005 by the FAO Ministerial Meeting on Fisheries, IUU fishing has

*...harmful and worldwide consequences...on the sustainability of fisheries (ranging from large-scale high seas fisheries to small-scale artisanal fisheries), on the conservation of marine living resources and marine biodiversity as a whole and on the economies of developing countries and their efforts to develop sustainable fisheries management.*<sup>2</sup>

4. Although difficult to quantify, the incidence of IUU fishing is significant, and many of the participating fishers are using increasingly sophisticated methods to conduct illegal fishing and to evade detection.

5. The global community has acted on concerns regarding illegal fishing with increasing dedication over the past decade. A number of international agreements and initiatives have focused on the problem of IUU fishing. Nearly all of these efforts call for increased monitoring, control and surveillance (MCS) efforts.

6. The GFETW was convened as a gathering of operational-level MCS professionals from the global community who are dedicated to resolving IUU fishing issues.

## GFETW objectives

7. Main workshop objectives were to provide participants with opportunities to:

- receive training on a broad cross section of MCS topics;
- share information and experiences, latest developments and new ways forward to improve fisheries enforcement; and
- build contacts and partnerships.

---

<sup>1</sup> Workshop preparation, implementation and reporting activities were made possible through FishCode project GCP/INT/849/USA ("Support for the Implementation of the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing"), with support from the Government of the United States of America, and the FishCode Trust, MTF/GLO/125/MUL, through contributions provided by the governments of Norway, Sweden and the United States of America. Support was also provided from the European Commission (EC) through Grant Agreement No. SI2.409866, which was received separately under FishCode project GCP/GLO/146/MUL, and from the Government of Japan, through FishCode project GCP/INT.823/JPN ("Responsible Fisheries for Small Island Developing States").

<sup>2</sup> See <http://www.fao.org/newsroom/en/news/2005/100200/index.html>

## **Participation and agenda**

8. The Workshop was scheduled as a five-day event in order to allow for review enforcement techniques and MCS operations by means of individual presentations, case studies and panel discussions. Participants were encouraged to discuss a range of tools available to assist States in dealing more efficiently with IUU fishing (e.g. fishery observers, vessel monitoring systems, utilizing customs information, specialized investigations and financial analysis), as well as the methods of applying these tools through legal systems.

9. The GFETW agenda is shown as Appendix A and the list and a photograph of workshop participants as Appendix B.

10. The GFETW was attended by a total of 105 participants<sup>3</sup> representing 38 countries and 11 international/intergovernmental organizations. Participants included 31 invitees from developing countries, 16 from developed countries, 52 speakers/facilitators, and 6 Secretariat and host country assistants.<sup>4</sup> Simultaneous interpretation services were provided for English, French and Spanish.

11. Copies of individual PowerPoint presentations given by GFETW speakers and resource persons are provided on the CD-ROM attached to the inside back cover of this report. Also attached to the inside back cover is a copy of the FAO multi-media DVD on illegal, unreported and unregulated (IUU) fishing presented during the opening session of the workshop. All of this material may be accessed through the FishCode Programme Web site at: <http://www.fao.org/fi/fishcode.htm>

## **Opening session**

12. Dato' Junaidi Bin Che Ayub, Director General, Department of Fisheries, Malaysia welcomed participants to the opening session, which convened on the morning of 18 July 2005. His welcoming speech is shown as Appendix C.

13. Ms Michele Kuruc, Chair, MCS Network, welcomed participants on behalf of the International MCS Network. She stressed the importance of the workshop in the context of the fight against IUU fishing. Large-scale illegal harvests of fish and despoliation of marine resources are widely recognized as serious problems and the focus of many existing international agreements. Improving compliance with existing conservation standards is complicated by sophisticated technologies employed by violators and high profit potential from illegal trafficking.

14. The MCS Network was introduced as one of the newest cooperative efforts to combat IUU fishing. Through the Network, nations are joining their resources to increase their effectiveness in enforcing conservation measures designed to protect world fisheries and ecosystems.

15. It was emphasised that the fight against illegal fishing requires a high level of international information sharing, particularly in terms of fishing vessels registration and related permits and licences. The objectives and functions of the MCS Network have been formulated accordingly.

16. A copy of the PowerPoint slides shown by Ms Kuruc during her talk is available on the accompanying CD-ROM.

---

<sup>3</sup> Not counting the nine Malaysia Department of Fisheries and INFOFISH support staff that helped with Workshop preparations and logistics but were not part of the "target" audience.

<sup>4</sup> Of the 105 participants, excluding the 11 from international organizations, the breakdown between those from developing versus developed countries was 43 from the former and 40 from the latter.

17. Dr Eric Reynolds, FAO FishCode Programme Coordinator, welcomed participants on behalf of the FAO. He emphasised that the challenges to achieving long-term sustainability of fisheries are global in scale, and needed to be addressed on these terms

18. It was noted that the most well known global agreement on fisheries is the 1995 FAO Code of Conduct for Responsible Fisheries. The Code recognises the nutritional, economic, social, environmental and cultural importance of fisheries, takes into account the biological characteristics of the resources, addresses the interests of consumers and other users, and embraces the commitments and requirements of all major instruments of relevance to fisheries. The Code its related instruments<sup>5</sup> constitute the primary framework for FAO's fisheries work programme.

19. Reference was also made to the 2002 Johannesburg Plan of Implementation, negotiated at the World Summit on Sustainable Development (WSSD-POI), which also accords a high prominence to fisheries issues. Both the Code and the WSSD-POI foresee broad stakeholder participation, transparency, institutional strengthening and the implementation of the precautionary and ecosystem approaches. Both aim to rebuild fish stocks and to minimize the impact of fishing on biodiversity and the environment through the reduction of fleet capacity and by combating IUU fishing.

20. It was in direct support of this effort to fight against IUU fishing that the present Training Workshop was devoted. The FishCode Programme, as a principle means through which the FAO Fisheries and Aquaculture Department seeks to facilitate implementation of the Code of Conduct, was pleased to be associated with this important effort in partnership with the International MCS Network, the European Union, and the Government of Malaysia.

21. The full text of Dr Reynolds address appears as Appendix D.

22. The GFETW was officially opened by the Honourable Dato' Seri Haji Mohamed Shariff Bin Haji Omar, Deputy Minister of Agriculture and Agro-Based Industries, Malaysia.

23. He spoke of the importance of fisheries as a source of food and livelihood to Malaysians and of the threats to the sustainability of fisheries resources both at the national level and on a wider global scale. The Government of Malaysia recognised that the continued contribution of capture fisheries to the national welfare depends on the effectiveness of management. In response to this, the Government has instituted a comprehensive regulatory and management regime designed to ensure the sustainability of the coastal fisheries sector.

24. The Deputy Minister emphasised that integrated and properly monitored enforcement activities were essential to successful management of the sector, and that capacity building of the kind offered through the present Workshop was a major need to be met for enforcement activities to be effective.

25. The Deputy Minister expressed the hope that the Workshop would be fruitful and meaningful to participants. He warmly welcomed them to Malaysia and to Kuala Lumpur, and expressed the hope that their stay would be pleasant and memorable. He then declared the GTFETW officially opened.

26. The full text of the Honourable Deputy Minister's address is given in Appendix E.

### **Multimedia presentation on IUU fishing**

27. Following the Deputy Minister's address, an FAO multimedia presentation on IUU fishing was screened by Dr Eric Reynolds, FAO FishCode Programme Coordinator. This

---

<sup>5</sup> Including the four International Plans of Action (IPOAs) on Seabirds, Sharks, Fishing Capacity, and IUU Fishing, and the FAO Strategy for Improving Information on Status and Trends in Capture Fisheries.

presentation was originally produced for the FAO Ministerial Meeting on Fisheries, Rome, March 2005. Copies of the Ministerial Declaration on IUU Fishing, which resulted from this meeting, were made available to GFETW participants. The full text of the Declaration is given as Appendix F.

28. A number of workshop participants requested copies of the multimedia presentation as well, for use in instructional and awareness-raising activities in their home countries and agencies. The presentation is thus provided in DVD format attached to the back cover of this report.<sup>6</sup>

### **Fisheries enforcement in Malaysia**

29. Malaysia's Fisheries Enforcement Programme was the subject of the presentation given by Mr Abd. Khalil bin Abd. Karim (Director, Resource Protection Division, Department of Fisheries, Malaysia).

30. The importance of fisheries for Malaysia was demonstrated by reference to official figures. There are 35,458 licensed vessels, almost 90 000 fishers and annual landings of some 1.2 million mt, for a value of RM 4013 billion (1.3% of GDP).

31. With regard to MCS, the Ministry of fisheries strives to conduct continuous data collection, measurement of fishing effort and yield and production of information for management planning. Legislation covers the regulation of fishing operation of domestic as well as foreign vessels, the management of fisheries resources, fishing methods and the establishment of MPAs.

32. Policy objectives with regard to fisheries licenses include the prevention of overexploitation of the resources, equitable distribution of resources, and restructuring of ownership pattern. Instruments include Marine Protected Areas (MPAs), vessel limitation, identification and marking, gear restrictions, control of duration of fishing operations and control at landing sites and at-sea surveillance.

33. Effective enforcement is expensive and efforts are being made to give more attention to alternative approaches and to strengthen related programmes. The Malaysian government has three such programmes: Coastal Watch Programme, Local Management Group and Fisher Contact Programme.

34. A copy of Mr Khalil's presentation is provided on the accompanying CD-ROM.

### **International framework for MCS cooperation**

35. Professor Moritaka Hayashi of Waseda University, Japan, provided the Workshop with a briefing on the international framework for MCS cooperation. He first reviewed the concept of MCS and its components, based on the FAO definition that it comprises a "Mechanism for implementation of agreed policies, plans or strategies for fisheries management."

36. Professor Hayashi then surveyed the main binding (UNCLOS, FAO Compliance Agreement and UN Fish Stock Agreement) and non-binding (FAO Code of Conduct for responsible fisheries and the IPOA IUU) fisheries instruments pertaining to MCS.

37. The basic principles and rules applicable to MCS were outlined according to: (a) general principles applicable to all States concerned with fisheries activities; (b) coastal State measures (internal water and territorial sea, contiguous zones, EEZ and continental shelf); and (c) measures to be taken by all States concerned (measures to be taken on the high seas, flag State measures and port State measures).

---

<sup>6</sup> The DVD was originally available only in English. Following the GFETW it was rendered into Arabic, Chinese, French and Spanish versions (the other four FAO official languages).

38. A copy of Mr Professor Hayashi's presentation is provided on the accompanying CD-ROM.

### **Session 1**

39. This session convened on the afternoon of 18 July 2006 and was facilitated by Ms Beverly Wade (Fisheries Administrator, Department of Fisheries, Belize). Copies of the presentations made by the respective speakers are provided on the accompanying CD-ROM.

#### **Enforcement in marine reserves and parks: Australia**

40. Session 1 began with a presentation on enforcement in marine reserves parks by Mr Mick Bishop (Director, Operations Great Barrier Reef Marine Park Authority).

41. The workshop was informed of the size and scope the Great Barrier Reef Marine Park and the multiple purposes it serves in terms of tourism, commercial fishing, water quality preservation, shipping and native title rights. The Park faces numerous compliance issues, including illegal fishing, illegal hunting, pollution, and shipping offences.

42. Also described was the evolution of the Park's zoning plan, and the lessons learned with regard to early consideration of compliance planning, appropriate design of zones and surveillance options (satellite monitoring, aerial surveillance and vessel surveillance).

43. Further enforcement lessons related to: (a) effective investigation and prosecution processes; (b) appropriate penalties; (c) adaptability; (d) evaluating success; and (e) learning from the experience of others.

#### **Enforcement in marine reserves and parks: Malaysia**

44. A presentation prepared jointly by Ms Raja Yana Meleessa and Mr Jamal Bin Mydin (Marine Parks Division, Ministry of Natural Resources and Environment, Malaysia) explained enforcement in marine parks, reserves and sanctuaries within Malaysia.

45. The presentation covered an overview of the need for marine parks (MPs) and protected areas (MPAs) and of national management and enforcement activities within these sites, including the agencies involved. The legal basis for the establishment of marine parks in Malaysia was outlined and the five main park areas described (Pulau Redang and Pulau Perhentian MP, Pulau Tioman MP, Pulau Payar MP, Pulau Tinggi MP, Labuan MP). Special attention was directed towards the education and awareness activities carried out in the MPs.

46. Regulations on the protection and conservation of the parks come from different regulatory bodies whose jurisdictions cover different aspects of MP management. On land the Ministry of Tourism regulates tourism enterprises and the Department of Wildlife enforces the protection of wildlife and wildlife habitats, whereas the Fisheries Department regulates fishing activities in the MPs and the Marine Department governs all maritime affairs. This situation at times raises complications for an effective enforcement process.

47. The concluding part of the presentation focussed on the five-year United Nations Development Programme – Global Environment Facility (UNDP-GEF) project to be initiated by the Malaysia government and dedicated to "Conserving Marine Biodiversity through Enhanced Marine Park Management and Inclusive Sustainable Island Development".

## **Fisheries enforcement in Belize**

48. A presentation by Mr James Azueta (Belize Fisheries Department), given on his behalf by Ms Beverly Wade, depicted the the situation of fisheries resources and management in Belize. Particular focus was directed towards the role, history and problems of enforcement.

49. Tasks conducted by the Belize Fisheries Department's enforcement unit include: (a) conduct of patrols and operations within the Belize territorial limits; (b) gathering intelligence on illegal fishing activities; (c) conduct of regular searches of establishments on land; (d) operations at road blocks; (e) provision of support for other units within the Fisheries Department and the Ministry; (f) participation in joint operations with other agencies; (g) enforcement duties within MPAs; (h) arrest and prosecution of offenders; (i) support for fisheries legislation drafting and enactment; and (i) provision of educational lectures on fisheries legislation and marine ecology.

50. Regulations pertaining to the conch, lobster and shrimp fisheries were reviewed, along with measures supported by the Belize Government to deal with IUU fishing at the national, regional and international levels.

51. Priority enforcement actions identified by the Fisheries Department for the immediate future include comprehensive fishing vessel licensing, curbing illegal lobster and conch harvesting, further training and environmental education, improved intra-agency cooperation, and work towards the establishment of regional fisheries policies and regulations through the MesoAmerican Barrier Reef System Project and Sistema de Integracion Centroamericana (SICA).

## **MCS training within the Southern African Development Community (SADC) region**

52. Mr Yahya Mgawe (Deputy Principal, Mbegani Fisheries Development Centre, Tanzania) next addressed the Workshop on the requirements for successful MCS training for dealing with IUU fishing.

53. His presentation highlighted the problems related to MCS training initiatives in general and defined principal MCS training needs, suggested criteria for the selection of trainees, and guidelines for developing curricula. Modules used for MCS training within the SADC region were used as specific curricula examples.

54. Mr Mgawe underlined that cost-effectiveness is a critical element in developing MCS-Training, especially in developing countries. The scale of MCS training must correspond to the scope of the MCS system in place. Cost-recovery from MCS operations will generate legitimacy and justify support for the MCS training function, as shown by the Tanzanian experience.

## **MCS initiatives in the Visayan Sea, Philippines**

55. MCS initiatives in the Philippines, with particular focus on the Visayan Sea, were presented by Mr Tony Oposa (President, Batas Kalikasan Foundation, Philippines).

56. Mr Oposa set the context through a detailed description of the importance of the Philippines from the point of view of marine biodiversity, and of the problems that marine ecosystems face. These latter include the impacts of waste disposal and pollution, and blast fishing, cyanide fishing, and other destructive practices.

57. Mr Oposa next provided an extended example of an effective and highly publicised fisheries enforcement episode in the Visayan Sea, in which official authorities and local community stakeholders combined to catch, convict and sentence blast fishers.



58. He further demonstrated how the education, enlightenment and empowerment of youth through involvement in marine conservation work led to greater levels of community appreciation of and compliance with fisheries regulations.

### **Marine Reserves Project in Palau**

59. A review of WildAid's Marine Reserves Project in the Republic of Palau was presented by Mr John Gavitt (Enforcement Advisor, WildAid, USA).

60. The project aims to strengthen protection of marine reserves in the Republic through phases of assessment, reporting and implementation activities, with the latter focusing on training and equipment, community outreach and assistance with policy and legislation.

61. Mr Gavitt described the establishment and operation of the Division of Fish and Wildlife Protection (DFWP) and of the Marine Environmental Enforcement Response Team (MEERT). The WildAid project gives special attention to training in Global positioning Systems/Geographical Information Systems (GPS/GIS) and to the dissemination of necessary equipment for information sharing as an essential tool of effective surveillance and enforcement. The DFWP is using this system to monitor and collect information on patrol routes, violations, species monitoring, and beach cleanups.

### **High Seas Task Force Approaches to IUU fishing**

62. There followed a presentation by Mr Frank Meere (Counsellor, High Seas Task Force) on "Some Suggested Approaches by the High Seas Task Force to Tackle IUU Fishing."

63. The Ministerially-led Task Force on Illegal, Unreported and Unregulated (IUU) Fishing on the High Seas (the High Seas Task Force or HSTF) was launched in December 2003. Members include fisheries ministers from Australia, Canada, Chile, Namibia, New Zealand and the United Kingdom as well as representatives from various NGOs, including The Earth Institute, WWF International, and the IUCN.

64. The purpose of the HSTF is to develop a small number of specific initiatives that will have a measurable impact on IUU fishing activity. The Task Force operates in terms of five integrated themes – namely, the promotion of: (a) better coordination of monitoring, control and surveillance through a strengthened MCS Network; (b) a global high seas fishing vessel information system; (c) greater flag State responsibility; (d) strengthened port State measures and control over nationals; and (e) RFMO-based initiatives and improved high seas governance.<sup>7</sup>

### **The Southern African Development Community (SADC)/ European Union (EU) Fisheries MCS Programme**

65. The next speaker was Mr Carlos Palin (Programme Manager, SADC EU Fisheries MCS Programme), who gave an overview of the southern Africa region, its principal fisheries and the improvement in surveillance capacity in the region from 2002 with the assistance of the SADC MCS Programme.<sup>8</sup>

66. Mr Palin described the operation of inspections (air, sea and land), the utility of the Fisheries Observers' Programme and the progressive harmonization of information systems. Emphasis was placed on the economics of MCS and the MCS 'sustainability cycle,' through which deterrence (fines and licenses) can generate revenue (augmented by partner sponsorships and multi-agency budgeting) that supports the equipment and operating costs

---

<sup>7</sup> More information and documentation is available at: [www.high-seas.org](http://www.high-seas.org)

<sup>8</sup> More information on the Programme is available at: [www.mcs-sadc.org](http://www.mcs-sadc.org)

for surveillance, which in turns yields the greater presence and visibility that leads to more effective deterrence.

67. Ongoing challenges that the SADC region faces in terms of enhancing MCS capabilities and performance were summarised under the following headings: (a) high value industry and open access tradition vs transparency; (b) financial sustainability, appropriate technology, institutionalization of revenues; (c) continued sharing of resources: hardware, expertise practice and training; (d) continued harmonization and coordination of practice within the region; (e) North-South partnerships; and (f) Governance and IUU – voice and accountability; government effectiveness; quality of regulations; rule of law; control of corruption.

### **MCS in Indian Ocean large pelagic fisheries**

68. The final presentation under Session 1 was made by Mr Neil Ansell (Technical Advisor, Indian Ocean Commission), who spoke about a pilot project for MCS of large pelagics in the Indian Ocean, which is to be implemented by the Indian Ocean Commission through financing under the 9th EDF and is scheduled to run from February 2005 for three years.<sup>9</sup>

69. Main project aims are to: (a) establish a harmonised administrative and regulatory framework for regional MCS; (b) develop an effective regional MCS capacity towards longliners and purse seiners; (c) plan and implement regional MCS 'pilot studies'; (d) implement and evaluate regional information / data exchange; (e) improve the frequency and quality of scientific information and catch data reported to the IOTC; and (f) evaluate and obtain regional estimates of IUU fishing based on the results of the specific pilot studies),

70. Current and planned activities under the project include: (a) assess the need for MCS in each country; (b) adapt national legislation to the international jurisdictional regime (United Nations Convention on the Law of the Sea (UNCLOS), the United Nations Fish Stocks Agreement, the Compliance Agreement and more particularly to the IOTC regime), dealing *inter alia* with evidentiary procedures, powers of enforcement, transshipment; (c) improve statistical data collection and processing and harmonize systems; (d) improve management of domestic and licensed foreign fleets; (e) Improve and harmonise VMS systems; (f) improve information exchange between national institutions and between IOC Parties, including the establishment of a regional record of tuna fishing vessels; and (g) ensure that MCS activities are cost-effective.

71. Summary observations drawn from the project thus far were noted as follows: (a) experience has shown that relatively few interceptions are sufficient to give credibility; (b) surveillance must have a deterrent effect, but not to the extent of scaring off foreign fleets which, for the foreseeable future will bring in most of the economic benefits; (c) maximum benefits will accrue from sound management rather than from arrests and prosecutions, which are rarely cost-effective in the long term; and (d) shore-based activities, coordinated regionally, are likely to be sufficient to discourage IUU fishing, particularly if, in a later phase, the MCS coordination integrates the eastern and southern African coastal countries.

### **Session 2**

72. The second session of the GFETW convened in the morning of 19 July 2006 and was facilitated by Ms Kimberly Dawson (Fishery Biologist, National Seafood Inspection Laboratory, National Marine Fisheries Service, Mississippi, USA). Copies of the presentations made by the respective speakers are provided on the accompanying CD-ROM.

---

<sup>9</sup> Further background information is available at: [www.coi-scs.org](http://www.coi-scs.org)

## **China Fisheries Enforcement Authority**

73. Mr Shengzhi Sun (Deputy Division Director, China Fisheries Enforcement Authority (CFEA)) led the second session off with a presentation on at-sea enforcement tactics. Mr Sun began with an overview of China's fisheries enforcement system, which covers a wide range of functions including, *inter alia*: supervision and administration over fisheries, aquatic wild flora and fauna resources; safety of fishing ports and fishing vessels; patrols in EEZ waters; operation of a fisheries radio broadcasting network and vessel monitoring system; and implementation of international fishery conventions and bilateral and multilateral fishery agreements.

