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Report of the

EXPERT CONSULTATION ON DATA FORMATS AND PROCEDURES FOR MONITORING, CONTROL AND SURVEILLANCE

Bergen, Norway, 25–27 October 2004

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
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PREPARATION OF THIS DOCUMENT

This document contains the final report of the Expert Consultation on