74. Measures adopted by the Chinese Fishery Authority for Sustainable Fishery Development were noted as follows:

- Establishment of fishery genetic resources protection zones;
- Summer moratoriums;
- Two indices for controlling fishing permissions – i.e. number of fishing vessels, and fishing vessel power.

75. At-sea enforcement tactics taken by the CFEA are aimed at preventing various forms of illegal fishing, including: operating without proper fishing permission, vessel inspection certificate, and/or vessel registration license; use of explosives, poisons, or electricity; use of banned fishing gear or nets; fishing in restricted areas or during closed seasons; and poaching endangered fish or other aquatic species.

76. Mr Sun also briefed Workshop participants about China's joint fisheries enforcement programmes with Korea and the Sino-US Joint Enforcement Program on the North Pacific High Seas, which features the use of Chinese shipriders/observer assigned to United States Coast Guard ships to exercise jurisdiction over illegal Chinese vessels engaged in high sea driftnet fishing.

## **Seizures and confiscations under United States (US) fisheries laws**

77. The following speaker was Commander Michael Cerne (US Coast Guard), who delivered a presentation on policies and procedures regarding seizures and confiscations for fishing vessels operating in violation of U.S. Fisheries Laws.

78. Seizing a vessel is one of many enforcement options available, and is reserved for only the most serious offenses that inflict significant harm to fisheries resources. These can include, for example, fishing without a permit, fishing during a closed season, or in a closed area, or gross under-reporting of catch. The vast majority of violations involve much lesser penalties, such as a monetary fine, permit sanction, or confiscation of the catch.

79. Once a serious offense has been detected, the Captain of the Coast Guard vessel must provide the facts of the case to his/her superiors and request permission to seize the vessel. The Coast Guard then embarks on a very deliberate process involving other agencies which may have an interest in the case, including the Justice Department (prosecutes criminal cases), the National Marine Fisheries Service (custody of vessel, conduct of investigation, prosecutes civil cases), and, in cases involving a foreign vessel, the United States Department of State.

80. Once officers on scene are directed to seize a vessel, initial steps are taken to ensure the safety of the boarding team and crew, and the legality of the seizure (advice to vessel master, log entries, securing of all evidence maintaining strict accountability and chain of custody).

81. Once the evidence is secure, and the safety of the boarding team and crew has been addressed, the vessel is surveyed to determine conditions of safety and seaworthiness,

presence of any dangerous conditions or hazardous materials, etc. A thorough video inventory of the vessel and contents is then conducted, and a custody crew assigned to take the vessel back to port (either under own power or by towing).

82. Commander Cerne closed his presentation by outlining the logistical and legal issues that need attention for arrival in a port (e.g. harbor pilot and tugs, pier space, selling and offloading of catch if perishable, security of crew and vessel, etc.), and the process of turning the vessel over to another government agency – normally the National Marine Fisheries Service. The boarding officer finalises a detailed statement and prepares a case package that is immediately sent to the attorney who will handle the case.

### **Integrating information from customs and port authorities: Norway**

83. The next presentation was given by Mr Bjarne Schultz (Senior Advisor, Directorate of Fisheries, Norway), who spoke on the subject of integrating information from customs and port authorities. Mr Schultz described the organizational structure for the cooperation among Norwegian agencies involved at different levels with MCS problems and their roles along the “chain of value” of fisheries that runs from “at sea”, to “on shore,” passing through ports and ending in exports.

84. These steps involve different agencies, from the Fisheries Department to tax authorities, coastguards, port and customs, and food and safety officials. Exchange of information among the interested authorities needs to be on a day-to-day basis, covering such items as ownership and technical specifications of vessels, quotas and general business details drawn from various registers, databases and case records.

85. Such interagency cooperation makes it possible to achieve better information quality and enhanced deterrent effect and the treatment of infringements of fishery regulations as economic (tax and custom) crimes, with the possibility of penalty through imprisonment rather than merely fines.

### **Forensic analysis: New Zealand case studies**

86. Mr Rex Healy (Manager, Compliance Information Minister of Fisheries, New Zealand) next delivered a briefing on “Forensic Analysis, Fisheries Profiling and Computer Forensics,” based on the New Zealand fisheries environment.

87. Two case studies were reviewed, in which forensic analysis was used in relation to (a) area misreporting and (b) closed area fishing.

88. The first case concerned the misreporting of Hake catch (reported to be caught in East Coast fishery while actually caught on the West Coast fishery. The misreporting was detected using fisheries profiling and was prosecuted using data forensics. Along with the profiling, a series of other tools were used, including comparison of VMS activities, analysis of monitored unload, Air Force flyover and retrospective proof against other vessels. The refrigeration plant logs were used to develop a model and to conclude that the energy used by the plant did not correspond to the expected one. Thus the court could conclude that the declared catch was false.

89. In the second case, closed area fishing was detected by third party sighting, confirmed using VMS, and prosecuted using computer forensic techniques.

90. Lessons learned from the cases were: (a) ask for help from other agencies; (b) consult technical experts at an early stage (credible knowledge from recognised experts in relation to the data forensic evidence from the refrigeration plant was crucial to achieving the guilty plea before the criminal trial began); and (c) thoroughness repays the effort (the computer forensic work in the closed area fishing case discovered a cover-up attempt as well as the

actual infringement, resulting in early guilty pleas and avoiding expensive hearing processes).

### **Port State measures in MCS: the case of Chile**

91. The following speaker was Mr Alejandro Covarrubias (Head of Enforcement, National Fisheries Service, Chile), who made a presentation on port State measures in MCS with particular reference to the case of Chile.

92. Following an overview of high seas fishing activities and with the extent and location of distant water fishing grounds frequented by fleets from the US, Japan, China, Eastern Europe, Russia and the European Union, Mr Covarrubias noted that under international law, ports have the category of interior waters. In consequence coastal States can exercise territorial jurisdiction and have the ability to decide whether foreign vessels are allowed access.

93. The Workshop was reminded that international instruments relevant for port State measures include the “Convención de las Naciones Unidas sobre el Derecho del Mar”. (CONVEMAR), the Convención sobre la Conservación de los Recursos Vivos Marinos Antárticos (CCRVMA), the Code of Conduct for Responsible Fisheries and the related IPOA on IUU fishing, and the Declaration on Responsible Fishing, Santiago 2000, which promoted the creation of the International Monitoring, Control and Surveillance Network.

94. Mr Covarrubias proceeded to summarise Chilean legislation related to fisheries and MCS measures in Chilean ports. Vessels without flag or without proper registration records are not admitted in Chilean ports. Once a vessel is allowed in port, the catch is verified and the gear inspected to determine compliance with relevant national and international legislation. Chile developed a National Plan of Action (NPOA) on IUU fishing in 2004 and is acting fully to comply with its role as a port State country.

### **Organized crime in fisheries: the Australian context**

95. The next presentation was delivered by Mr Murray Donaldson (Chief Investigator, Fisheries, Victoria, Australia), who spoke on organised crime in fisheries, with a particular focus on the Australian context and a case study of an enforcement operation in his own jurisdiction.

96. Mr Donaldson underlined that organised crime in fisheries is very adaptive and responsive, can shift from one commodity to another or operate across a range of commodities (e.g. stolen property, firearms, drugs), and attracts “whole of life” criminals who maintain networks through the prison system.

97. The aim of Australia’s National Fisheries Compliance Strategy was to achieve an optimal level of compliance both through maximising voluntary compliance and creating a deterrent effect. Key components of strategy implementation were noted as legislation (complementary offences), organisational capability (partnerships), intelligence capacity, robust anti-corruption processes and practices, and research (quantifying organised fisheries crime).

98. “Operation Black Ice” was presented as an example of a successful enforcement action against organised crime involving abalone in the southeast Australia state of Victoria. Principal “take home messages” from the operation relate to the importance of: intelligence capacity; organizational capability; legislation; strategic partnerships and the role of media (deterrence/generate intelligence).

## **Risk assessment to facilitate enforcement**

99. The final presentation of the second session was made by Mr Fraser McEachan (Senior Compliance Officer, Australian Fisheries Management Authority (AFMA)) on the subject of risk assessment to facilitate enforcement.

100. Mr McEachan remarked that risk management is about achieving maximum compliance in the fishery. Risk assessment is used to identify, measure, and prioritise risks to facilitate enforcement of management arrangements through compliance plans. It makes the decision-making process accountable and transparent, and provides a rationale for enforcement and deployment of assets in the field

101. It was noted that operational risk management relates to the “Situation” in a tactical order based on the “SMEAC” (Situation, Mission, Execution, Admission and Control) pro forma. Thus, for example, “We have a high risk on non-compliance in this fishery, at this location, at this time of the year, which requires a tactical response.” The process was described of how to identify enforcement risks and then how the risks need to be analysed to determine their possible consequences and likelihood. From all of these steps emerges a “pyramid” of increasing risk of non-compliance emerges.

102. Once the compliance risks have been identified, appropriate tools can be selected, taking into account when and how the tool is to be used and the related budget. The process is continuous in nature and requires communication, consultation, monitoring and review involving all the different actors concerned with fisheries management (AFMA Board, fisheries management advisory committees, permit holders, AFMA intelligence fisheries management and legal section, coastwatch and territory fisheries agencies).

## **Session 3**

103. The third session of the GFETW convened in the afternoon of 19 July 2006. Copies of the presentations made by the respective speakers are provided on the accompanying CD-ROM.

### **The use of financial analysis: cases in the USA**

104. The first presenter at the third session was Mr Mitch MacDonald (Enforcement Attorney, NOAA, USA), who briefed participants on the use of financial analysis in a case. Such analysis is highly effective because it is based on records, which everyone needs to keep. It is also highly useful for identifying sources of evidence and for determining when certain records are relevant and necessary.

105. Drawing on a number of example cases in the United States, Mr MacDonald commented on the advantages and pitfalls faced by investigators in dealing with other financial experts, including those in banks and accounting and bookkeeping firms. Bookkeepers were noted as being especially important as potential witnesses, since they often hold the key to information that can make or break a case.

### **Interviews, confessions and evidence: experience in the USA**

106. The second presentation of the afternoon, given by Mr Stuart Cory (Special Agent, NOAA, USA), dealt with (a) interviews and confessions and (b) evidence handling and documentation.

107. Pointing out that the international trade in fisheries products in recent years has increased dramatically, along with the number of fishing vessels operating in international waters, Mr Cory addressed two questions – viz: (a) what are the legal restrictions on the use

of statements taken by countries for international cases? and (b) how to prepare for interviewing suspects in international cases?

108. Steps to take before interviews were enumerated as follows.

- ascertain that a case has international implications;
- contact foreign counterparts to verify their laws for interviews;
- conduct background checks on all suspects and organize to have international agents participating in the interview.

109. Important interview questions, with appropriate documentation in the form of notes, audio and video records and signed statements, include:

- where has the ship been fishing and how has it been navigated?
- which fish species were targeted and what was the bycatch?
- what is the final destination of the fish products?

110. In terms of evidence handling and documentation for international cases, Mr Cory dwelt on how to document evidence, requirements for storage of evidence, and methods of agency cooperation in investigating cases that cross international boundaries. The basic chain of custody procedure should be applied, keeping in mind that the documents and procedures will be scrutinized by international courts and attorneys.

### **Peru's MCS programme**

111. Mr Raul Ponce (Director, National Direction of Pursuit, Control and Monitoring, Peru) next provided a briefing on Peru's MCS Programme, setting it first in the context of the national fisheries sector (fishing methods, fisheries production and economic value).

112. Peru's system to combat illegal fishing was described as being based on four pillars – namely: control of landings, VMS, inspections and coast guards. Mr Ponce proceeded to provide details of how each of the system pillars functioned and complemented the others. Basic lessons to draw from the Peruvian experience included the following points.

- The cost benefit of the MCS Programme is highly favourable.
- Information originating from VMS does not provide evidence as reliable as we would like it to be.
- Even given the limited resources available from the State, it is possible to have an effective MCS that fosters a climate of confidence and agreement created between all the parties involved.
- Good control cannot be established on the basis of a confused and unfair fishery management system.

113. The last part of Mr Ponce's talk outlined the case of in which Peruvian authorities seized 700 kg of cocaine that was being smuggled within a 25 tonne cargo of frozen giant squid.

### **USA/South Africa Bengis toothfish case**

114. Session 3 concluded with a review of the South Africa/US, Bengis Toothfish Case, jointly presented by Mr JD Kotze (Acting Chief Investigating Officer, Directorate of Special Operations, South Africa) and Mr Andy Cohen (Special Agent, NOAA USA).

115. Mr Kotze began by recalling that the case involved the Bengis Company and the seizure of a container in May 2001. A number of investigation challenges were encountered, including documentation, multiple focus areas and the involvement of international syndicates and operations. Mr Kotze further recounted the resources that were applied and

the outcomes produced (fines, penalties and forfeiture of vessels and processing plants) in the case, which ended in April 2003.

116. Mr Cohen then spoke on the key players and enforcement processes involved in the Bengis case, which was pursued under provisions of the Lacey Act. The Act (16 U.S.C § 3372 (a)) makes it unlawful to import, export, buy or sell fish wildlife and plants taken or possessed in violation of foreign, state or tribal law. It requires that all packages containing fish or wildlife be plainly marked. Enforcement Measures include civil and criminal penalties, forfeiture of property, or imprisonment of up to five years.

117. The case resulted in the closure of all the involved companies (Hout Bay Fishing Industries in Cape Town, SA; Icebrand Seafood Inc. in New York, NY; Associated Seafisheries, Inc. in New York, NY; and Icebrand Seafoods Maine, Inc. in Portland, Maine).

#### **Session 4**

118. The fourth session of the GFETW was convened in the morning of 20 July 2006, facilitated by Mr Colin Brown (Manager, MCSOPS, Cook Islands). Copies of the presentations made by the respective speakers are provided on the accompanying CD-ROM.

#### **VMS Problems and Limitations**

119. Mr Trevor Fradsham (Project Manager, Fisheries and Oceans, Canada) initiated the session with a talk on “VMS Problems and Limitations: Outages, Failures And Tampering.” The benefits of VMS for different sectors were recounted, including those of: conservation and management (compliance monitoring within fishing zones, conflict resolution between fleets, validation of catch logs, and integration with other sources for auditing); communication; search and rescue; and science (data source to help calculate level of effort in addition to amounts of catch recorded in log books).

120. Some limitations and risks with VMS were then reviewed. Hardware is subject to outages, failures and tampering, and there are agency resource constraints to consider. Outages can be of two main types, namely: service provider not reporting or specific unit not reporting. The latter can be subdivided into four principal causes, i.e. unit powered-down, unit block, unit failure and unit tamper.

121. Mitigation plans for managing VMS risks were shown to be based on the following pillars: (a) certification process (for VMS hardware and for service providers); (b) data integration (regulations, license, log-books, hails and surveillance); (c) data validation (cross reference VMS data with integrated information, manual methods, automated methods); (d) exception reporting (impossibility of real-time monitoring in crowded user field, need for computer-based applications to validate data across multiple systems, rules around fishing activity); (d) sanctions/penalties (high level of penalties for violations, denial of profit from illegal fishing); and (e) education (for fishers on VMS benefits and for enforcement group to keep up-to-date on technologies and to help mitigate risk of tampering).

122. Mr Fradsham concluded his presentation by emphasising the importance for enforcement teams to be able to identify risks for VMS and to use proper operating procedures for each category of VMS risk, vessel inspection procedures, and VMS manuals for enforcement.

#### **USA: the use of VMS information in court**

123. The session's next speaker was Mr Charles Juliand (Enforcement Attorney, NOAA, USA), who provided a presentation on the use of VMS information in court beginning with an



overview of the deployment of VMS in the USA, and the administrative systems used in a fisheries enforcement context.

124. Mr Juliand then reviewed the case of *F/V Independence* being tracked into a closed fishing area in 1998 and subsequently seized and escorted to port. The incident became a test case for the use of VMS by NOAA in charging a fishing vessel. The strategic criteria used were: strength of evidence, seriousness of violation, prior violation history, significance of penalty, importance of issue, likelihood of success and vessel position only (no need to prove fishing).

125. The defense insisted on the insufficient testing of the system, on the absence of a quality control monitoring, the error rate of positioning and the allegedly inaccurate radar of the Coast Guard. The determination that the VMS was accurate 95% of the time to within 300 meters became the first judicial statement of VMS's reliability.

126. Lessons learned from the case included the following:

- commercial witnesses reluctant to testify for the government may need to be compelled to testify – even though they are potentially hostile;
- there is a high demand for system testing on four levels –
  - vendor quality control,
  - agency verification of accuracy,
  - proper functioning on violation date, and
  - testing of all component parts of the system
- there is a need for testing of reliability and accuracy of VMS by independent experts;
- the content of expert reports needs to be complete and understandable to a lay person;
- 95% accuracy was acceptable; and
- expert qualification and preparation are essential for success.

### **Remote sensing of fishing vessels**

127. Harm Greidanus (EC Joint Research Centre, Italy) gave the final presentation of the fourth session, which focussed on “Remote Sensing of Fishing Vessels: Progress to Date” and was prepared in collaboration with Naouma Kourti and Guido Lemoine (Joint Research Centre, Italy). Mr Greidanus reviewed the rationale for and recent technical advancement in remote sensing systems as applied to the monitoring of fishing vessels.

128. It was observed that while VMS can be used as the baseline for control, not all nations' fishing vessels are equipped with VMS, systems may malfunction, transponders may be turned off or tampered with, and there is poor INMARSAT coverage in some areas (>75 N). The need for a “non-cooperative technique” for monitoring has thus been recognised.

129. EU member states have been required to experiment with satellite remote sensing or “Vessel Detection Systems” (VDS). Both radar and optical image systems can be used, though the first is preferred due to its all-weather capabilities. Test campaigns have shown that the most significant limitations of VDS use in fisheries are that: (a) the detection of vessels via satellite is not perfect (e.g., smaller vessels can be missed, natural phenomena may give false alarms, and detection reliability needs to be quantified); (b) identification of vessels is not possible; and (c) continuous monitoring is not possible. Thus, remote sensing will not replace VMS.

130. Summarizing the issues, Mr Greidanus noted that remote sensing/VDS is valuable as a non-cooperative fisheries control mechanism, on top of VMS, and can be of help to detect non-compliant, illegal, and unreported fishing activities. It is most useful in regional settings

and is most useful in the outer ranges of EEZs or international waters where other control means are scarce.<sup>10</sup>

## **Session 5**

131. Mr Martin Tsamenyi (Director, Centre for Maritime Policy, University of Wollongong, Australia) served as facilitator of the fifth GFETW session, which was held on the morning of 21 July 2006. Copies of the presentations made by the respective speakers are provided on the accompanying CD-ROM.

### **Legislation: powers of enforcement officers**

132. The first speaker of the session was Mr Philippe Cacaud (International Legal Consultant), who briefed participants on “Legislation: Powers of Enforcement Officers, Seizure Authority, Penalty Levels” through a presentation prepared in collaboration with Mr Blaise Kuemlangen (Legal Officer, Development Law Service, FAO).

133. The Cacaud/Kuemlangen presentation underscored the importance of the legal basis for MCS. No MCS and enforcement system was likely to be effective unless based on clear legal rules that set out the rights and duties of the various parties in a manner that accords with the international legal framework for fisheries management, and provides effective and efficient legal procedures and mechanisms for implementing those rules consistently.

134. Legal provisions that enable MCS and enforcement activities were enumerated as follows: (a) define the powers, duties and obligations of States and designated authorities; (b) establish rules for fishers; (c) grant enforcement powers to designated officials (powers for routine checks at sea and in ports, control of fishing gear and catch on board, and powers where there is suspicion that an offence has been committed); (d) protect the interests of fishers (in particular confidentiality of information); (e) establish judicial process for penalizing violators (including the protection of basic rights, rules of evidence and the seizure of items); and (f) establish offenses and penalties schemes, including categorization of offenses according to their seriousness, penalties and penalty levels (fines and/or imprisonment), and additional penalties that may be imposed by the courts.

### **USA experience with the Lacey Act**

135. The session's next speaker was Mr Paul Ortiz (Enforcement Attorney, NOAA, USA), who reviewed the U.S. experience with the Lacey Act and model port State enforcement provisions. Mr Ortiz explained that the Act applies to fish, wildlife and plants, defined broadly to include any wild animal, whether alive or dead, and any part, product, egg or offspring thereof. The Act directly targets illicit interstate or foreign trade in illegally taken species and sets civil and criminal penalties.

136. The two main prohibitions of the Act were noted as: (a) transportation involving interstate or foreign commerce any fish or wildlife taken, possessed, transported or sold in violation of any law or regulation of any State or in violation of an foreign law); and (b) false labelling of any fish, wildlife, or plant which has been, or is intended to be (i) imported, exported, transported, sold, purchased, or received from any foreign country; or (ii) transported in interstate or foreign commerce.

---

<sup>10</sup> Further information is available at:

- <http://fish.jrc.it>
- <http://agrifish.jrc.it>
- <http://ipsc.jrc.it>

137. Mr Ortiz then described the characteristics of a standard fisheries case and the underlying violation: the underlying law has to be resource related, the catch must have been taken, possessed, transported, or sold in violation of the foreign law and the violation must be proved, and there must be a statement of support from aggrieved nation (a general NOAA policy but not required by statute).

138. Elements of a model statute for nations that are considering additional port State authority to combat IUU fishing were reviewed. Model provisions would: (a) prohibit importation/transportation of Illegally taken resources, and falsification/failure to maintain logbooks; (b) establish broad definitions for “fish”, “import”, “law of Foreign State”, “person,” etc.; (c) establish effective Sanctions (high penalties, forfeiture, criminal, etc.); and (d) possibly regulate penalty sharing. Effective port State enforcement is called for by the IPOA IUU and most RFMOs are considering port state measures for members. Clear benefits are the denial of ports of convenience for IUU fishers and the ease of monitoring in ports in comparison to the open ocean.

### ***Lacey-type clauses in the Pacific region***

139. Lacey-type legislation in Papua New Guinea was the subject of the next presentation, which was delivered by Mr Blaise Kuemlangan (Legal Officer, Development of Law Service, FAO). The introduction of a Lacey clause in the PNG Fisheries Management Act raised issues of extraterritoriality (whether law applies outside PNG’s territory) and of jurisdiction (whether district courts can hear cases involving offences “outside” the district). However, text was eventually approved in the following formulation:

*... a person who, within the country or in fisheries waters,*  
*(a) on his on account, or as the partner agent or employee of another person, lands, imports, exports, transports, sells, receives, acquires or purchases; or (b) causes or permits a person acting on his behalf, or uses a boat to land import, export, transport, sell, receive, acquire or purchase any fish taken, possessed, transported or sold contrary to the law of another state,*  
*shall be guilty of an offence.*

140. Mr Kuemlangan informed participants that other Lacey clauses in the Pacific region had been introduced by Marshall Islands, Nauru, Solomon Islands and Tonga. He then presented the first case in which the clause was applied in PNG (*Kemp Ada v Lin Wen Beau*) and the arguments raised by the defence. Important issues highlighted in the case were the need to prove foreign law and the fact that the fishing was a violation of such law. These were not specifically covered in the PNG Lacey clause.

141. Broad lessons learned were: (a) wider implications of the Lacey clause should be considered in drafting – i.e., extraterritoriality and jurisdiction of the court (geographical and where offence is conceived); (b) wider definition should be given to “import”; (c) procedure for proof of foreign law (better if it is specified); and (d) experience and advice of prosecutors in drafting is also important.

### ***Administrative sanctions in civil law countries***

142. The next presentation, on fisheries administrative sanctions in civil law countries, was given by Mr Philippe Cacaud (International Legal Consultant), who began by posing the question of: “Are administrative sanctions a viable enforcement alternative to criminal enforcement systems?”

143. The two major features of administrative sanctions were noted as (a) the power to impose them is vested in an administrative agency or in an independent institution and (b) sanctions are imposed outside the judicial process. Examples of the use of such sanctions were provided from civil law countries around the world, including in Europe (e.g.

Spain and Albania), Africa (e.g. countries of French or Portuguese civil law tradition) and South America (e.g. Peru).

144. The main characteristics of administrative sanctions were noted as: (a) the decision to impose fines is under control of an administrative authority (not a court); (b) the competence may be divided among a hierarchy of authorities and there is a certain discretionary power vested in the executive authority. (c) the review of the decision is generally granted to an external body (court or ministry); (d) special commissions may be established to assist in assessing penalties (e.g. Senegal, Mauritania) or to determine such penalties (e.g. Albania, Peru); and (e) discretionary power is exercised by the executive authority (circumstances for consideration in determining level of fines include seriousness of the infringement, previous record of the offender, economic benefits derived from infringement).

145. Mr Cacaud observed that the most commonly used administrative sanctions are fines, suspension or revocation of fishing authorization, temporary ineligibility to fish, and confiscation of gear, catch, equipment or vessel. Deprivation of liberty (imprisonment) does not lie in the scope of administrative sanctions.

146. Principal reasons for using administrative sanctions were summarised as follows:

- means of improving level of compliance (EU);
- allow imposition of more realistic and appropriate penalties (by involving persons who know the industry in the adjudication process);
- provide no opportunity for settlement in criminal proceedings;
- are more expeditious;
- entail no criminal record.

147. In going back to the question of whether administrative sanctions offer a viable enforcement alternative, several issues still needed to be addressed: (a) is it clear whether use of administrative sanctions has contributed to improved levels of compliance with fisheries laws and regulations?; (b) is the decision-making process behind them transparent and equitable?; (c) is their use in many developing countries simply a reflection of a failing judiciary?; (d) is there need to balance between criminal and administrative sanctions (minor vs. serious offences)?; and (e) is there a case for the establishment of specialized courts (e.g. environmental court in South Africa and fisheries tribunal in Indonesia)?

## **USA administrative procedures**

148. Ms Amanda Wheeland (Enforcement Attorney, NOAA, USA) continued with the theme of administrative processes with her presentation on USA experiences in prosecuting fisheries violations. Under the US Administrative Procedure Act of 1946, requirements are that (a) a hearing be held if requested by the violator; (b) Government carries the burden of proof; and (c) proof be based on a preponderance of the evidence (as opposed to the burden of proof government must meet in a criminal case, which is “beyond a reasonable doubt.”

149. The primary attributes of the US administrative process were described as: (a) high volume of cases; (b) presence of dedicated prosecutors, judges, and investigators; (c) availability of out-of-court settlement possibilities, which greatly reduces the number of hearings; and (d) the fact that legal representation is allowed.

150. Ms Wheeland informed session participants that administrative charging options in the US system can be arrayed in a pyramid fashion, with outreach and education to encourage compliance serving as a base. Verbal and written warnings from the NOAA Office of Law Enforcement, summary settlements (early offers to settle cases before referred to the prosecutor) and “Fix-It Tickets” (written notice to correct technical violation within specified period) are options that may be applied for low-level violations. Written warnings from the General Counsel for Enforcement and Litigation are a further option, in which no penalty is

assessed but where the warning may be used as a prior violation to increase any penalty that would be assessed if another violation occurs in future. Civil enforcement involving a Notice of Violation and Assessment (NOVA) is reserved for the most serious types of violations. Beyond this level, recourse may be had to criminal charges.

151. Finally, it was noted that types of penalties provided for under US law range from monetary sanctions to seizure and forfeiture of catch, gear, equipment or vessel. Under provisions of the Magnuson-Stevens Fishery Management and Conservation Act, 16 U.S.C. 1861(e), sums received as fines, penalties, and forfeitures of property for violations may be used to pay for any expenses directly related to investigations and civil or criminal enforcement proceedings.

### **Shark finning: a USA case study**

152. Ms Mary Lundberg (Assistant United States Attorney, Chief of Forfeiture Division, U.S. Department of Justice, San Diego, California) and Mr Paul Ortiz (Senior Enforcement Attorney, NOAA Office of General Counsel, Southwest and Pacific Islands Regions) closed Session 5 with a joint presentation entitled “Case Study for Prosecutors - *King Diamond II*.”

153. The case concerned the Shark Finning Prohibition Act. The *King Diamond II*, loaded with fins, was intercepted at sea by the US Navy and Coast Guard, and escorted to San Diego. Here the entire load was seized, along with pertinent documents. Inventory ascertained that the vessel was carrying 29,371 kgs of fins, 90% of which came from Blue Shark. Options available for the US Government included Civil Administrative Penalty, Forfeiture of Catch, Forfeiture of Vessel, and Criminal Sanctions (jail time and penalties), of which the prosecutors chose the first two. A Notice of Violation was issued in April 2003.

154. In terms of disposal of the fins, it was a question of either selling or destroying them. Auction to the highest bidder was the first choice, but the claimant litigated the issue of the auction and the Court ordered a release of the fins against a \$775,000 bond. The central issue was whether the *King Diamond II* was a fishing vessel for purposes of the statute prohibiting “...custody, control, possession or any ... [shark fin] aboard a fishing vessel without the corresponding carcasses.”

155. The claimant’s argument was that the *King Diamond II* did not qualify as a fishing vessel because it had no fishing equipment on board, did not engage in shark finning, and was not a “mothership” connected in any other way to shark finning. The prosecutors’ argument was that the vessel was in fact a fishing vessel because it “assisted” the vessels that finned sharks by, for example, bringing the the market to the fishing vessels and storing and transporting the fins.

156. No trial took place because there was no factual dispute. The only issue was whether, under the agreed upon facts, there was a violation. A Summary Judgment issued in January 2005 by the U.S. District Court found that the *King Diamond II* was a fishing vessel. This decision is now awaiting appeal.

### **Session 6**

157. The sixth session of the GFETW was convened on the afternoon of 21 July 2006, with Mr Giorgio Gallizioli (Head of Monitoring and Licences, European Commission) serving as facilitator. Copies of the presentations made by the respective speakers are provided on the accompanying CD-ROM.

## ***Illegal fishing and the media***

158. Session 6 was opened with a talk by Mr Simon Latimer (Australian Customs) on “Illegal Fishing... Is the Media your Friend or Enemy?” His presentation underlined the importance of managing media relations in order effectively to combat illegal fishing, and also to secure funding and motivation for offices involved in combating illegal fishing.

159. Mr Latimer drew on cases studies of “the power of TV” and the August 2003 sea chase of the *Viarsa 1* (at 3 900 nautical miles, the longest sea chase in Australia’s history) to demonstrate media coverage can determine whether the community and government think an agency is succeeding or failing.

160. Principal lessons on media relations shared with GFETW participants by Mr Latimer, based on his experience with Australian Customs and IUU fishing issues, included the following:

- it is important to ensure that everyone in an agency understands the importance of having rules about when you can/cannot speak to the media, and who can speak;
- mass media coverage is usually more effective, more believable and much cheaper than paid advertising;
- agencies should identify spokespersons who have authority, understand how the media works, and ability/talent to speak about fisheries enforcement issues;
- video footage of agency operations should be compiled and given to TV stations for their use when covering stories in the future;
- agency Web sites should be used to make photos/video/audio available;
- third party advocates to support agency messages should be identified and used, along with briefings and regular fora to keep industry and key politicians informed and onside;
- presentations on IUU fishing should be set in terms that everyone will understand: jargon and technical language should be avoided in media briefings;
- “Today’s operational problems are tomorrow’s media disaster...fix problems NOW”;
- make media relations a key part of your agency’s enforcement operations;
- always tell the media something they are likely to find out for themselves anyway; and
- adopt an open door policy – always be available to talk to reporters whether it is good or bad news; be positive but cautious.

## **High seas enforcement and the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)**

161. The following panelist was Mr Eugene Subourenkov (Science and Compliance Officer, CCAMLR), who briefed the workshop on high seas enforcement and the CCAMLR regulatory regime through a presentation prepared in collaboration with Mr Denzil Miller (Executive Secretary, CCAMLR).

162. A general overview of the CCAMLR Convention area was provided, touching on major hydrographical features, conservation principles set out in the Convention, the Antarctic marine ecosystem food web, the building blocks of the Commission’s ecosystem approach to fisheries management, the impacts of IUU fishing, and the extensive set of conventional MCS measures that the Commission has implemented. These latter include:

- Licensing
- Comprehensive vessel database
- System of inspection at sea
- Port inspections
- Scheme of international scientific observation
- MCS cooperation with non-Contracting Party Flag States

- MCS Cooperation with RFMOs

163. It was pointed out that the specific characteristics of the Convention area pose considerable challenges to MCS: it makes up 11 percent of world ocean, is remote, has heavy ice and weather conditions, entails high cost enforcement at sea; contains transboundary stocks, and comprises both high seas areas and EEZs.

164. Nevertheless, progress towards the elimination of IUU fishing in the CCAMLR area has been realised through the development and application of three principal tools: (a) a catch documentation scheme (CDS) for *Dissostichus* spp.; (b) a centralized satellite-based vessel monitoring system (C-VMS); and (c) IUU vessel lists.

### **Global MCS: the obligation to cooperate**

165. The next speaker, Mr Denzil Miller (Executive Secretary, CCAMLR), provided a broad appreciation of IUU fishing as a global problem that requires close cooperation between all States to resolve, in a presentation prepared in collaboration with Mr Eugene Subourenkov (Science and Compliance Officer, CCAMLR).

166. The presentation reviewed global fish catch and stock status, and the implications of a decrease in the number of under- or moderately exploited stocks and an increase in the number of depleted, overexploited or recovering stocks in the period from the 1970s to the present.

167. A graphical representation of the stages and product and income flows of an IUU fishing operation were used to illustrate the global nature of the problem, and the need for States to cooperate through application of existing international fisheries instruments. Particular attention was drawn to articles 117 and 118 of UNCLOS.

168. Five major “lessons” were emphasized. The first concerned operationalization of RFMO choices towards international MCS and ocean resources management (either fish until stocks become self-regulating – i.e. fishing is no longer ecologically sustainable, or improve current initiatives and develop new ones to manage fishing). The second was the necessity of global action. The third was that cooperation means “detection + compliance + sanction.” The fourth was that the “ideal world” for combating IUU is expensive. And the fifth was that there are practical actions that can be taken at the international level in order to combat IUU fishing more effectively. These include, at the RFMO level, steps to:

- improve institutional enforcement (CDS, C-VMS)
- resolve jurisdictional issues (Flag/Coastal State)
- resolve competency issue (e.g. CITES)
- promote globally compatible measures/sanctions
- resolve role of non-contracting parties (NCPs)
- synchronise with FAO IPOAs and UNFSA
- promote proaction and efficiency

and at a general level, steps to:

- maintain RFMO coherence
- operationalize LOSC provisions (Arts 116-119)
- operationalize UNFSA (Arts 24-26)
- improve vessel and flag (FOC) links
- elaborate “nationals” responsibility
- elaborate role ancillary agreements (e.g. CBD)
- promote responsible fishing (education)

## **VMS and Regional Fisheries Management Organizations: North East Atlantic Fisheries Commission (NEAFC)**

169. The next panelist was Mr Joao Neves (VMS Manager, NEAFC), who informed participants of the origin and operation of the Commission and its Scheme for Control and Enforcement. He further explained that, within the context of NEAFC, the management of fishing vessels operating in the Regulatory Area (RA) is the exclusive responsibility of the flag-States. The control and enforcement scheme therefore establishes clear procedures for the licensing and monitoring of vessels, control of catches, inspection and infringement follow-up that relies on the agencies of the Contracting Parties (CPs).

170. The Scheme represented a tool providing inspectors with real-time, accurate information on fishing vessels' operations prior to inspection boarding. It revolves around a database designed to receive, verify, store and retransmit data. While a significant percentage of these data consists of VMS position messages, other data are also received by the system.

171. The Workshop was informed that data are received using two protocols (X.25 and HTPPS) from 19 different flag State fisheries monitoring centres (FMCs). Verification is done at several levels including message content and source, message syntax, coding and data structure. Also described were the database integration procedure and the present status of the system in terms of reliability and implementation and compliance.

172. It was also noted that a NEAFC pilot project is testing capabilities of automated data transmission (other than position messages) in order to simplify vessel operators' tasks and facilitate two-way communication between the inspection craft and the fishing vessels. It integrates onboard VMS with other reporting equipment.

173. Three upcoming projects were also described:

- "Improving fisheries Monitoring through integrating Passive and Active Satellite-based Technologies" (IMPAST) will develop, improve and assess methodology and tools that will allow near real-time access to space borne synthetic aperture radar (SAR) imagery and the integration and comparison of this information with VMS position reports in order to improve and support control activities.
- The "Secure and Harmonised European Electronic Logbook" (SHEEL) project will aim to develop and demonstrate an operational, cost-effective and secure electronic transfer system for conveying logbook information to and between authority agencies in order to facilitate improved monitoring and control.
- The "Catch, Effort and Discards Estimates in Real-time" (CEDER) project will aim at development of operational (near) real-time catch estimation from VMS data and observer reports, which also can be used for short-term forecast of the catches in order to obtain reliable prognosis on the degree of TAC uptake and to improve estimates of discards.

## **VMS and Regional Fisheries Management Organisations: International Commission for the Conservation of Atlantic Tunas (ICCAT)**

174. The final presentation of Session 6 was given by Ms Erika Carlsen (Foreign Affairs Specialist, National Marine Fisheries Service, NOAA, USA), who spoke of the suite of MCS measures used by ICCAT. These fall into the following categories:

- **Data reporting and review** – reporting requirements for: scientific data (e.g., catch data, effort, size frequencies) compliance (e.g., quotas and catch limits, minimum sizes); national research, management, and enforcement actions); and other information (trade data, vessel sighting reports, etc.).
- **Trade-related measures** – statistical document programmes and trade restrictive measures.



- **Measures to combat IUU fishing** – IUU (negative) and authorized (positive) vessel lists; rules to ensure compliance by limiting fishing activities, establishing monitoring standards, and articulating responsibilities of flag States and their vessels.
- **Other MCS measures** – procedures for port inspection; transshipment, vessel chartering, and vessel sighting and reporting, and management standards for large-scale tuna longline vessels.

175. Ms Carlsen also provided an overview of ICCAT's Working Group to Develop Integrated Monitoring Measures (2001-2003) and the challenges faced by ICCAT in developing effective monitoring, control and surveillance measures, including: resources, confidentiality, member compliance, and basic data reporting.

176. In closing, Ms Carlsen noted that future MCS-related concerns at the Commission would focus on issues of transshipment, recreational fishing, farming activities, a comprehensive trade resolution, at-sea inspection and ICCAT observers.

## Session 7

177. The seventh and last working session of the GFETW was convened on the morning of 22 July 2006, with Ms Ms LeAnn Southward (MCS Network Consultant) volunteering as facilitator. Copies of the presentations made by the respective speakers are provided on the accompanying CD-ROM.

### Using VMS in a Regional Vessel Register

178. The session led off with a briefing by Mr Andrew H. Richards (Manager – Monitoring, Control and Surveillance, Pacific Islands Forum Fisheries Agency (FFA)) that began with an overview of the FFA, its area of operation and main functions.

179. Workshop participants were informed that the FFA Secretariat has operated a vessel register on behalf of its members since 1982, and that since 2003 the Regional Register has been linked to the FFA members' vessel monitoring system (FFA VMS). From 1 September 2005, the procedures of both registers will be amalgamated into the FFA Vessel Register, with a single set of procedures.

180. Mr Richards explained that the Regional Register year runs from 1 September to 31 August, and that there is an annual application process for foreign fishing vessels wishing to obtain or retain "good standing" status on it. This was a status conferred on a vessel once the vessel operator has successfully completed the registration process (application form, side-view colour photograph of the vessel showing the name in English and the International Telecommunication Union Radio Call Sign (IRCS), agreement to vessel being tracked by the FFA VMS and payment of a US\$ 500 registration fee – part of which is used to support the Secretariat's provision of fisheries management advice to FFA members).

181. The Regional Register now contained 1,070 vessels of 12 types in good standing, including longliners, purse seiners, fish carriers, pole-and-liners, bunker vessels, mother-ships, search boats and others representing a total of 33 flag States. Fishing vessels in good standing on the Regional Register automatically transmit their geographical positions to the FFA Secretariat at a default rate of 6 positions per 24 hours from an Automatic Location Communicator (ALC) onboard the vessel. Operational costs of the FFA VMS are fully recovered from vessel operators (annual fee of US\$ 845 per vessel).

182. The amalgamated FFA Vessel Register that will commence on 1 September 2005 would serve as a compliance mechanism operated by the FFA Secretariat in support of FFA

member vessel licensing policies. In summarising the lessons learned from the FFA regional vessel register experience, Mr Richards noted the following:

- strong cooperation between FFA members has been required over a considerable time;
- members have shown that strong political will exerted collectively by likeminded coastal States can convince vessel operators to pay for the establishment and on-going operation of a vessel register that includes the requirement to fit and operate VMS on vessels for which registration is sought; and
- incorporation of the FFA VMS in the register procedures has strengthened FFA members' application of the FFA VMS in their respective jurisdictions.

### **MCS planning in developing nations**

183. The second Session 7 panelist was Mr Per Erik Bergh (Operations Director, NFDS, Southern Africa Office), who emphasised that IUU fishers target developing countries because of their relatively weak MCS systems, and that MCS challenges for developing countries are related to governance, lack of effective communication, lack of cooperation and information sharing, low knowledge about fisheries and limited capacity and cash.

184. Mr Bergh went on to stress the importance of planning to maximize the impact and value of MCS systems, and that an MCS plan was really about collecting information, and reviewing and analysing it to come up with a few key areas where MCS developments are needed. He drew on a recent plan drawn up for Albania in order to illustrate a suggested format.

185. A possible planning scale could be five years, with a fisheries sector review as the starting point. The review would cover eight major sections or topics, viz:

- national policy (overall);
- national fisheries policy (specific to the sector);
- donor interventions (active fisheries and maritime projects);
- fisheries management framework (all stakeholders and links that interact in the fisheries management organisation);
- fisheries institutional framework (administrative structure and function of fisheries management authority and related agencies);
- legal framework (laws and regulations that are vital for MCS, since they support the "control" element and are first step to understanding how successful current MCS operations are and where improvements may be required).
- the fisheries themselves (how many and who are fishing, where fishing, which gear used, what fish caught, how much caught, where landed, sold etc.); and
- MCS review by area (key strengths and weaknesses by practical division: a lake, a port, a fishing method etc.).

186. Mr Bergh advised that when information was lacking, the assessment should be based on documented knowledge and experience, and interviews and simple surveys with people involved in fishing and related activities (e.g. fishers, harbour masters, resellers, markets and restaurants, exporters, community leaders, etc.). Once basic information was assembled, analysis to determine recommendations for improved MCS could focus on the following areas:

- implications of the legal framework;
- institutional capacity and cooperation;
- co-management considerations;
- the state of compliance; and
- priority fisheries.

187. The next planning step reviewed was to move from recommendations to actually meeting them by proposing tangible options and solutions. An assessment of MCS components and their status (e.g. “MCS activities in support of improved compliance among fishers”) at different stages in the fishing process (before, during and after harvest), laid out in tabular form, would provide a concise summary of the MCS tool kit and relate it to implementation effectiveness and cost implications.

188. The final planning step reviewed by Mr Bergh was to compose a logframe laying out the sequence of outputs, activities timing and costing of MCS plan elements for implementation. Once the plan is ready, all levels of fisheries management should be briefed and made aware of budget requirements and the implications of budget cuts, the need to allocate staff to implement/organize the different activities and regularly to follow up and revise the plan when needed. The value of coordinated donor assistance was emphasised in this regard. In closing, Mr Berghe urged that MCS planning should be based on three basic points – viz. (a) “even a small and simple MCS organization, can have a great impact;” (b) “build on what you have;” and (c) “in the absence of good statistical data, use all possible assessment methods: something is better than nothing.”

### **Education, outreach and enforcement**

189. The following panelist was Captain Laurie Luher (Law Enforcement Captain, Florida Fish and Wildlife Conservation Commission), who provided GFETW participants with a case study on education, outreach and enforcement through a presentation prepared in collaboration with Mr Robin Jung (Enforcement Attorney, NOAA Southeast Regional Office). The study dealt with approaches to improving resource protection and sustaining economic benefits in the Florida Keys National Marine Sanctuary (FKNMS).

190. The presentation noted that national marine sanctuaries in the United States are marine environment areas of special significance, and are regulated by the National Marine Sanctuary Act. It also depicted the situation of the FKNMS, where much of the local economy depends on tourism, as well as the way various human activities impact the fisheries and on the coral reef environment.

191. Education and outreach are seen a tool for managing resources, reaching people who impact those resources and for gaining compliance. An important part of this work in the FKNMS is carried out by “Team Ocean” (Ocean Conservation Education Action Network) (OCEAN), which has three main goals – namely: (a) public education; (b) promote stewardship; and (c) sanctuary presence. Important education and outreach tools include brochures, videos, posters and the use of other media to disseminate information.

192. Workshop participants were informed that the FKNMS is composed of five types of marine zones, including (a) Sanctuary Preservation Areas; (b) Special-Use Areas; (c) Ecological Reserves; (d) Wildlife Management Areas; and (e) Existing Management Areas. The first three types are designated as “no take” areas.

193. Benefits of establishing marine reserves were summarized as follows:

- protects diverse habitats that maintain biodiversity and ecosystem integrity;
- ensures areas of high ecological importance evolve naturally;
- protects most significant coral reef resources;
- provides replenishment to surrounding areas outside reserve boundaries;
- facilitates use activities compatible with resource protection;
- provides undisturbed monitoring sites and control areas for research; and
- simplifies enforcement.

194. Effective implementation of marine protected areas was shown to be based on four elements: (a) marking areas, (b) education, (c) monitoring and research; and (d) enforcement. General lessons to be drawn from FKNMS experiences were listed as:

- **Design** – capture and manage entire interconnected ecosystems;
- **Acceptance and Support** – involve user groups and highlight economic benefits; and
- **Compliance** – best achieved through education and outreach underscored by visible enforcement programme.

### **Fisheries Monitoring Control and Surveillance Network**

195. The final panelist of Session 7 was Mr Alejandro Covarrubias (Head of Enforcement, National Fisheries Service, Chile), who made a presentation on the International MCS Network prepared in collaboration with Ms Michele Kuruc (Chair, MCS Network).

196. Mr Covarrubias informed workshop participants that the MCS Network grew out of an international conference in Chile in 2000, in which participants recognised the need to promote informal cooperation among states with regard to common MCS issues and concerns. It was established as a voluntary network, in order to work towards the objectives of:

- strengthened MCS at the international level;
- reduced IUU fishing; and
- enhanced cooperation, coordination, information collection and exchange among national organizations/institutions responsible for fisheries-related MCS.

197. Examples of how the Network can be used for cooperation and of what type of information it can provide to members were illustrated with reference to the Network's Web site, <http://www.imcsnet.org>

198. Coordination and cooperation was facilitated through the exchange and updating of information between members. At a minimum, such information should include that required under the FAO Compliance Agreement and, to the extent possible, as proposed under the International Plan of Action to combat IUU fishing.

199. Information requirements would thus cover such basics as:

- primary Contact officer (name, telephone numbers, fax, e-mail, language);
- name and positions of key personnel (address, telephone numbers, fax, e-mail, Web site);
- name of relevant fisheries MCS organizations/institutions (general description of organization and structure).

200. They would further cover:

- **Vessel-related information** (Name of vessel; registration number (IMO number, if available); flag of vessel; previous flag state and date of change; previous names of vessel and date of change; register and port of registration; international radio call sign; name and address of owners (telephone numbers, fax, e-mail, Web site); etc.).
- **Fishing Permits/Authorizations** (Natural or legal person authorized to fish; areas; scope and duration of the authorization; scientific name of species or FAO Code, fishing gear authorized, and where appropriate, other applicable management measures; vessel monitoring systems; catch reporting requirements; reporting and other conditions for transshipping; etc.).

- **Catch/Landing Information** (Vessel logbook data, landing data, where relevant; sale and/or export data).
- **MCS Information** (Vessel inspection information; record of sightings and movements; action/contact officers; violation history and penalty information (vessel, companies, persons) in accordance with national laws).
- **Fisheries Laws** (Legislation/regulations and policies relating to particular fisheries and conservation measures).

## Closing session

201. The closing session of the GFETW featured an open discussion and needs assessment for MCS capacity building and final remarks by the Workshop organizers.

202. Participants affirmed that the GFETW proved highly useful in providing an opportunity for them to build contacts and partnerships for future collaboration, and in this regard was clearly a success. At the same time they strongly affirmed that there was extensive scope for capacity building towards more effective MCS, particularly for operational-level fisheries enforcement professionals, administrators and managers in developing countries.

203. Participants were asked to complete a Workshop evaluation form prior to departing from the venue. A total of 47 forms were submitted to the Secretariat. Results were subsequently summarised and are included as Appendix G of this report.

204. The overall judgment of participants with regard to Workshop organisation, implementation and outcomes was very positive. Areas of some concern included: the scope of topics addressed, which limited the time of presentations and follow up questions and discussion; the lack of opportunity for small group discussion; and the need for a better balance between presentations from developed country panellists and those from developing countries.

205. Ms Michele Kuruc (Chair, MCS Network) and Mr Eric Reynolds (Coordinator, FAO FishCode Programme) both expressed deep appreciation to all participants for the time and effort they devoted in travelling to attend the GFETW and for their active engagement in the proceedings.

206. Particular thanks were extended to all who served as resource persons, panelists and facilitators, and the invaluable assistance of the team of local facilitators, including officers of the Malaysian Department of Fisheries, the staff of INFOFISH, and the Workshop interpretation group was gratefully acknowledged.

207. Finally, special thanks were expressed for the financial contribution provided by the European Union in support of Workshop preparations and implementation, and, above all, to the Government of Malaysia for its generosity in hosting this global event.

208. The Global Fisheries Enforcement Training Workshop was officially closed by Dato' Junaidi Bin Che Ayub (Director General, Department of Fisheries, Malaysia), who extending his thanks to participants and organisers for their efforts in making the Workshop a success. He wished all a safe journey home and expressed the hope that they had enjoyed their visit to Malaysia and that they would be able to visit again soon.

Appendix A

WORKSHOP AGENDA



**GLOBAL FISHERIES ENFORCEMENT TRAINING WORKSHOP**

**18-22 July 2005**

**Crown Plaza Hotel and Conference Centre  
Kuala Lumpur, Malaysia**

*hosted by*  
**Government of Malaysia**

*in cooperation with*  
**International MCS Network, FAO FishCode Programme and  
the European Union**

---

**Sunday Evening (17 July): Registration**

---

**16:00-21:00 REGISTRATION**

**17:00-18:00 FACILITATORS' MEETING**

---

---

**Monday Morning (18 July): Opening**

*Chair:* DATO JUNAIDI BIN CHE AYUB  
– Director General, Department of Fisheries, Malaysia

---

**08:00-09:30 REGISTRATION**

**09:35-09:45 WELCOMING REMARKS**

DATO JUNAIDI BIN CHE AYUB  
– Director General, Department of Fisheries, Malaysia

**09:45-10:00 OPENING COMMENTS**

MICHELE KURUC  
– Chair, MCS Network

ERIC REYNOLDS  
– Coordinator, FAO FishCode Programme

**10:00-10:20 OPENING ADDRESS**

HONOURABLE DATO' SERI HAJI MOHAMED SHARIFF BIN HAJI OMAR  
– Deputy Minister of Agriculture and Agro-Based Industries, Malaysia

**10:20-10:30 MULTIMEDIA PRESENTATION ON IUU FISHING**

ERIC REYNOLDS  
– Coordinator, FAO FishCode Programme

**10:30-11:00 TEA/COFFEE BREAK**

**11:00-11:15 GROUP PHOTO**

**11:15-12:15 MALAYSIA'S FISHERIES ENFORCEMENT PROGRAMME**

MR. ABD. KHALIL BIN ABD. KARIM  
– Director, Resource Protection Division, Department of Fisheries, Malaysia

**12:15-12:45 INTERNATIONAL FRAMEWORK FOR MCS COOPERATION**

MORITAKA HAYASHI  
– Professor, Waseda University, Japan

**12:45-14:00 LUNCH-BUFFET**

---

**Monday Afternoon (18 July): Session 1**

*Facilitator:* BEVERLY WADE

– Fisheries Administrator, Department of Fisheries, Belize

---

**14:00-15:00 ENFORCEMENT IN MARINE RESERVES, AND MARINE PARKS**

MICK BISHOP

– Director, Operations Great Barrier Reef Marine Park Authority, Australia

MS. RAJA YANA MELESSA

– Fisheries Officer, Marine Parks Division, Ministry of Natural Resources and Environment, Malaysia

**15:00-15:30 MCS TRAINING**

YAHYA MGAWA

– Deputy Principal, Mbegani Fisheries Development Centre, Tanzania

**15:30-15:45 TEA/COFFEE BREAK**

**15:45-17:30 MCS INITIATIVES**

TONY OPOSA

– President, Batas Kalikasan Foundation, Philippines,

JOHN GAVITT

– Enforcement Advisor, WildAid, USA,

FRANK MEERE

– Counsellor, High Seas Task Force,

CARLOS PALIN

– Programme Manager, SADC

NEIL ANSELL

– Technical Advisor, Indian Ocean Commission

**17:30-17:45 QUESTIONS AND ANSWERS**

**20:00 DINNER**

*Hosted by the Department of Fisheries, Malaysia*



---

**Tuesday Morning (19 July): Session 2**

**Facilitator:** KIM DAWSON  
– Fisheries Biologist, NOAA, USA

---

**08:30-09:00 AT-SEA ENFORCEMENT TACTICS**

SUN SHENGZHI  
– Deputy Division Director, China Fisheries Enforcement Command

**09:00-09:30 SEIZURE AND CONFISCATION**

MICHAEL CERNE  
– Commander, US Coast Guard

**09:30-10:00 INTEGRATING INFORMATION FROM CUSTOMS AND PORT AUTHORITIES**

BJARNE SCHULTZ  
– Senior Advisor, Directorate of Fisheries, Norway

**10:00-10:15 TEA/COFFEE BREAK**

**10:15-10:45 FORENSIC ANALYSIS, FISHERIES PROFILING AND COMPUTER FORENSICS**

REX HEALY  
– Manager, Compliance Information Minister of Fisheries, New Zealand

**10:45-11:15 PORT MEASURES**

ALEJANDRO COVARRUBIAS  
– Head of Enforcement, National Fisheries Service, Chile

**11:15-11:45 INVESTIGATING CRIME SYNDICATES**

MURRAY DONALDSON  
– Chief Investigator, Fisheries, Victoria, Australia

**11:45-12:15 RISK ASSESSMENT TO FACILITATE ENFORCEMENT**

FRASER MCEACHAN  
– Senior Compliance Officer, AFMA, Australia

**12:30-14:00 LUNCH-BUFFET**

---

**Tuesday Afternoon (19 July): Session 3**

*Facilitator: TBA*

---

**14:00-14:45 USING FINANCIAL ANALYSIS IN A CASE**

MITCH MACDONALD

– Enforcement Attorney, NOAA, USA

GERALD HELLERMAN

– Financial and Corporate Consultant

**14:45-15:30 a) INTERVIEWS AND CONFESSIONS**

**b) EVIDENCE HANDLING AND DOCUMENTATION**

STUART CORY

– Special Agent, NOAA, USA

**15:30-16:00 TEA/COFFEE BREAK**

**16:00-16:30 PERU'S MCS PROGRAM**

RAUL PONCE

– Director, National Direction of Pursuit, Control and Monitoring, Peru

**16:30-17:15 CASE STUDY: SOUTH AFRICA/US, BENGIS TOOTHFISH CASE**

JD KOTZE

– Acting Chief Investigating Officer, Directorate of Special Operations, South Africa

ANDY COHEN

– Special Agent, NOAA USA

**17:15-17:30 QUESTIONS AND ANSWERS**

**Free for Dinner**

---

**Wednesday Morning (20 July): Session 4**

*Facilitator:* COLIN BROWN  
– Manager, MCSOPS, Cook Islands

---

**08:30-09:30 VMS PROBLEMS AND LIMITATIONS: OUTAGES, FAILURES AND TAMPERING**

TREVOR FRADSHAM  
– Project Manager, Fisheries and Oceans, Canada

**09:30-10:30 USING VMS INFORMATION IN COURT**

CHARLES JULIAND  
– Enforcement Attorney, NOAA, USA

**10:30-11:00 TEA/COFFEE BREAK**

**11:00-11:30 REMOTE SENSING OF FISHING VESSELS, PROGRESS TO DATE**

HARM GREIDANUS  
– Joint Research Centre, Italy

**11:30-12:00 QUESTIONS AND ANSWERS**

---

**Wednesday Afternoon (20 July): Field Trips (Box lunches provided)**

---

**12:30 Field Trip 1:**

1. Malaysian Maritime Enforcement Agency (MMEA), Cyberjaya,
2. Visit to Taman Wetland/Botani,
3. Prime Minister Gallery Office, Putra Mosque and SOUQ Bazaar, Putrajaya

**Field Trip 2:**

Visit to Port Klang – view the enforcement activity at sea and Ketam Island to view the cage culture and fish landing activities.

**Field Trip 3:**

Forest Research Institute Malaysia (FRIM) – Visit to Forest Research Institute of Malaysia. A guided tour canopy walk, nature trail and hike to picnic area. Visit to the insectarium, wetlands, ponds and museum.

**Free for Dinner**

---

**Thursday Morning (21 July): Session 5**

**Facilitator:** MARTIN TSAMENYI

– Director, Centre for Maritime Policy, University of Wollongong, Australia

---

**08:30-10:00    LEGISLATION: POWERS OF ENFORCEMENT OFFICERS, SEIZURE AUTHORITY, PENALTY LEVELS**

PHILIPPE CACAUD

– International Legal Consultant

**US EXPERIENCES UNDER THE LACEY ACT: MODEL LACEY ACT CONSULTANCY**

PAUL ORTIZ

– Enforcement Attorney, NOAA, USA

**a) INTERNATIONAL EXPERIENCES WITH LACEY TYPE LEGISLATION**

**b) PNG - PROSECUTION UNDER LACEY TYPE LEGISLATION**

BLAISE KUEMLANGAN

– Legal Officer, Development Law Service, FAO

**10:00-10:15    TEA/COFFEE BREAK**

**10:15-11:15    SANCTION STRUCTURES**

**CIVIL**

PHILIPPE CACAUD

– International Legal Consultant

**ADMINISTRATIVE**

AMANDA WHEELAND

– Enforcement Attorney, NOAA, USA

**11:15-12:15    CASE STUDIES FOR PROSECUTORS**

PAUL ORTIZ

– Enforcement Attorney, NOAA, USA

MARY LUNDBERG

– Chief of the Asset Forfeiture and Financial Litigation Unit, US Attorney's Office

**12:30-14:00    LUNCH-BUFFET**

---

**Thursday Afternoon (21 July): Session 6**

**Facilitator:** GIORGIO GALLIZIOLI

– Head of Monitoring and Licences, European Commission

---

**14:00-14:45 VIEW FROM THE BENCH: A JUDGE’S PERSPECTIVE**

HON. PARLEN MCKENNA

– Administrative Law Judge, US Coast Guard

**14:45-15:30 INTERACTING WITH THE MEDIA**

SIMON LATIMER

– Director, Corporate Communication, Australian Customs Service

**15:30-15:45 TEA/COFFEE BREAK**

**15:45-17:15 REGIONAL FISHERIES MANAGEMENT ORGANIZATIONS AND MCS**

EUGENE SABOURENKOV

– Compliance Officer, CCAMLR

DENZIL MILLER

– Executive Secretary, CCAMLR,

JOÃO NEVES

– VMS Manager, NEAFC

ERIKA CARLSEN

– Foreign Affairs Officer, NOAA, USA

**19:30 FAREWELL DINNER *International Buffet and Cultural Show***

***Hosted By Workshop Secretariat***

---

**Friday Morning (22 July): Session 7**

**Facilitator:** TBA

– International Consultant, MCS Network

---

**08:30-09:00 USING VMS IN A REGIONAL VESSEL REGISTER**

ANDY RICHARDS

– Manager, Monitoring, Control and Surveillance, Forum Fisheries Agency

**09:00-10:00 a) DEVELOPMENT OF MCS PLANS/INSTITUTIONAL FRAMEWORKS IN DEVELOPING NATIONS**

**b) COASTAL AND SMALL SCALE FISHERIES AND MCS**

PER ERIK BERGH

– Director, NFDS, Botswana

**10:00-10:45 CASE STUDY: FLORIDA KEYS NATIONAL MARINE SANCTUARY**

LAURIE LUHER

– Office of Law Enforcement, USA

ROBIN JUNG

– Enforcement Attorney, NOAA, USA

**10:45-11:00 TEA/COFFEE BREAK**

**11:00-11:15 FISHERIES MONITORING CONTROL AND SURVEILLANCE NETWORK**

ALEJANDRO COVARRUBIAS

– Head of Enforcement, National Fisheries Service, Chile

MICHELE KURUC

– Chair, MCS Network

**11:15-12:00 OPEN DISCUSSION AND NEEDS ASSESSMENT FOR MCS CAPACITY BUILDING**

MICHELE KURUC

– Chair, MCS Network

**12:00-12:30 CLOSING REMARKS**

MICHELE KURUC

– Chair, MCS Network

ERIC REYNOLDS

– Coordinator, FAO FishCode Programme

DAO JUNAI DI BIN CHE AYUB

– Director General, Department of Fisheries, Malaysia

**12:30-14:00 LUNCH-BUFFET**

---

**Friday Afternoon (22 July)**

**14:45- MCS NETWORK MEETING (NETWORK MEMBERS ONLY)**

---

## Appendix B

### LIST OF PARTICIPANTS

#### Angola

Mr Federico Laurindo  
Chefe de Departamento  
Membro do Conselho Operativo do  
Ministério dos Pescas  
Luanda 2550  
Tel.: +2442 923323196/912331548  
and c/o Embai of South Africa  
Tel.: +2442 330953/41817  
Fax: +2442 3398730

Mr Fraser McEacham  
Australian Government  
Australian Fisheries Management Authority  
John Curtin House, 22 Brisbane Ave. Barton  
Box 7051, Canberra Business Centre  
Canberra Act 2610  
Tel.: +61 2 62725029  
Fax: +61 2 67725175  
E-mail: [fraser.mceachan@afma.gov.au](mailto:fraser.mceachan@afma.gov.au)

#### Australia

Mr Mick Bishop  
Director, Operations  
Great Barrier Reef Marine Park Authority  
2 – 68 Flinders Street  
PO Box 1379  
4810 Townsville, Queensland  
Tel.: +61 7 4726 0560  
Fax: +61 7 4750 0892  
E-mail: [m.bishop@gbmpa.gov.au](mailto:m.bishop@gbmpa.gov.au)

#### Belize

Ms Beverly Wade  
Fisheries Administrator  
Ministry of Agriculture and Fisheries  
PO Box 148  
Belize City  
Tel.: +501 223 2187 / 223 2623  
Fax: +501 223 2983  
E-mail: [species@btl.net](mailto:species@btl.net)

Mr Simon Latimer  
Director, Corporate Communication  
Australian Customs Service  
Customs House, 5 Constitution Avenue  
Canberra, ACT 2600  
Tel.: +61 2 6275 6025  
Fax: +61 2 6275 6992  
E-mail: [simon.latimer@customs.gov.au](mailto:simon.latimer@customs.gov.au)

#### Botswana

Mr Per Erik Bergh  
Operations Director  
NFDS, Southern Africa office – Gaborone  
Private Bag 351 No 145  
Postnet Kgale, Gaborone  
Tel.: +267 3922698  
Fax: +267 3926290  
E-mail: [pebergh@nfdso.info](mailto:pebergh@nfdso.info)

Prof. Martin Tsamenyi  
Director Centre for Maritime Policy  
University of Wollongong NSW 25522  
Tel.: +61 2 4221 3224  
Fax: +61 2 4221 5544  
E-mail: [martin\\_tsamenyi@uow.edu.au](mailto:martin_tsamenyi@uow.edu.au)

#### Brunei Darussalam

Mr Haji Ajamain Haji Sawal  
Senior Fisheries Officer  
Fisheries Department,  
Ministry of Industry and Primary Resources  
Jalan Menteri Besar  
Bandar Seri Beggawan,  
BB 3910, Brunei Darussalam  
Tel.: +2772780/2770066  
Fax: +2770065  
E-mail: [ajamain\\_sawal@fisheries.gov.bn](mailto:ajamain_sawal@fisheries.gov.bn)

Mr Murray Donaldson PSM  
Chief Investigator –  
PO Box 300  
East Melbourne Victoria 8002  
Tel.: +61 3 9658 43 27  
Fax: + 61 3 96 58 4330  
E-mail: [murray.donaldson@dpi.vic.gov.au](mailto:murray.donaldson@dpi.vic.gov.au)

## Canada

Mr Trevor Fradsham  
VMS Project Coordinator  
Fisheries Management  
Newfoundland and Labrador Region  
PO Box 5667  
St. John' s NL A1C 5x1  
Tel.: +1 709 772 4345  
Fax: +1 709 772 2046  
E-mail: [fradshamt@dfo-mpo.gc.ca](mailto:fradshamt@dfo-mpo.gc.ca)

## Chile

Mr Alejandro Covarrubias Perez  
Fisheries Engineer  
Head of Enforcement Department  
National Fisheries Service  
Government of Chile  
Victoria 2832, Valparaíso  
Tel.: +56 32 819 302  
Fax: +56 32 819 300  
E-mail: [acovarrubias@sernapesca.cl](mailto:acovarrubias@sernapesca.cl)

Mr Rodrigo Valencia Sepulueda  
Fisheries Engineer  
Jefe Fiscalización e Inspección Pesquera  
VIII Region,  
Servicio Nacional de Pesca – Chile  
Blanco Encaladd 444, OF 301  
Talcahuano  
Tel.: +56 41 500 842  
Fax: +56 41 500 844  
E-mail: [rvalencia@sernapesca.cl](mailto:rvalencia@sernapesca.cl)

## China

Mr Guo Haibo  
Deputy Chief of Information  
China Fisheries Enforcement Command  
No.11 Nongzhanguan,  
Nanli Chaoyang District  
100026 Beijing  
Tel.: +86 10 64192953  
Fax: +86 10 64192955  
E-mail: [guo10@yahoo.com](mailto:guo10@yahoo.com)

Mr Shengzhi Sun  
Deputy Director of Investigation  
China Fisheries Law Enforcement Command  
No.11 Nongzhanguan Nanli  
Chaoyang District  
100026 Beijing  
Tel.: +86 10 64193005  
Fax: +86 10 64192955  
E-mail: [sunshz@yahoo.com](mailto:sunshz@yahoo.com)

## Cook Islands

Mr Colin Brown  
Manager  
Maritime and Coastguard Agency  
Arurangi Rarotonga 2011  
Tel.: +682 23066  
Fax: + 682 29721  
E-mail: [cibn@oyster.net.ck](mailto:cibn@oyster.net.ck)

## El Salvador

Mr Alvaro Cesar Vanegas Matheu  
Operations Coordinator  
MAG – CENDEPESCA  
Ministerio de Agricultura y Ganaderia  
Centro de Desarrollo de la Pesca y Acuicultura  
Av Manuel Gallardo y 1ª Av. Norte  
Santa Tecla, La Libertad  
Tel.: +503 2228-1066/ 2228-0034  
Fax: +503 2228-0074  
E-mail: [cvanegas@mag.gob.sv](mailto:cvanegas@mag.gob.sv)  
[cevanegas@hotmail.com](mailto:cevanegas@hotmail.com)

## France

Mr Philippe Cacaud  
FAO Consultant  
Independent legal consultant  
256 chemin Sainte Catherine  
Viry, Rhone-Alpes 74580  
Tel.: +33 450 04 86 78  
E-mail: [pcacaud@aol.com](mailto:pcacaud@aol.com)

## Gambia

Mr Austin Jones  
Director  
Unité de Coordination des Opérations de  
Surveillance des Pêches (UCOS)  
E-mail: [austinjoko@yahoo.com](mailto:austinjoko@yahoo.com)



## Japan

Mr Moritaka Hayashi  
Professor of Law  
Waseda University School of Law  
1-6-1 Nishiwaseda, Shinjuku-ku  
Tokyo 169-8050  
Tel. +81-3-5286-1333  
Fax. +81-3-5286-1853  
E-mail: [hayashim@waseda.jp](mailto:hayashim@waseda.jp)

## Kenya

Mr Godfrey V. Monor  
Assistant Director of Fisheries  
Ministry of Livestock and Fisheries  
Development  
PO Box 90423, Mombasa, 80100  
Tel.: + 254 41 229 577  
Fax: +254 41 315 904  
E-mail: [monorgv@gmail.com](mailto:monorgv@gmail.com)

## Kiribati

Mr Raikaon Tumo  
Senior Fisheries Officer  
Fisheries License and Enforcement Unit  
PO Box 64, Bairiki, Tarawa  
Tel.: +686 21 502/21099/28392  
Fax: +686 22289/21120  
E-mail: [raikaon.tumo@gmail.com](mailto:raikaon.tumo@gmail.com)

## Malaysia

Dato' Junaidi bin Che Ayub  
Director General,  
Department of Fisheries  
6<sup>th</sup> Floor Wisma Tani, Tower Block 4G2  
Precinct 4,  
Federal Government Administrative Centre  
62628 Putrajaya  
Tel.: +60 3 8870 4009  
Fax: +60 3 8889 1786

Mr Abdul Khalil Abdul Karim  
Director, Resource Protection Division  
Department of Fisheries Malaysia  
5<sup>th</sup> Floor Wisma Tani, Lot 4G2, Precinct 4,  
Federal Government Administrative Centre  
62628 Putrajaya  
Tel.: +60 3 8870 4014  
Fax: +60 3 8889 1786  
E-mail: [abkhalil@hotmail.com](mailto:abkhalil@hotmail.com)

Mr Abdul Hamid Bin Yasin  
Head of Operation Section  
Resource Protection Division  
Department of Fisheries Malaysia  
5<sup>th</sup> Floor Wisma Tani, Lot 4G2, Precinct 4,  
Federal Government Administrative Center  
62628 Putrajaya  
Tel.: +60 3 8889 1786

Mr Hamzah Ishak  
Principal Assistant Director  
Maritime Security Policy Directorate  
National Security Division  
Prime Minister' s Department  
Level LG, West Wing  
Perdana Putra Building  
Federal Government Administrative Centre  
62502 W. P. Putrajaya  
Tel.: +60 3 88882095  
Fax: +60 3 88883091  
E-mail: [hamzah@bkn.jpm.my](mailto:hamzah@bkn.jpm.my)

CDR Christopher Ravindran RMN  
Malaysia Maritime Enforcement Agency (MMEA)  
Suite E001, Lower Floor, Block 2200,  
Enterprise Three  
63000 Cyberjaya  
Tel.: +60 3 8318 0022

Capt. Zuklifi Abu Bakar RMN  
Malaysia Maritime Enforcement Agency  
(MMEA)  
Suite E001, Lower Floor, Block 2200  
Enterprise Three  
63000 Cyberjaya  
Tel.: +60 3 8318 0022

Mr Mohd Ghazali Mohamad Taib  
Head of Legal Section,  
Department of Fisheries  
Level 3, Podium Block  
Wisma Tani Persint 4  
62628 Putrajaya,  
Tel.: +60 3 8870 4000  
E-mail: [kcy01@dof.my](mailto:kcy01@dof.my)

Ms Raja Yana Meleessa binti Raja Haroon  
Arashid  
Marine Park Officer, Marine Parks Division,  
Ministry of Natural Resources and  
Environment  
5<sup>th</sup> Floor, Wisma Awol  
Jalan Raja Muda Abdul Aziz,  
53300 Kampung Baru,  
Kuala Lumpur  
Tel.: +60 3 2698 2500  
Fax: +60 3 2691 3199

Mr Abdullah Ma'amor Ibrahim  
Assitant Secretary  
Multilateral Economics and Environment  
Division  
Kementerian Luar Negeri  
(Ministry of Foreign Affairs)  
Wisma Putra  
n.1, Jalan Wisma Putra Precint2,  
62602 Putrajaya  
Tel.: +60 3 8887 4000  
Fax: +60 3 8889 2843  
E-mail: [maamor@kln.gov.my](mailto:maamor@kln.gov.my)

### **Maldives**

Ms Fathmath Shafeega  
Assistant Director  
Ministry of Fisheries, Agriculture and Marine  
Resources  
Ghazee Building, Ameer Ahmed Magu  
Male'  
Tel.: +960 748842  
Fax: +960 326558  
E-mail: [fathmath.shafeega@fishagri.gov.mv](mailto:fathmath.shafeega@fishagri.gov.mv)

### **Mexico**

Mr Virgilio Octavio Juárez Medina  
General Director for inspection and  
surveillance  
Commission Nacional de Acuacultura y Pesca  
Av. Camarón Sábalo S/N Esq. Tiburón  
Sabalo Country Club  
C.P. 82100 Mazatlán, Sinaloa  
Tel.: +52 1 669 9156900 ext. 1301 fax 6920  
Tel.: +52 6699156917  
Cell: +52 6699120392  
E-mail: [vjuarezm@sagarpa.gob.mx](mailto:vjuarezm@sagarpa.gob.mx)

### **Micronesia (Federated States of)**

Mr Justino Helgen  
VMS Manager  
National Police Surveillance  
PO Box PS 20  
Kolonia, Pohnpei  
96941  
Tel.: +691 320 2384  
Fax: +691 320 8387  
E-mail: [fsmvms@mail.fm](mailto:fsmvms@mail.fm)

### **Namibia**

Mr Bonny Amutse  
Deputy Director Operations  
Ministry of Fisheries and Marine Resources  
Private Bag 13355  
Windhoek  
Tel.: +264 61 2053013  
Fax: +264 61 240412  
E-mail: [bamutse@mfmr.gov.na](mailto:bamutse@mfmr.gov.na)

Mr Carlos Palin  
Programme Manager  
SADC Fisheries MCS Programme  
PO Box 86223  
Windhoek  
Tel.: + 264 61 205 3016  
Fax: + 264 61 242 502  
E-mail: [cpalin@mcs-sadc.org](mailto:cpalin@mcs-sadc.org)

### **Nauru**

Mr Terry Amram  
Administration Manager  
Nauru Fisheries and Marine Resources  
Authority  
PO Box 449  
Republic of Nauru  
E-mail: [terrya@naurufisheries.com](mailto:terrya@naurufisheries.com)

### **New Zealand**

Mr Rex Healy  
Manager Compliance Information  
Ministry of Fisheries  
256 Lambton Quay  
PO Box 1020  
Wellington, New Zealand  
Tel.: +64 4 4942372  
Fax: +64 460 4699

E-mail: [rex.healy@fish.govt.nz](mailto:rex.healy@fish.govt.nz)

Mr Shaun Driscoll  
Manager, Investigation Services  
Ministry of Fisheries  
GBL House  
256 Lambton Quay  
PO Box 1020  
Wellington, New Zealand  
Tel.: +64 4948204  
Fax: +64 4948206  
E-mail: [driscolls@fish.govt.nz](mailto:driscolls@fish.govt.nz)

### Nicaragua

Ing. Danilo Rosales Pichardo  
Director  
Gouvernement of Nicaragua  
Ministero de Fomento, Industria y Comercio  
Dirección de Monitoreo, Vigilancia y Control  
ADPESCA  
Tel.: +505 2700932 ext 1268  
E-mail: [danilo.rosales@mific.ni](mailto:danilo.rosales@mific.ni)

### Niue

Mr Launoa Gataua  
Fisheries Officer (MCS Division)  
Department of Agriculture, Forestry and  
Fisheries  
Tel.: +683 4302/4668  
Fax: +683 4079  
E-mail: [noah\\_gataua2000@yahoo.com](mailto:noah_gataua2000@yahoo.com)  
[niuefisheries@yahoo.com](mailto:niuefisheries@yahoo.com)

### Norway

Mr Bjarne Schultz  
Senior Adviser Control Section  
The Directorate of Fisheries  
Strandgaten 229 ,  
Postboks 2009, Nordnes,  
NO- 5817 Bergen  
Tel.: +47 55 23 80 00/8218  
Fax: +47 55 23 80 90  
E-mail: [bjarne.schultz@fiskeridir.no](mailto:bjarne.schultz@fiskeridir.no)

Mr Gunnstein Bakke  
Legal Adviser  
Control Section  
Directorate of Fisheries  
Strandgaten 229,

Postboks 2009, Nordnes,  
NO-5817 Bergen, Norway  
Tel.: +47 55 23 80 00/82 15  
Fax: +47 99 10 54 52  
E-mail: [gunnstein.bakke@fiskeridir.no](mailto:gunnstein.bakke@fiskeridir.no)

### Palau

Lieutenant Thomas Tutii  
OIC Surveillance  
Division of Marine Law Enforcement  
Ministry of Justice  
PO Box 790, Koror  
96940  
Tel.: +680 488 2882/5206  
Fax: +680 488 4509  
E-mail: [pirates@palaunet.com](mailto:pirates@palaunet.com)

### Papua New Guinea

Mr Noan Pakop  
Acting Manager MCS  
National Fisheries Authority  
11<sup>th</sup> Floor, Deloitte Tower  
PO Box 2016, Port Moresby, N.C. D.  
Tel.: +675 3090444 436  
Fax: +675 3202061  
E-mail: [npakop@fisheries.gov.pg](mailto:npakop@fisheries.gov.pg)

Mr Thomas Ponjom  
Officer-In-Charge  
PNG National Surveillance Coordination  
Centre  
PO Box 978, Port Moresby  
Tel.: +675 321 3463  
Fax: +675 321 4421  
E-mail: [nsc@online.net.pg](mailto:nsc@online.net.pg)

### Peru

Mr Raul Ponce Monge  
Director Nacional De Seguimiento, Control y  
Vigilancia  
Calle uno Oeste n.050 Urb. Corpac  
San Isidro, Lima  
Tel.: +51 1 616 2210, anexo: 505  
Fax: +51 1 616 2222  
E-mail: [rponce@produce.gob.pe](mailto:rponce@produce.gob.pe)

## Philippines

Mr Marlito N. Guidote  
Coastal Law Enforcement Specialist  
Fisheries Improved for Sustainable Harvest  
5/F CIFIC Towers  
Reclamation Area, Cebu City 6000  
Tel.: +63 32 232 1821 to 22  
Fax: +63 32 232 1825  
E-mail: [mguidote@mozcom.com](mailto:mguidote@mozcom.com)

Mr Antonio A. Oposa Jr  
Counselor at Environmental Law  
President, The Law of Nature Foundation  
Westgate Tower  
Investment Drive  
Madrigal Business Park  
1780 Alabang  
Muntinlupa City  
Tel.: +63 2 809- 6122  
E-mail: [tonyoposajr@yahoo.com](mailto:tonyoposajr@yahoo.com)  
[tonyoposa@pltdsl.net](mailto:tonyoposa@pltdsl.net)

## Samoa

Mr Pouvave Fainuulelei  
Senior Fisheries officer  
Ministry of Agriculture and Fisheries  
Tel.: +685 20 369  
Fax: +685 24 292  
E-mail: [fainuulelei@lesamoa.net](mailto:fainuulelei@lesamoa.net)  
[povave@hotmail.com](mailto:povave@hotmail.com)

## Seychelles

Mr Gerard Domingue  
Monitoring, Control and Surveillance  
Manager  
PO Box 449, Victoria, Mahe  
Tel.: +248 670315/670300  
E-mail: [gdomingue@sfa.sc](mailto:gdomingue@sfa.sc)

## Spain

Mr Germán Bejarano García  
Ambassador  
Embassy of Spain  
50450 Kuala Lumpur  
Tel.: +60 3 2142 8776  
Fax: +60 3 2161 3135  
E-mail: [embespmj@mail.mae.es](mailto:embespmj@mail.mae.es)

Mr Blanca Londaiz Laborde  
Deputy Head of Mission  
Embassy of Spain  
200, Jalan Ampang  
50450 Kuala Lumpur  
Tel.: +60 3 2142 8776  
Fax: +60 3 2161 3135/ 2142 4582  
E-mail: [embespmj@mail.mae.es](mailto:embespmj@mail.mae.es)

## Solomon Islands

Mr Andrew H. Richards  
Manager Monitoring, Control and  
Surveillance  
Pacific Islands Forum Fisheries Agency  
PO Box 629 Honiara  
Tel.: (+677) 21124  
Fax: (+677) 23995  
E-mail: [andrew.richards@ffa.int](mailto:andrew.richards@ffa.int)

## South Africa

Ms Abeeda Mugjenkar  
Chief Director, MCS  
Department of Environmental Affairs and  
Tourism Private Bag X2, Rogge Bay, 8012  
Cape Town  
Tel.: +27 21 402 3550  
Fax: +27 21 425 7324  
E-mail: [amugjenkar@deat.gov.za](mailto:amugjenkar@deat.gov.za)

Mr Johan D. Kotze  
Senior Special Investigator  
The National Prosecuting Authority  
Private Bag X9178  
Cape Town, 8000  
Tel.: +27 21 487 7000  
Fax: +27 21 487 7167  
E-mail: [jdkotze@npa.gov.za](mailto:jdkotze@npa.gov.za)

## Suriname

Mr R. J. Debipersad  
Acting Director of Fisheries  
Ministry of Agriculture, Animal Husbandry and  
Fisheries  
Tel.: (597) 472233/476741  
Fax: (591) 424441  
E-mail: [visserydienst@sr.net](mailto:visserydienst@sr.net)

## **Tanzania (United Republic of)**

Ms Janet S. Uronu  
Assistant Director, Surveillance and Control  
Fisheries Division  
PO Box 2462 Dar es Salaam  
Tel mob: +255 (0) 748 958408  
E-mail: [janeturonu@hotmail.com](mailto:janeturonu@hotmail.com)

Mr Yahya Mgawe  
Deputy Principal  
Mbegani Fisheries Development Centre  
PO Box 83  
Bagamoyo  
Tel.: +255 745 492988  
E-mail: [ymgawe@yahoo.com](mailto:ymgawe@yahoo.com)

## **Turks and Caicos Islands**

Mr Rodman Johnson  
Sergeant, Royal Turks and Caicos Islands  
Police Force C/O Police Headquarters  
Church Folly  
Grand Turk  
Tel.: + 649 946 2371  
Fax: +649 946 2099  
E-mail: [johnsonrodman@hotmail.com](mailto:johnsonrodman@hotmail.com)

Mr Leroy Brooks  
Deputy Chief Conservation Officer  
Providenciales  
Tel.: +649 946 4017  
Fax: +649 941 3063  
E-mail: [decrprovo@tcway.tc](mailto:decrprovo@tcway.tc)

## **United Arab Emirates**

Mr Reem Abdulla Jaafar Al Baharna  
Head, Fisheries Management and Licensing  
Marine Environment Research Center  
PO Box 45553  
Abu Dhabi  
Tel.: +971 2 681 7171  
Fax: +971 2 681 0008  
E-mail: [rjaafar@erwda.gov.ae](mailto:rjaafar@erwda.gov.ae)

Dr Thabit Zahran Al Abdessalaam  
Director of Marine Environment Research  
Centre  
PO Box 45553  
Abu Dhabi  
Tel.: +971 2 681 7171

Fax: +971 2 681 7353  
E-mail: [tabdessaam@erwda.gov.ae](mailto:tabdessaam@erwda.gov.ae)

Mr Husain Abdul Rahman Mohammed  
Senior Technician  
Marine Environment Research Center  
PO Box 45553  
Abu Dhabi  
Tel.: +971 2 681 7171  
Fax: + 971 2 681 0008  
E-mail: [hmohamed@erwda.gov.ae](mailto:h mohamed@erwda.gov.ae)

## **United States of America**

Ms Alexa Cole  
Enforcement Attorney  
National Oceanic and Atmospheric  
Administration (NOAA)  
8484 Georgia Avenue, Suite 400  
Silver Spring, Maryland 20910  
Tel.: +1 301 427-2202  
Fax: +1 301 427-2211  
E-mail: [alexa.cole@noaa.gov](mailto:alexa.cole@noaa.gov)

Ms Monia Williams  
Program Management Analyst  
Assistant General Counsel for Enforcement  
and Litigation  
U.S. Department of Commerce (NOAA)  
8484 Georgia Avenue, Suite 400  
Silver Spring, Maryland 20910  
Tel.: +1 301 427-2202  
Fax: +1 301 427-2211  
E-mail: [monia.williams@noaa.gov](mailto:monia.williams@noaa.gov)

Mr Charles R. Juliand  
Office of the General Counsel (NOAA)  
One Blackburn Drive, Suite 205  
Gloucester, MA 01930,  
Tel.: +1 978 281 9379  
Fax: +1 978 281 9389  
E-mail: [charles.r.juliand@noaa.gov](mailto:charles.r.juliand@noaa.gov)

Ms Erika Carlsen  
Foreign Affairs Specialist  
National Marine Fisheries Service  
1315 East West Highway  
Silver Spring, Maryland 20910  
Tel.: +1 301 713 2276  
Fax: +1 301 713 2313  
E-mail: [erika.carlsen@noaa.gov](mailto:erika.carlsen@noaa.gov)

Mr John Gavitt  
Enforcement Advisor  
WildAid  
112 Ridge Court, Winchester, VA22603  
Tel.: +1 540 665 0304  
E-mail: [gavitt@shentel.net](mailto:gavitt@shentel.net)

Mr Jordan George  
Director of Judicial Administration  
U.S. Coast Guard  
Commandant (G-CJ) Room 6302  
2100 Second Street SWE Washington,  
DC 20593  
Tel.: +1 202 267 2940  
Fax: +1 202 267 4753  
E-mail: [gjordan@comdt.uscg.mil](mailto:gjordan@comdt.uscg.mil)

Ms Mary Lundberg  
Chief, Asset Forfeiture Unit  
United States Attorney Office  
880 Front Street, Room 6293  
San Diego, California 92101  
Tel.: +1 619 557 6759  
Fax: +1 619 235 2757  
E-mail: [Mary.Lundberg@usdoj.gov](mailto:Mary.Lundberg@usdoj.gov)

Ms Meggan Engelke-Ros  
Enforcement Attorney (NOAA)  
8484 Georgia Avenue, Suite 400  
Silver Spring, Maryland 20910  
Tel.: +1 301 427-2202  
Fax: +1 301 427-2211  
E-mail: [meggan.engelke-ros@noaa.gov](mailto:meggan.engelke-ros@noaa.gov)

Mr Michael B. Cerne  
Commander  
United States Coast Guard  
Coast Guard District 17  
PO Box 25517  
Juneau, Alaska 99801  
Tel.: +1 907 463 2223  
Fax: +1 907 463 2216  
E-mail: [mcerne@cgalaska.uscg.mil](mailto:mcerne@cgalaska.uscg.mil)

Hon. Parlen L. McKenna  
Administrative Law Judge  
United States Department of Homeland Security  
U.S. Coast Guard  
USCG ALJ Office Alameda  
US Coast Guard Is. Bldg. 54C  
Alameda, CA 94501-5100  
Tel.: +1 510 437 3361  
Fax: +1 510 437 2717  
E-mail: [PMckenna@d11.uscg.mil](mailto:PMckenna@d11.uscg.mil)

Mr Paul Ortiz  
Enforcement Attorney (NOAA)  
501 W. Ocean Blvd. Suite 4470  
Long Beach, CA 90802  
Tel.: +1 562 980-4069  
Fax: +1 562 980-4084  
E-mail: [paul.ortiz@noaa.gov](mailto:paul.ortiz@noaa.gov)

Mr H. Stetson Tinkham  
Deputy Director  
Office of Marine Conservation  
U.S. Department of State  
OES/OMC, Room 5806  
Washington, D.C. 20520-7818  
Tel.: +1 202 647 3941  
Fax: +1 202 736 7350  
E-mail: [tinkhamsx@state.gov](mailto:tinkhamsx@state.gov)

Captain Laurie Luher  
Fish and Wildlife Conservation Commission  
Special Enforcement Area / NOAA / FKNMS  
State of Florida Regional Ser. Center  
Suite 100  
2796 Overseas Hwy  
Marathon, FL 33050  
Tel.: +1 305 289 2320 Ext 102  
Fax: +1 305 289 2326  
E-mail: [laurie.luher@noaa.gov](mailto:laurie.luher@noaa.gov)

Mr Gerald Hellerman  
Managing Director  
Hellerman Associates  
10965 Eight Bells Lane,  
Columbia, MD 21044  
Tel.: +1 301 596 0053  
Fax: +1 410 997 2726  
E-mail: [hassoc@comcast.net](mailto:hassoc@comcast.net)

Mr David Muniz  
Economic Officer  
Environment, Science and Technology  
U.S. Embassy Kuala Lumpur  
376 Jalan Tun Razak  
50400 Kuala Lumpur  
Malaysia  
Tel.: +60 3 2168 4910  
Fax: +60 3 2168 4993  
E-mail: [MunizD@state.gov](mailto:MunizD@state.gov)

Ms Kimberly Dawson  
Fishery Biologist  
National Seafood Inspection Laboratory  
National Marine Fisheries Service  
705 Convent Street  
Pascagoula, MS 39567  
Tel.: +1 228 769 8964  
Fax: +1 228 762 7144  
E-mail: [kim.dawson@noaa.gov](mailto:kim.dawson@noaa.gov)

Mr Stuart Cory  
Special Agent  
NOAA Fisheries  
Office for Law Enforcement  
8484 Georgia Ave, Suite 415  
Silver Spring, MD 20910  
Tel.: +1 301 427 2300  
Fax: +1 301 427 2055  
E-mail: [stuart.cory@noaa.gov](mailto:stuart.cory@noaa.gov)

Mr Andrew Cohen  
Special Agent-in-charge  
NOAA Fisheries Law Enforcement  
1 Blackburn Drive  
Gloucester, MA 01930  
Tel.: +1 978 281 9213  
Fax: +1 978 281 9317  
E-mail: [Andrew.cohen@noaa.gov](mailto:Andrew.cohen@noaa.gov)

Ms Amanda Wheeland  
Enforcement Attorney  
U.S. Department of Commerce  
National Oceanic and Atmospheric  
Administration  
501 W. Ocean Blvd., Ste. 4470  
Long Beach, CA 90802  
Tel.: +1 562 980 4091  
Fax: +1 562 980 4084  
E-mail: [amanda,wheeland@noaa.gov](mailto:amanda,wheeland@noaa.gov)

Mr Mitch MacDonald  
Office of the General Counsel  
One Blackburn Drive, Suite 205  
Gloucester, MA 01930  
Tel.: +1 978 281 9379  
Fax: +1 978 281 9389  
[Mitch.MacDonald@noaa.gov](mailto:Mitch.MacDonald@noaa.gov)

Mr Robert Hogan  
[robert.hogan@noaa.gov](mailto:robert.hogan@noaa.gov)

## Yemen

Mr Abdul Hafiz Al-Semmah  
Deputy Minister MFW  
Yemen Ministry of Fish Wealth (MFW)  
PO Box 12145 Sana'a  
Tel.: +967 1 444 156  
Fax: +967 1 444 157  
E-mail: [fishops@y.net.ye](mailto:fishops@y.net.ye)

Ms Amani A.S. Bahobaishi  
Secretary  
Yemen Fisheries MCS Project  
PO Box 12145 Sana'a  
Tel.: +961 1 444156  
Fax: +961 1444157  
E-mail: [fishops@y.net.ye](mailto:fishops@y.net.ye)

Mr Michael H. Ferris  
Training Technical Advisor  
Yemen Fisheries MCS Project  
PO Box 12145 Sana'a  
Tel.: +967 1 444 156  
Fax: + 967 1 444 157  
E-mail: [fishops@y.net.ye](mailto:fishops@y.net.ye)

## International/intergovernmental organizations

Mr Eugene Sabourenkov  
Science and Compliance Officer  
Commission for the Conservation of Antarctic  
Marine Living Resources (CCAMLR)  
PO Box 213  
North Hobart ,  
Tasmania 7002, Australia  
Tel.: + 61 3 62101111  
Fax: + 61 3 6224 8766  
E-mail: [eugene@ccamlr.org](mailto:eugene@ccamlr.org)

Mr Denzil Miller  
Dr/Executive Secretary  
CCAMLR  
PO Box 213 North Hobart  
Hobart, Tasmania 7002, Australia  
E-mail: [Denzil@ccamlr.org](mailto:Denzil@ccamlr.org)

Mr Frank Meere  
Counsellor,  
Management, Enforcement and Economic  
Issues  
Ministerial Task Force on IUU Fishing–  
OECD  
2 rue Andre-Pascal  
75775 Cedex 16 Paris, France  
Tel.: +33 1 45 24 96 42  
Fax: +33 1 45 24 84 08  
E-mail: [frank.meere@oecd.org](mailto:frank.meere@oecd.org)

Mr João Batista Neves  
VMS Manager  
22 Berners Street  
W1T 3DY, London, Great Britain  
Tel.: +44 20 7631 0016  
Fax: + 44 20 7636 9225  
E-mail: [joao@neafc.org](mailto:joao@neafc.org)

Mr Giorgio Gallizioli  
Head of Unit - Monitoring and Licenses  
Fisheries and Maritime Affairs  
European Commission  
Rue Joseph II, 99 Office 6/49  
1049 Brussels, Belgium  
Tel.: +32 2 2955047  
Fax: +32 2 2962338  
E-mail: [giorgio.gallizioli@cec.eu.int](mailto:giorgio.gallizioli@cec.eu.int)

Mr Harm Greidanus  
EC Joint Research Centre (JRC)  
Via Fermi 1, Ispra (VA) 21020 Italy  
Tel.: +39-0332-789739  
Fax: +39-0332-789658  
E-mail: [harm.greidanus@jrc.it](mailto:harm.greidanus@jrc.it)

Mr Neil Ansell  
Technical Adviser  
Indian Ocean Commission  
Avenue Sir Guy Forget, Q4  
PO Box 7, Quatre-Bornes, Mauritius  
Tel.: +230 425964 -4251652  
Fax: +230 425 2709  
E-mail: [neilansell@coi.intnet.mu](mailto:neilansell@coi.intnet.mu)

## **FAO, Rome**

Mr Blaise Kuemlangan  
Legal Officer  
Legal Office  
Food and Agriculture Organization of the  
United Nations  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
Tel.: +39 06 570 54080  
Fax: +39 06 570 54408  
E-mail: [blaise.kuemlangan@fao.org](mailto:blaise.kuemlangan@fao.org)

## **Secretariat**

Dr Eric Reynolds  
FishCode Programme Coordinator  
Fisheries and Aquaculture Department  
Food and Agriculture Organization of the  
United Nations  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
Tel.: +390657056807  
Fax: +390657056500  
E-mail: [eric.reynolds@fao.org](mailto:eric.reynolds@fao.org)

Ms Michele Kuruc  
Assistant General Counsel for Enforcement  
and Litigation  
U.S. Department of Commerce  
NOAA  
8484 Georgia Avenue, Suite 400  
Silver Spring, Maryland 20910, USA  
Tel.: (+1 301) 427-2202  
Fax: (+1 301) 427-2211  
E-mail: [michele.kuruc@noaa.gov](mailto:michele.kuruc@noaa.gov)

Ms LeAnn Southward  
MCS Network Consultant  
c/o  
Assistant General Counsel for Enforcement  
and Litigation  
U.S. Department of Commerce  
NOAA  
8484 Georgia Avenue, Suite 400  
Silver Spring, Maryland 20910, USA  
Tel.: (+1 301) 427-2202  
Fax: (+1 301) 427-2211  
E-mail: [LeAnn.Southward@noaa.gov](mailto:LeAnn.Southward@noaa.gov)



Ms Tania Abdirizzak  
FishCode Programme Assistant  
Fisheries and Aquaculture Department  
Food and Agriculture Organization of the  
United Nations  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
Tel.: +39 06 570 55396  
Fax: +39 06 570 56500  
E-mail: [tania.abdirizzak@fao.org](mailto:tania.abdirizzak@fao.org)

Ms Tan Geik Hong  
Head of International Planning Section  
Department of Fisheries  
Level 2, Tower Block 4G2,  
Wisma Tani, Persint 4  
62628 Putrajaya, Malaysia  
Tel.: +60 3 8870 4210  
Fax: +60 3 8889 1195  
E-mail: [geikhong88@hotmail.com](mailto:geikhong88@hotmail.com)

Ms Ong See Ling  
Fisheries Officer,  
Department of Fisheries Malaysia  
Level 2, Tower Block, 4G2,  
Wisma Tani, Persint 4  
62628, Putrajaya, Malaysia

Ms Seniati Hj. Jais  
Fisheries Assistant,  
Department of Fisheries  
Level 5, Tower Block, 4G2,  
Wisma Tani, Persint 4  
62628, Putrajaya, Malaysia

Ms Zaitun Hj. Hassan  
Fisheries Assistant,  
Department of Fisheries  
Level 5, Tower Block, 4G2,  
Wisma Tani, Persint 4  
62628, Putrajaya, Malaysia

Mr Mohd Fadli Abd. Rahman  
Fisheries Assistant,  
Department of Fisheries  
Level 5, Tower Block, 4G2,  
Wisma Tani, Persint 4  
62628, Putrajaya, Malaysia

Mr Hassan Sihab  
Fisheries Assistant,  
Selangor Start Fisheries Office  
Level 16, Shah Alam,  
Selangor 40000, Malaysia

Mr Zam Zam Sarifan  
Deputy Fisheries Officer  
Department of Fisheries  
Level 5, Tower Block, 4G2  
Wisma Tani, Persint 4  
62628, Putrajaya, Malaysia

Ms Intan Mawarni Mohamed Zain  
Fisheries Officer  
Department of Fisheries  
Level 2, Tower Block, 4G2  
Wisma Tani, Persint 4  
62628, Putrajaya, Malaysia

Mr Sivarajah A/L Kandiah  
Fisheries Assistant,  
Department of Fisheries  
Level 2, Tower Block, 4G2  
Wisma Tani, Persint 4  
62628, Putrajaya, Malaysia

Ms Pauline Teh  
Administrative Officer  
INFOFISH  
PO Box 10899  
50728 Kuala Lumpur  
Malaysia  
Tel.: +60 3 2691 4466  
Fax: +60 3 2691 6804  
E-mail: [infish@po.jaring.my](mailto:infish@po.jaring.my)

Ms Cheam Kwai Tock  
Graphic Designer  
INFOFISH  
PO Box 10899  
50728 Kuala Lumpur  
Malaysia  
Tel.: +60 32691 4466  
Fax: +60 3 2691 6804  
E-mail: [infish@po.jaring.my](mailto:infish@po.jaring.my)

Ms Zainah Abbas  
Administrative Assistant  
INFOFISH  
PO Box 10899  
50728 Kuala Lumpur  
Malaysia  
Tel.: +60 3 2691 4466  
Fax: +60 3 2691 6804  
E-mail: [infish@po.jaring.my](mailto:infish@po.jaring.my)

Ms Shirlene M. Anthonyamy  
Trade Promotion Officer  
INFOFISH  
PO Box 10899  
50728 Kuala Lumpur  
Malaysia  
Tel.: +60 3 2691 4466  
Fax: +60 3 2691 6804  
E-mail: [infish@po.jaring.my](mailto:infish@po.jaring.my)

Ms Jennifer Nielsen Friis  
Intern  
INFOFISH  
PO Box 10899  
50728 Kuala Lumpur  
Malaysia  
Tel.: +60 3 2691 4466  
Fax: +603 2691 6804  
E-mail: [infish@po.jaring.my](mailto:infish@po.jaring.my)

Ms Tanya Lim  
Crowne Meetings Director  
Crowne Plaza Hotel  
Jalan Sultan Ismail  
50250 Kuala Lumpur  
Tel.: +60 3 2148 2322  
Fax: +60 3 2146 3895



**GLOBAL FISHERIES ENFORCEMENT TRAINING WORKSHOP ( GFETW )  
18-22 July 2005, KUALA LUMPUR**

## Appendix C

### **WELCOMING REMARKS BY DATO JUNAIDI BIN CHE AYUB, DIRECTOR GENERAL, DEPARTMENT OF FISHERIES, MALAYSIA**

The Hon. Dato' Seri Haji Mohd. Shariff bin Hj. Omar  
Deputy Minister of Agriculture and Agro-Based Industry Malaysia

Dr. Zulkifli bin Idris  
Deputy Secretary General  
Ministry of Agriculture and Agro-Based Industry Malaysia

Dr. Eric Reynolds  
FishCode Programme Coordinator  
Fisheries and Aquaculture Department, Food and Agriculture Organization

Ms. Michele Kuruc  
Executive Chair, MCS Net

Heads of Departments and  
Agencies Under The Ministry of Agriculture And Agro-Based Industry

Distinguished Delegates, and Guests

Dato' -Dato'/Datin-Datin,

Ladies and Gentlemen,

First of all, I would like to express my gratitude to the Hon. Dato Seri Hj. Mohd. Shariff bin Hj. Omar, for his presence and consent to officiate at the "Global Fisheries Enforcement Training Workshop" on behalf of the Minister of Agriculture and Agro-based Industry, Malaysia

Ladies and Gentlemen,

It is my privilege and pleasure to extend my warmest welcome to all the Honourable guests, distinguished delegates and participants from the all over the world to Kuala Lumpur.

As you are all aware the Hon Minister of Agriculture and Agro Based Industry Malaysia had made his commitment during the Ministerial Meeting on Fisheries held recently in Rome, Italy that Malaysia will host this Global Fisheries Enforcement Training Workshop.

The Global Fisheries Enforcement Training Workshop is very much linked to the issue of illegal, unreported and unregulated fishing (IUU) which undermines the effectiveness of long-term sustainable fisheries management. Monitoring, control and surveillance (MCS) can be used as an integral part of fisheries management and as a tool in combating IUU fishing. The concept of MCS as an essential and integrated component of fisheries, to ensure that management measures can be implemented successfully and expeditiously, has been always a prime concern of the Department of Fisheries Malaysia. Since the late 1970's Malaysia has formulated and implemented various measures to ensure the proper

management and conservation of the fisheries resources and at the same time to contain conflicts between fishers.

We are very fortunate here that international organization like FAO is concerned about the fate of million of fishers especially in developing countries and the sustainability of the fisheries globally, and as such has been very committed in trying to assist these countries to have effective fisheries management., Not forgetting organizations like the MCS Network and other developed countries that share the same concern and have provided the needed fund for the organization of this workshop.

To FAO, MCS Network, EU and other donors, we would like to express our greatest gratitude and we give assurance that we will try our best to make this workshop a success and a meaningful one.

I understand that this workshop has a total of 135 participants from all over the world. Your presence will add to the seriousness and commitment of this workshop, and as participants from the different countries in this region will exchange ideas and learn from each other to build and improve on their MCS capability. I sincerely suggest that you take full advantage of the discussion that follows the presentations of our distinguished speakers.

Once again, I would like to thank all the resource persons and paper presenters, and participants for giving their valuable time to attend this workshop. To the Organizing Committee of the Global Fisheries Enforcement Training Workshop, I thank you for your hard work in ensuring the success of this workshop.

Last but not least, I wish to express my sincere appreciation and heartfelt thanks to FAO and MCS Network, for jointly organizing this workshop, the Hon. Dato' Seri Hj. Mohd. Shariff bin Hj. Omar, Deputy Minister of Agriculture and Agro-based Industry Malaysia for his consent to officiate at this workshop as well as to all those who have in one way or another contributed to the success of this event.

I sincerely hope that all of you will have a pleasant and memorable stay in Kuala Lumpur.

Thank you.

## Appendix D

### OPENING SESSION SPEECH BY J. ERIC REYNOLDS, COORDINATOR, FAO FISHCODE PROGRAMME

The Honourable Dato' Seri Haji Mohamed Shariff bin Haji Omar, Deputy Minister of Agriculture and Agro-Based Industry, The Honourable Dr Zulkifli Idris, Deputy Secretary General, Ministry of Agriculture and Agro-Based Industry, The Honourable Dato' Junaidi bin Che Ayub, Director-General of Fisheries, Malaysia, Ms Michele Kuruc, Chair, International Fisheries Monitoring, Control and Surveillance Network, Distinguished Guests, Ladies and Gentlemen:

On behalf of FishCode, the Programme of Global Partnerships for Responsible Fisheries of the Food and Agriculture Organization of the United Nations, it is with great pleasure that I welcome you to this Fisheries Enforcement Training Workshop, made possible through the generous hospitality of the Government of Malaysia with the support of the MCS Network, the European Union, and the IUU Fishing Project, one of the component projects of the FishCode Programme.

Distinguished Guests, Ladies and Gentlemen:

The international community has become aware of the transformation, by human activities, of an apparently limitless resource into one that is now acknowledged to be finite and increasingly fragile. Current information continues to confirm that, despite local and regional differences, the global potential for marine capture fisheries has been reached. From 1974 to 2003 there was a consistent downward trend in the proportions of stocks offering potential for fishing expansion. At the same time there has been an increasing trend in the proportion of overexploited and depleted stocks.

Adverse effects on the marine ecosystem are varied and widespread. Impacts on fisheries arise from human induced alterations on the marine ecosystem due to pollution, habitat destruction and other forms of environmental degradation. Climatic change – whether directly human induced or not – is also now regarded as a major driver of marine ecosystem alteration processes.

Impacts of fisheries on ecosystems include the direct impacts of overfishing generally – the existence of excessive harvesting rates and fishing effort on wild resources. Overfishing is often driven by fisheries subsidies and fleet overcapacity and, increasingly, by the activities of those who engage in illegal, unreported and unregulated or "IUU" fishing.

Ladies and Gentlemen,

The challenges to achieving long-term sustainability of fisheries are global in scale, and obviously need to be addressed on these terms. At the same time, solutions must be appropriate and adaptable to regional and local conditions. The solutions must also be participatory in character, involving stakeholders so as to ensure that responsible management and utilization decisions are widely supported.

Since the 1992 United Nations Conference on Environment and Development, the international community has responded to the challenges of unsustainability by identifying vital issues and actions through a series of international instruments and other initiatives. The

future of sustainability in fisheries depends to a large extent on their broad and effective implementation – a process that involves coordinated action through institutions at all levels.

FAO through its Fisheries and Aquaculture Department is a pioneering and leading partner in this process. The activities of the Fisheries and Aquaculture Department are overseen by the Committee on Fisheries (COFI), a unique inter-governmental forum for the examination of major international fisheries and aquaculture problems and issues, and for the negotiation of global agreements and non-binding instruments.

The most well known global agreement negotiated through COFI is the 1995 FAO Code of Conduct for Responsible Fisheries. The Code recognises the nutritional, economic, social, environmental and cultural importance of fisheries, and the interests of all those concerned with the fishery sector. It takes into account the biological characteristics of the resources and their environment and the interests of consumers and other users, and embraces the commitments and requirements of all major instruments of relevance to fisheries.

Together with the other voluntary fisheries instruments that were developed within its context and are integral to it – the four International Plans of Action (IPOAs) on Seabirds, Sharks, Fishing Capacity, and IUU Fishing, and the FAO Strategy for Improving Information on Status and Trends in Capture Fisheries, the Code is the primary framework for FAO's fisheries work programme. As its "fisheries flagship" instrument, FAO is committed to foster the Code's full and effective implementation.

The 2002 Johannesburg Plan of Implementation, negotiated at the World Summit on Sustainable Development (WSSD-POI), also accords a high prominence to fisheries issues. Many of the specific WSSD-POI fisheries provisions are a reflection of commitments in the four FAO IPOAs that were adopted within the framework of the Code prior to WSSD. Both the Code and the WSSD-POI foresee broad stakeholder participation, transparency, institutional strengthening and the implementation of the precautionary and ecosystem approaches. Both aim to rebuild fish stocks and to minimize the impact of fishing on biodiversity and the environment through the reduction of fleet capacity and by combating IUU fishing.

Distinguished Guests, Ladies and Gentlemen:

It is in direct support of this effort to fight against IUU fishing, this campaign against fishing piracy, that the present Training Workshop is devoted. The FishCode Programme, as a principle means through which the FAO Fisheries and Aquaculture Department seeks to facilitate implementation of the Code of Conduct for Responsible Fisheries, is pleased to be associated with this important Workshop in partnership with the International MCS Network, the European Union, and our kind host the Government of Malaysia. Let us all use our time together, both in formal session and as we meet socially, to take full advantage of this special opportunity to learn and to get to know one another better.

Thank you.

## Appendix E

### **OPENING SPEECH BY THE HONOURABLE TAN SRI DATO' HJ. MUHYIDDIN BIN HJ. MOHD. YASSIN, MINISTER OF AGRICULTURE AND AGRO BASED INDUSTRY**

Mr. Eric Reynolds  
FishCode Programme Coordinator  
Fisheries and Aquaculture Department  
Food and Agriculture Organization

Ms. Michele Kuruc  
Executive Chair, MCS Net

The Hon. Tan Sri Dato' Abi Musa Asa'ari bin Mohamad Nor  
Secretary General  
Ministry of Agriculture and Agro Based Industry  
Malaysia

Dato' Junaidi bin Che Ayub  
Director General of Fisheries  
Malaysia

Heads of Departments and  
Agencies Under The Ministry of Agriculture And Agro-Based Industry

Distinguished Delegates, and Guests

Ladies and Gentlemen,

Good morning. I would like to take this opportunity to welcome you to Malaysia and particularly to Kuala Lumpur the capital of Malaysia. It is a privilege for me to be here this morning to address such a distinguished audience of fisheries experts. I understand there are over 135 of you here from all corners of the globe, representing every discipline and sub-discipline within the realm of fisheries to discuss fisheries enforcement. Your presence here marks a milestone in the on-going efforts by the respective governments to see that their respective fisheries industries continue to support the growing expectations of growing populations in the production of fish. All of you here have important roles to play, given the dimensions this challenge has come to assume.

Throughout the world fish has been the main supply of cheap and healthy protein to a major percentage of the world's populations. Fisheries continue to receive increasing attention not only because they are important source of livelihoods and food but also form one of the key components in the national economy of coastal states. FAO, in a report on the State of World Fisheries and Aquaculture 2004 concludes that developments in world fisheries and aquaculture during recent years have continued to follow the trends that were already apparent at the end of 1990's: captured fisheries production is stagnating, aquaculture output is expanding and there are growing concerns with regard to safeguarding the livelihoods of fishermen and the sustainability of both the commercial catches and the aquatic ecosystem.

One of the world's most crucial challenges today is how to find the resources to feed its people. Based on a report by United Nations Conference on Environment and Development



(UNCED), 1992, the world population is projected to grow to 8 billion by 2020 and 9 billion by 2030 – up from the present 5 billion. In the year 2000, 60 of the world's 80 most populated cities – with a population above 4 million people will be located in developing countries. By 2020, developing countries will account 7-8 billion people, most of them will live in the cities. How can we cope with the ever increasing demand for fish when fisheries resources is rapidly shrinking?

World total demand for fish and fish products is projected to expand by almost 50 million tonnes, from 133 million tonnes in 1999/2001 to 183 million tonnes by 2015. This represents an annual growth rate of 2.1 percent compared with 3.1 percent during the previous 20 years. Demand for food would account for 137 million tones. The world average per capita demand for all seafood could amount to 18.4 kg in 2010 and 19.1 in 2015 compared with 16.1 kg in 1999/2001.

Total world fish production would increase from 129 million tonnes in 1999/2001 to 159 million by 2010 and to 172 million tones by the year 2015. This means that growth in global world fish production is projected to decline from the annual rate of 2.7 percent of the past decade to 2.1 percent per year between 1999/2001 and 2010 and to 1.6 percent per year between 2010 and 2015. World capture production is projected to stagnate, while aquaculture production is projected to increase substantially, albeit at a slower growth rate than in the past. Out of the expected increase of 43 million tones in global fish production from 1999/2001 to 2015, 73 percent would come from aquaculture which is projected to account for 39 percent of global fish production in 2015.

Allow me to use Malaysia as a case in point. Though small from an economic perspective, accounting for only 1.35 percent of GDP in 2003, fisheries in Malaysia has strategic socio-political and food security perspectives that far outweigh a simplistic financial valuation of its importance. In most Asian countries, particularly those in Southeast Asia, fish is a staple protein that is as ubiquitous as rice on the dinner plate. Travel to any small town in Malaysia and you will find seafood restaurants in every nook and corner, attesting the widespread popularity of fish among all communities.

The average Malaysian consumed 49kg of fish annually in 2000. Contrast this with the per capita consumption of fish in the United States of 7.09kg/annum in 2002, and we can easily gauge its importance in local diets. To meet this need, Malaysia has a fisheries industry that in 2003 caught 1.48 million tonnes valued at RM5.22 billion ( US\$1.37 billion).

Over 89,000 fishers derive direct employment from the fishing industry, and many more in ancillary support activities. This scenario is not static. The rapid growth of the economy has provided more Malaysians the means to support enhanced consumption levels of fish. Coupled with a growing population, we are looking at strong demand trends that will extend well into the future. Estimates indicate that by 2010, the total demand for food fish will amount to 1.59 million tonnes annually, while per capita consumption is set to rise to 56kg/annum.

While the demand situation is exciting and bullish, the same cannot be said for the health of the resources expected to support it. The coastal fisheries sector, which accounts for the bulk of landings, is generally considered overfished. Stock assessments undertaken by the Department of Fisheries have shown that catch rates have declined significantly over the last decade.

Though overall landings increased 26% from 911,933 tonnes in 1991, these overall volume figures often mask collapses of sub-fisheries that are often too small to make an impact. The shifts in species profiles that have been picked up through long term studies in both the west and east coasts of Peninsular Malaysia is testimony to the fact that there have been serious

diminutions in specific populations. The coastal marine fishery resources of both the west and east coasts of Peninsular Malaysia and Sarawak have been exploited close to or beyond their maximum sustainable levels. These resource issues are already being felt.

Over the years, the industry has shifted from coastal dependence to more commercial orientation with much of the activities concentrated in the offshore waters beyond 30 nautical miles. In the year 2003, marine capture fisheries contributed 1,283,256 tonnes or 86.48% of the nation's fish production with a value of RM 4.01 billion. With the coastal fisheries being the major contributor with a production of 1,084,802 tonnes valued at RM 3.47 billion.

Deep-sea fishing industry is still in the infancy stage. Although still to be developed to its potential, the deep-sea fisheries sector in 2003 was able to produce 198,453 tonnes with a value of RM546.55 million and contributed 13.37% to the total fish production.

The inshore marine capture fisheries in Malaysia is close to the point of maximum sustainable yield and the marine fish production is not expected to increase sufficiently and in tandem with the increase in demand. This deficit in production has to be met by the aquaculture sector. In Malaysia the aquaculture sector has a bright future. It has been estimated that there are about 442,000 ha. of land which can be developed. Aquaculture has been given a big mandate with production targeted to reach 600,000 tonnes by the year 2010 from the present production of 196,874 tonnes. Malaysia has resources that can be sustainably developed to support substantial production levels of shrimp, blood cockle, marine and freshwater fish. Given these initiatives, the Government is confident that the country will be able to meet 96% of its food fish requirements in 2010.

There will be reduction of post harvest losses and increased development of products to cater for the modern lifestyle where stringent requirements of high quality and safety of food products are demanded by the international markets.

However, the contribution from capture fisheries will depend on some further development and also on the effectiveness of fisheries management. In response to this, the Government has instituted a comprehensive regulatory and management regime designed to ensure the sustainability of the coastal fisheries sector.

These include:

- The adoption of the conventional fisheries management approach that consists of the monitoring, control and surveillance (MCS) mechanism. The government is fully responsible in regulating and monitoring the fishery sector. Scientific information is commonly used and incorporated in fisheries management. The information is used to formulate the regulatory system consisting of licensing and zoning of fishing ground and also the establishment of Marine Protected Areas.
- Managing the industry through a comprehensive licensing system that limits entry of new fishers as well as places restrictions on the number and sizes of fishing appliances and vessels that can be employed. The Fisheries Comprehensive Licensing Policy was created as a management scheme based on the limitation of fishing activities. Under this policy, licenses are issued according to size of fishing vessels, fishing gears and fishing zones. The licensing system ensures that the fisheries resources are exploited in a sustainable manner, in order to conserve the stock.
- Establishment of management zones to ensure equitable allocation of the fishery resources by size of fishing vessels and types of fishing appliances, and to reduce conflicts between traditional and commercial fishers.
- Restrictions on destructive fishing methods such as fishing with explosives and poisons, and motorized pushnets have been prohibited to conserve juveniles of fish and prawns, particularly in estuarine and coral areas.

- The employment of closed seasons, such as the current restrictions on the collection of grouper fingerlings from the wild has been introduced to conserve resources.
- The establishment of reef based Marine Parks and Reserves to conserve resources.
- The rehabilitation of resources through the construction of artificial reefs.
- A vessel tracking and monitoring system (VTMS) to monitor performance of large commercial fishing vessels

A comprehensive program has been planned to make Malaysia a net exporter of fish and fishery products by the year 2010.

In addition, the Government is committed to sustainably develop the deep-sea fishery sector in offshore and EEZ waters. Incentives are being provided for entrepreneurs who are willing to capitalise on opportunities offered by the resources within the country's EEZ.

The urgency to meet the unprecedented demand for fish and fish products has, and will continue, to place intense pressure on resources, that are, for most parts, already heavily exploited. Extracting more from these waters may bring about irreversible harm to the resources. The emphasis is therefore on effective management to ensure the fisheries sustain. Focus should also be placed on reducing wastage through improving selectivity and the use of environmentally-friendly fishing gear as well as enforcing the legal instruments/regulations enacted to ensure the sustainability of the fisheries resources.

All fishery regulations are complex, change frequently and require a high level of enforcement presence to achieve compliance. In addition to federal laws and regulations there are also state enactments associated with the protection and management of riverine and inland fisheries in the states. Compliance with all regulations is essential for the effective management of the fisheries resources.

Only through good enforcement practices can the capability to detect a sufficient number of actions that are in violation of the law in achieving the management goals. This does not discard the fact that illegal, unregulated and unreported fishing practices seem to be quite a significant form of violation of the law.

Having said that, there are several types of potential enforcement problems, which are of concern. Among them are smuggling, under reporting or declaring, false reporting and other illegal activities, which include the use of destructive fishing practices. The incentives to commit some of these types of violations are higher because the rewards for such actions are considerably greater. These problems form a major portion of problems faced by many countries when it comes to fishery management.

These problems however can be overcome through integrated and properly monitored enforcement activities. At the same time, there is no denial that capacity building is also a major factor contributing to the effectiveness of enforcement activities. It is also my wish and hope that the need to increase and improve capacity building does not end with this workshop.

As such, training programmes like the one which all of you are taking part here today is very important. This can be an avenue for all those involved in the enforcement of fishery regulations to learn from each other and also use this opportunity to exchange ideas and experiences.

Most importantly, I feel that all that are present here should try to create a networking of sorts among the participants. With the advent of ICT, this is made all the more possible without having to leave your place of work.

This brings us to this training workshop. This workshop will provide an opportune platform and forum for participants to deliberate actively as well update and exchange of thoughts, ideas and strategies. A forum like this engenders the solution we all seek. Let this be a start to a more fruitful and meaningful relationship among participating countries for the sake of the resources of the world and the bastion of the deep.

Before I end my speech, I would like to congratulate the Department of Fisheries Malaysia, FAO, MCS Net, INFOFISH and all other donors and agencies that have contributed towards the organization of this training workshop.

Finally, I hope that all of you will have a very pleasant and memorable stay here. We hope that you will find time to explore the city, places of interests, shopping delights and delicious food besides the warm hospitality of our plural society.

On this note, and in the name of Allah the Compassionate, the Merciful, I take great pleasure in declaring the Global Fisheries Enforcement Workshop open. I wish all of you a very fruitful and rewarding experience during this workshop.

Thank you.

Wattaufik Walhidayah Wassalam mualaikum wrt.

## Appendix F

### THE 2005 ROME DECLARATION ON ILLEGAL, UNREPORTED AND UNREGULATED FISHING

**Adopted by the  
FAO Ministerial Meeting on Fisheries  
Rome, 12 March 2005**

*We, the Ministers and Ministers' representatives, meeting in Rome at the FAO Ministerial Meeting on Fisheries on 12 March 2005,*

*Bearing in mind* the principles and rules of international law as reflected in the United Nations Convention on the Law of the Sea of 10 December 1982 (the 1982 UN Convention),

*Noting* with satisfaction the entry into force on 11 December 2001 of the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (1995 UN Fish Stocks Agreement) and the entry into force on 24 April 2003 of the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (1993 FAO Compliance Agreement),

*Recalling* the relevant provisions of other international instruments, such as the 1992 Rio Declaration on Environment and Development and Chapter 17 of Agenda 21; the 2000 United Nations Millennium Declaration and Millennium Development Goals; and the 2002 Johannesburg Declaration on Sustainable Development and the Johannesburg Plan of Implementation,

*Reaffirming* our commitment to the principles and standards contained in the FAO Code of Conduct for Responsible Fisheries,

*Recalling* the adoption on 11 March 1999 of the Rome Declaration on the Implementation of the Code of Conduct for Responsible Fisheries at the FAO Ministerial Meeting on Fisheries, as well as the endorsement of the 2001 FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU),

*Recalling* as well the resolution on IUU fishing adopted by the FAO Conference in 2003,

*Desiring* to move from words to action through full implementation of various international instruments for sustainable fisheries adopted or enacted in the past decades,

*Noting* the harmful and worldwide consequences of IUU fishing on the sustainability of fisheries (ranging from large-scale high seas fisheries to small-scale artisanal fisheries), on the conservation of marine living resources and marine biodiversity as a whole and on the economies of developing countries and their efforts to develop sustainable fisheries management,

*Recognizing* that there is often a relationship between fleet overcapacity and IUU fishing and acknowledging the economic incentives that drive these phenomena,

*Acknowledging* the genuine development aspirations and legitimate efforts of developing countries, in particular small island developing States, toward the sustainable management and development of their fisheries sectors,

*Emphasizing* the responsibility of flag States under international law to effectively control and manage vessels flying their flags, as well as the responsibilities of port and coastal States in controlling IUU fishing,

*Aware* that effective fisheries monitoring, control and surveillance (MCS) is essential to combat IUU fishing and that integrated MCS, including vessel monitoring systems (VMS), as well as a comprehensive global record of fishing vessels within FAO, are key tools in this endeavour,

*Recognizing* the need to strengthen international cooperation for the development of VMS so as to implement the Code of Conduct for Responsible Fisheries, prevent, deter and eliminate IUU fishing and protect and assist fishermen in danger and the assistance that FAO may provide in harmonizing VMS to members who request it,

*Recognizing* the special requirements of developing countries in combating IUU fishing and, in particular, the need to strengthen their capacity for fisheries management, and

*Reaffirming* the commitment to enhance responsible and effective fisheries management, to prevent, deter and eliminate IUU fishing and to strengthen, improve, and where appropriate establish, MCS programmes including VMS,

We declare that:

1. We are committed to concentrating and intensifying our efforts to implement fully all the international instruments for the sustainable use of marine living resources.
2. We reaffirm the need for FAO to play a leading role in supporting the efforts of States to implement these instruments, with particular emphasis placed on assisting developing countries.
3. We will renew our efforts:
  - to develop and implement national and regional plans of action to combat IUU fishing,
  - to adopt, review and revise, as appropriate, relevant national legislation and regulations, in particular to ensure compliance with fisheries management measures and to provide sanctions of sufficient gravity as to deprive offenders of the benefits accruing from their illegal activities and to deter further IUU fishing,
  - to ensure effective implementation of catch certification schemes through their harmonization and improvement as necessary,
  - to adopt internationally agreed market-related measures in accordance with international law, including principles, rights, and obligations established in WTO agreements, as called for in the IPOA-IUU,
  - to ensure that all fisheries policy-makers and managers consider the full range of available MCS options, strategies and tools; take necessary actions to fully implement the IPOAs and any applicable MCS measures adopted by relevant regional fisheries management organizations (RFMOs); and that fishers have an understanding of their role in MCS,

- to ensure that States, to the greatest extent possible, take measures or cooperate to ensure that nationals subject to their jurisdiction do not support or engage in IUU fishing, and
- 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, or earlier if so decided by their flag State or any relevant RFMO.

4. We call for the following new actions:

- to identify, reduce and ultimately eliminate the economic incentives that lead to IUU fishing and the economic drivers that lead to fleet overcapacity, at the national, regional and global levels,
- to ensure that measures to address IUU fishing or fleet overcapacity in one fishery or area do not result in the creation of fleet overcapacity in another fishery or area or otherwise undermine the sustainability of fish stocks in another fishery or area, and that such measures do not prejudice the legitimate expansion of fleets in developing countries in a sustainable manner,
- to develop a comprehensive global record of fishing vessels within FAO, including refrigerated transport vessels and supply vessels, that incorporates available information on beneficial ownership, subject to confidentiality requirements in accordance with national law,
- to work within RFMOs to facilitate, where appropriate, the exchange of VMS and observer data, subject to confidentiality requirements in accordance with national law, and
- to supplement existing MCS schemes through measures such as encouraging the fishing fleet to report any suspected IUU fishing activities they observe.

5. We agree upon the need:

- for flag States, port States, coastal States and, where appropriate, RFMOs to effectively regulate transshipment in order to combat IUU fishing activities and to prevent laundering of illegal catches,
- for States, as well as NGOs and members of the fishing industry, to exchange information on suspected IUU fishing, if possible on a real-time basis, in collaboration with FAO, RFMOs and other relevant arrangements, and by actively participating in the International MCS Network,
- to develop and ensure effective implementation of national and, where appropriate, internationally agreed boarding and inspection regimes consistent with international law,
- to strengthen coastal and port State measures for fishing vessels, consistent with international law, in order to prevent, deter, and eliminate IUU fishing,
- for further international action to eliminate IUU fishing by vessels flying “flags of convenience” as well as to require that a “genuine link” be established between States and fishing vessels flying their flags,

- to strengthen RFMOs to ensure that they are more effective in preventing, deterring and eliminating IUU fishing, and
- to fully implement vessel marking requirements in accordance with the FAO Standard Specification and Guidelines for the Marking and Identification of Fishing Vessels and any applicable RFMO requirements.

6. We urge all States:

- that have not yet done so to become parties to the 1982 UN Convention, the 1993 FAO Compliance Agreement and the 1995 UN Fish Stocks Agreement, and abide by their provisions,
- to ensure that they exercise full and effective control over fishing vessels flying their flag, in accordance with international law, to combat IUU fishing,
- that are parties to the 1993 FAO Compliance Agreement to fulfil their obligations to submit to FAO, for inclusion in the High Seas Vessel Authorization Record, data on vessels entitled to fly their flags that are authorized to be used for fishing on the high seas, and those that are not yet parties to the 1993 FAO Compliance Agreement to submit such data on a voluntary basis, and
- to supply detailed information on fishing vessels flying their flag to relevant RFMOs, in accordance with the requirements adopted by those RFMOs, and to establish such requirements within RFMOs where they do not yet exist.

7. We further urge additional research, as well as enhanced international cooperation including appropriate transfer of technology, in remote sensing and satellite surveillance of fishing vessels to prevent, deter and eliminate IUU fishing, particularly in remote areas with lack of deployment of MCS facilities.

8. We also urge:

- the provision of additional assistance to developing countries to help them implement their commitments in preventing, deterring and eliminating IUU fishing, as well as to participate effectively in the development and implementation of fishery conservation and management measures by RFMOs, and
- the provision of advice and training to promote the development of fisheries management regimes, at the national and local levels, to prevent, deter and eliminate IUU fishing, including community-based fisheries management in countries where such fisheries management is practiced, recognizing, where appropriate, the role of local coastal communities in the management of near-shore resources, particularly in developing countries.

9. We resolve to provide financial and technical assistance to developing countries in the implementation of MCS capabilities, including VMS, with the support of FAO and relevant international financial institutions and mechanisms, and to consider the establishment of a special voluntary fund for this purpose.

**WE REQUEST** that the Director-General of the Food and Agriculture Organization of the United Nations convey this Declaration to the Secretary-General of the United Nations for consideration by that organization.



## Appendix G

### GFETW EVALUATION BY PARTICIPANTS

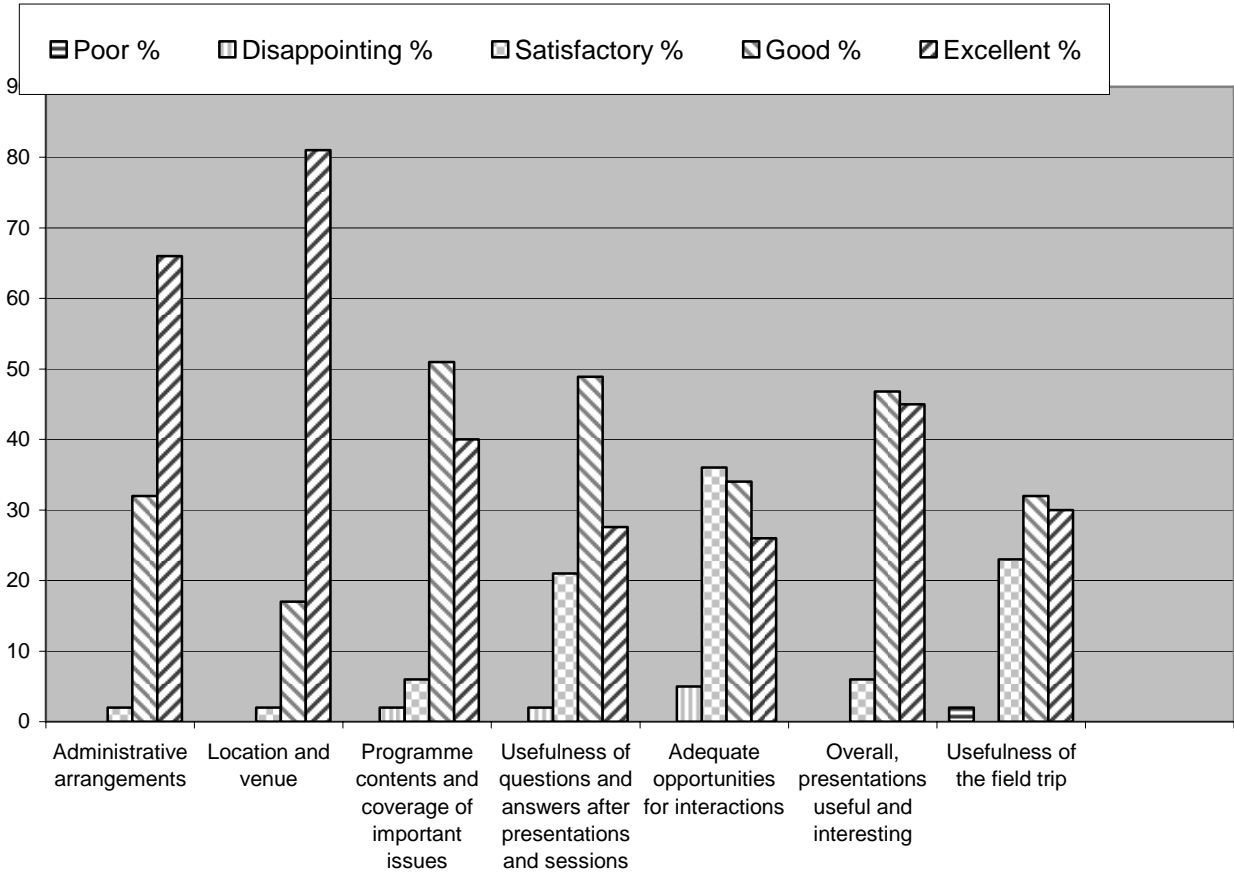
GFETW participants were asked to complete an evaluation of the usefulness of the Workshop and the quality of its organization. The questionnaire included both closed and open questions, as shown in the sample below.

| <b>Workshop<br/>Evaluation</b>   |                   |                  |          |               |
|--|-------------------|------------------|----------|---------------|
| Kindly complete and place in the box provided outside the Conference venue. Thank you.   |                   |                  |          |               |
| <b>GLOBAL FISHERIES ENFORCEMENT TRAINING WORKSHOP</b><br>18 - 22 July, 2005<br>Crowne Plaza Hotel and Conference Centre<br>Kuala Lumpur, Malaysia  |                   |                  |          |               |
| -1- Poor   | -2- Disappointing | -3- Satisfactory | -4- Good | -5- Excellent |
| Kindly circle the appropriate number against each of the following:  |                   |                  |          |               |
| • Administrative arrangements (e.g. travel, hotel, registration, documentation, etc.)?   | 2                 | 3                | 4        | 5             |
| • Location and venue?  | 2                 | 3                | 4        | 5             |
| Program content and coverage of important issues?  | 2                 | 3                | 4        | 5             |
| Usefulness of questions and answers after presentations and sessions? ..   | 2                 | 3                | 4        | 5             |
| Were there adequate opportunities for interaction with others during the Workshop? .....   | 2                 | 3                | 4        | 5             |
| Overall, did you find the presentations useful and interesting?  | 2                 | 3                | 4        | 5             |
| • What other relevant topics would you like to see on the agenda in a future meeting?<br>Please specify:   |                   |                  |          |               |
| • Did you find the field trip useful?  | 2                 | 3                | 4        | 5             |
| • Which field trip did you attend?<br>.....  |                   |                  |          |               |
| Based on your experiences at this workshop, would you be likely to attend a future meeting of this type?<br><input type="checkbox"/> Yes <input type="checkbox"/> No                     |                   |                  |          |               |
| • Will you share the information you obtained at the workshop with others in your organization or others in your government?<br><input type="checkbox"/> Yes <input type="checkbox"/> No |                   |                  |          |               |
| • What did you think about the pacing of the Workshop? Too many topics? Presentations too long or too short?<br>Please comment:  |                   |                  |          |               |
| • In your view, what sort activities should be organized as follow up to the Workshop?   |                   |                  |          |               |
| • Any other comments?  |                   |                  |          |               |

A total of 47 completed forms were returned to the Workshop Secretariat,

Closed-end questions, with five possible answers from poor to excellent, were used to assess (a) the quality of administrative arrangements; (b) the location and venue; (c) the content and coverage of issues; (d) the usefulness of questions and answers during workshop sessions; (e) opportunities for interaction between participants; (f) overall quality of presentations in terms of interest-raising and usefulness; and (g) the usefulness of the field trips offered on the afternoon of 20 July 2005.

Participant responses to the seven closed-end questions are summarised in graphical form below.



The overall judgment was positive (Good + Excellent scores > 50 percent.) on all issues addressed.

The form also asked respondents two “yes/no” answer questions, viz: (a) “Based on your experiences with this workshop, would you be likely to attend future meetings of this type?”; and (b) “Will you share the knowledge/information gained with others in your organization/government?” Nearly all respondents answered in the affirmative to both questions.

Two open-ended questions followed, viz: (a) What did you think of the pacing of the Workshop? Too many topics? Presentations too long or too short? Please comment; and (b) In your view, what sort of activities should be organized as follow up to the Workshop?”

With regard to the first question, many participants complained that there were too many topics being addressed. They thus considered that the time allocated to each presentation was too short to fully explore the issues.

Some participants also considered that several of the presentations were overlapping, and suggested that a more structured approach based on abstracts sent well in advance should have been adopted.

Others felt that it would have been useful to have the papers/presentations available before the Workshop, in order to have adequate time to review them and thus be able to participate more actively in discussion during the presentation sessions.

Along the same lines, some respondents suggested that more time should have been devoted to questions and answers, and that discussions should have been organized for small groups in order to allow more direct engagement of participants.

According to some participants, there were too many presentations from developed country panellists. It was felt that it would have been interesting to have more presentations and case studies from developing countries.

The list of other topics participants would have wanted on the agenda of the workshop includes the following.

- industry issues:
- reports on work being done to quantify IUU fishing on a global level:
- economic impact of IUU fishing in more specific terms:
- fishing structure in different countries (rights/permits, allocation process, etc.);
- training modules and methodologies across cultures on MCS;
- views/comments of flag states whose vessels are listed in the negative list;
- fishing vessels captains views on IUU fishing;
- critical analysis of flag and port states activities;
- enforcement procedures-implementation;
- presentations from Caribbean countries;
- fishermen rights;
- Tuna management;
- Inland and artisanal fisheries;
- IUU in CARICOM states;
- More case studies demonstrating methodologies and technologies;
- Licensing arrangements in different countries;
- Assessment of the efficiency of MCS for sustainable utilization of resources/conservation;
- Stock assessment: relevance of scientific data as a basis for setting laws and regulations;
- More videos on MCS by relevant authorities;
- Media involvement in IUU;
- Trade and WTO relation on IUU;
- Strategies for rebuilding fisheries in Tsunami affected areas;
- Legal aspects of international mutual legal assistance;
- Low- cost cooperative initiatives that developing countries can use; and
- Information systems and not just VMS.

With regard to the second question on follow-up measures to be taken, participants' suggestions can be divided in two broad categories: (a) measures that would directly follow-up to the Workshop, and (b) measures for future development deriving from the Workshop.

For the first category, suggested measures include:

- develop a list of resolutions and a final statement (also to be used in media relations);
- distribute the Workshop presentations, and possibly make the material available online;
- request participants to educate “at home;” and
- prepare a questionnaire to ask how lessons learned are applied by participants.

For the second category, suggested measures include:

- seek lists of any action/activity arising from the workshop,
- assess the improvements of national MCS programmes as a result of the experience gained in the Workshop;
- create a mechanism to have States reporting regularly on the status and improvements of their MCS systems;
- establish a mechanism for enforcement data exchange within regional bodies,
- organize regional workshops on MCS and sub-regional workshops on specific issues;
- prepare MCS training guidelines for all those involved in control and surveillance (inspections, observers, prosecution, investigation, financial analysis etc); and
- provide assistance to developing countries.

## FAO FishCode Reviews

**1 Pintz, W.S. Tuna and bottom fishery licence management: Tonga. *FAO/FishCode Review*. No. 1. Rome, FAO. 2003. 35p.**

Fish are now the largest single export from the Kingdom of Tonga. However, expansion of the industry faces severe infrastructure constraints, and granting substantial numbers of new longline licences without resolving the constraints could seriously affect all Tongan commercial fisheries.

**2 Gillett, R. Aspects of fisheries management in the Maldives. *FAO/FishCode Review*. No. 2. Rome, FAO. 2003. 61p. (*Restricted distribution*)**

The inshore marine resources of the Maldives, an atoll environment, are being increasingly exploited for baitfishing, food for local residents, consumption by tourists, exports and non-extractive uses such as dive tourism. This situation must be reconciled with the limited nature of the resources.

**3 Die, D.L.; Alió, J.; Ferreira, L.; Marcano, L.; Soomai, S. Assessment of demersal stocks shared by Trinidad and Tobago and Venezuela. *FAO/FishCode Review*. No. 3. Rome, FAO. 2004. 32pp.**

The FAO/WECAFC Workshop on assessment of demersal stocks shared by Trinidad and Tobago and Venezuela (2002) initiated an assessment of the shrimp stocks shared by the two countries. The main conclusion of the assessment is that some shrimp stocks are being severely overfished and are suffering as a result.

**4 Gillett, R. The marine fisheries of Cambodia. *FAO/FishCode Review*. No. 4. Rome, FAO. 2004. 57p.**

Excess fishing effort and associated declines in abundance of target species are the most serious problems facing Cambodia's marine fisheries: resource sustainability will require restrictions on resource access.

**5EN FAO/FishCode. Seminar on responsible fisheries management in large rivers and reservoirs of Latin America. *FAO/FishCode Review*. No. 5. Rome, FAO. 2004. 72p. [En]**

This report of the Seminar on Responsible Fisheries Management in Large Rivers and Reservoirs in Latin America (2003), attended by experts from member countries of the Commission, observers from other regional bodies and representatives from local fishing communities in El Salvador, presents the principles of responsible fishery management in Latin America as well as a selection of national reports.

**5SP FAO/FishCode. Seminario sobre ordenación pesquera responsable en grandes ríos y embalses de América Latina. *FAO/FishCode Revista*. No. 5. Roma, FAO. 2004. 78 p. [Sp]**

El Seminario sobre Ordenación Pesquera Responsable en Grandes Ríos y Embalses de América Latina (2003) se efectuó en San Salvador en asociación con la novena reunión de la Comisión de Pesca Continental para América Latina (COPESCAL). Participaron expertos de países miembros de la Comisión; observadores de otros organismos regionales y representantes de comunidades pesqueras locales de El Salvador. Se presentaron dos documentos sobre los principios de la ordenación pesquera responsable en grandes ríos y embalses en América Latina y una selección de informes nacionales.

**6 Swan, J. National Plans to combat illegal, unreported and unregulated fishing: models for coastal and small island developing states. *FAO/FishCode Review*. No. 6. Rome, FAO. 2003. 76p.**

These case studies for use in FAO regional and subregional workshops were prepared in accordance with the FAO International Plan of Action to Prevent, Deter and Eliminate IUU Fishing. The "Republic of Galactia" and the "Alpha Islands" are fictitious, but the fisheries profiles presented draw on typical existing circumstances.

**7 Kuemlangan, B. Creating legal space for community-based fisheries and customary marine tenure in the Pacific: issues and opportunities. *FAO/FishCode Review*. No. 7. Rome, FAO. 2004. 65p.**

The laws of Pacific Island countries generally support traditional fisheries management with only modest efforts to encourage the use of customary marine tenure-based community fisheries management. Government commitment for the role of customary marine tenure in community-based fisheries management, with support from interested stakeholders, will complement efforts for promoting sustainable utilization of fisheries resources and improved livelihoods in the Pacific region.

**8 FAO/FishCode. Report of the Workshop on Development of a Management Plan for Tomini Bay Fisheries, Indonesia. *FAO/FishCode Review*. No. 8. Rome, FAO. 2004. 31p.**

Tomini Bay fishery resources are still considered to be underexploited, but annual catches have increased dramatically over the past ten years. In the absence of a fisheries management body, The FAO/Government of Indonesia Workshop on the Development of a Management Plan for Tomini Bay Fisheries (2003) provided a starting point for addressing responsible fisheries issues and laying the groundwork for a fisheries management plan

**9 FAO/FishCode. Report of the National Conference on Responsible Fisheries in Viet Nam, Hanoi, Viet Nam, 29–30 September 2003. FAO/FishCode Review. No. 9. Rome, FAO. 2004. 94p.**

This national conference was organized in the context of increasing problems faced by Vietnamese fishers in maintaining and improving their livelihoods through coastal and offshore fisheries; some coastal fish resources in particular are being heavily over-exploited.

**10 Stanley, J. Institutional review of the National Fishing Corporation and the Fisheries Department of Tuvalu. FAO/FishCode Review. No. 10. Rome, FAO. 2004. 47p. (Restricted distribution)**

The economic growth and development of Tuvalu depend on its marine resources and especially its relatively rich tuna resources. Although the primary concern of the government is the sustainable economic development and management of tuna, there is also potential for the development of other marine products, particularly deep bottom fish.

**11 García Mesinas, A. Lineamientos para un Código de Ética de Pesca y Acuicultura para El Salvador. FAO/FishCode Revista. No. 11. Roma, FAO. 2004. 59p. [Sp] (Restricted distribution)**

Este documento presenta los resultados de un proyecto llevado a cabo a través del Programa FishCode de la FAO a petición del Gobierno de El Salvador para desarrollar los lineamientos a nivel nacional del Código de Ética de la Pesca y Acuicultura. El trabajo se realizó coordinado a través de la Oficina Regional de América Latina (RLC) y la Representación de FAO de El Salvador.

**12 FAO/FishCode. Report of the National Workshop on the Code of Conduct for Responsible Fisheries and its practical application to coastal aquaculture development in Viet Nam. FAO/FishCode Review. No. 12. Rome, FAO. 2004. 47p.**

The National Workshop on the Code of Conduct for Responsible Fisheries and its Practical Application to Coastal Aquaculture Development in Viet Nam took place in Hué from 3 to 4 October 2003. The Workshop aimed to build awareness among national and provincial stakeholders about the need to develop and implement an Aquaculture Code of Conduct for Viet Nam. Coastal aquaculture in Viet Nam, particularly shrimp culture, has developed rapidly in recent years. Although shrimp farming has brought many benefits to coastal communities, it is associated with high social and environmental risks.

**13 FAO/FishCode. Report of the National Seminar on the reduction and management of commercial fishing capacity in Thailand. FAO/FishCode Review. No. 13. Rome, FAO. 2005. 59p.**

The marine capture fisheries sector is more capital intensive than is appropriate for Thailand's resource endowment, and there is an urgent need for fishing capacity reduction for improved fisheries management and

protection and conservation of fish habitats and other threatened coastal resources. Failure to achieve this will have serious consequences for the most vulnerable people in coastal communities, fish consumers and society at large.

**14 FAO/FishCode. Reports of the regional vessel monitoring systems workshops: Southwest Indian Ocean, Central America, the Caribbean and Southeast Asia. FAO/FishCode Review. No. 14. Rome, FAO. 2005. 91p.**

Four regional workshops on vessel monitoring systems (VMS), respectively covering the South West Indian Ocean, Central America, the Caribbean and Southeast Asia, were organized and implemented in succession from September 2003 to October 2004. The workshops were intended to promote the use of VMS as an additional instrument for the management of fisheries, both at a national level and in cooperation with regional fisheries bodies. They comprise one aspect of FAO's larger set of activities to implement the International Plan of Action (IPOA) to Prevent, Deter or Eliminate Illegal, Unreported and Unregulated (IUU) Fishing. The document includes a CD-ROM.

**15 FAO/FishCode. Fishery policy in the Marshall Islands. FAO/FishCode Review. No. 15. Rome, FAO. 2005. 33p.**

Fisheries play a key role in the economy of the Republic of the Marshall Islands (RMI) and in the lives of its people. Substantial tuna resources are exploited from the country's vast exclusive economic zone, largely by foreign fishing vessels operating under licence. Coastal fisheries are important for subsistence purposes, and also generate income for atoll communities. RMI's well-recognized remote and pristine outer atoll lagoons are considered suitable for targeted commercial mariculture development. The Marshall Islands Marine Resources Authority is investing heavily in formulating its outer island work programmes, involving both coastal fisheries and mariculture research and development. A cautious and transparent approach is needed, with attention to partnerships between communities and private business concerns and the use of incentives involving seed funding, technical assistance, transport facilitation, and other support activities.

**16 FAO/FishCode. Report of the Conference on the National Strategy for Marine Fisheries Management and Development in Viet Nam. FAO/FishCode Review. No. 16. Rome, FAO. 2005. 64p.**

The Conference on the Strategy for Marine Fisheries Management and Development in Viet Nam, (Hanoi, 26 – 27 April 2005) was organized by the Ministry of Fisheries of Viet Nam (MOFI) in close collaboration with the Research Institute Marine Fisheries, the DANIDA Fisheries Sector Programme Support (FSPS) and the FAO FishCode Programme. It represented the culmination of a process that started in 2003 with the Conference on

Responsible Fisheries in Viet Nam and that included a number of local level consultations as well as a senior expert meeting in 2004. The 2005 Strategy Conference was attended by a wide range of sectoral stakeholders, representing local and commercial fisheries interests, national and provincial government bodies, bilateral development assistance agencies and international organizations. Observations and recommendations received from the Conference have provided a basis for MOFI to finalize the Strategy for official Government approval.

**17 Macfadyen, G.; Cacaud, P.; Kuemlangan, B. Policy and legislative frameworks for co-management. Paper prepared for the APFIC Regional Workshop on Mainstreaming Fisheries Co-management in Asia Pacific. Siem Reap, Cambodia, 9–12 August 2005. FAO/FishCode Review. No. 17. Rome, FAO. 2005. 51p.**

This paper was prepared for the Asia-Pacific Fisheries Commission workshop on mainstreaming fisheries co-management, held in Cambodia in August 2005. It examines the policy and legislative frameworks for co-management in thirteen countries in Asia and the Pacific, and the extent to which these frameworks hinder or support co-management practices. The nature of policy and legislative frameworks is varied, as is commitment by governments to co-management – in some cases support is more rhetoric than reality, with insufficient real transfer of powers and financial resources to local levels. Through an analysis of the different case studies, “lessons learned” are presented and a number of conclusions drawn about the key characteristics of a supportive policy and legislative frameworks based on some ideas about “best practice”. The adoption of these characteristics by governments would demonstrate their commitment to co-management and increase the likelihood of co-management success.

**18. FAO/FishCode. Report of the Global Fisheries Enforcement Training Workshop. Kuala Lumpur, Malaysia, 18–22 July 2005. FAO/FishCode Review. No. 18. Rome, FAO. 2007. 66p.**

The Global Fisheries Enforcement Training Workshop (Kuala Lumpur, Malaysia, 18–22 July 2005) brought together operational-level monitoring, control and surveillance (MCS) professionals for the global community who are dedicated to resolving illegal,

unreported and unregulated (IUU) fishing issues. Hosted by the Government of Malaysia in cooperation with the MCS Network, the FAO FishCode Programme and the European Union, the Workshop provided participants with training on a wide range of MCS topics and gave them the opportunity to share information and experiences, latest developments and new ways to improve fisheries enforcement. Among other subjects, the Workshop reviewed enforcement techniques and MCS operations through individual presentations, case studies and panel discussions. Participants discussed a wide range of tools available to assist countries in dealing more efficiently with IUU fishing, as well as methods of applying these tools through legal systems.

**19. Gillett, R.; Moy, W. Spearfishing in the Pacific Islands. Current status and management issues. FAO/FishCode Review. No. 19. Rome, FAO. 2006. 72p.**

Spearfishing is growing in importance in the Pacific Islands. While its management has featured as a topic in some regional-level meetings, detailed information on spearfishing is surprisingly scarce. In early 1994, the Secretariat of the Pacific Community (SPC) proposed to consolidate information on spearfishing in the Pacific Islands. The original intent was to undertake a review of the available literature through a desk study. With the realization that many issues related to spearfishing are undocumented, the strategy was changed to include some field work. These activities were supported by the FAO FishCode Programme. This report reviews spearfishing in selected Pacific Island countries and identifies the important species caught by and the major problems associated with the method. It further considers possible interventions to mitigate these problems and the assistance that is likely to be required by Pacific Island countries in the management of their spearfisheries. For several reasons, a complete ban of scuba spearfishing coupled with effective enforcement is the single most important spearfishing management measure.

**20. Wilkinson, Simon and Collins, Jean. Information in support of responsible fisheries and aquaculture. Guidelines on digital publishing: a practical approach for small organizations with limited resources. FAO/FishCode Review. No. 20. Rome, FAO. – in preparation.**

For further information, or to obtain copies,  
please contact:

FishCode Programme/Fisheries Department  
Food and Agriculture Organization of the United Nations  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
**Tel.:** (+39) 06 5705 5396/6807 **Fax:** (+39) 06 5705 6500  
**E-mail:** FishCode@fao.org  
<http://www.fao.org/fi/fishcode.htm>







The Global Fisheries Enforcement Training Workshop (Kuala Lumpur, Malaysia, 18–22 July 2005) brought together operational-level monitoring, control and surveillance (MCS) professionals for the global community who are dedicated to resolving illegal, unreported and unregulated (IUU) fishing issues. Hosted by the Government of Malaysia in cooperation with the MCS Network, the FAO FishCode Programme and the European Union, the Workshop provided participants with training on a wide range of MCS topics and gave them the opportunity to share information and experiences, latest developments and new ways to improve fisheries enforcement. Among other subjects, the Workshop reviewed enforcement techniques and MCS operations through individual presentations, case studies and panel discussions. Participants discussed a wide range of tools available to assist countries in dealing more efficiently with IUU fishing, as well as methods of applying these tools through legal systems.



---

**For further information:**

FishCode Programme  
Fisheries Department  
Food and Agriculture Organization of the United Nations  
Viale delle Terme di Caracalla  
00153 Rome, Italy  
Tel: (+39) 06 5705396/6807 Fax: (+39) 06 57056500  
E-mail: [FishCode@fao.org](mailto:FishCode@fao.org)  
[www.fao.org/fi/fishcode.htm](http://www.fao.org/fi/fishcode.htm)

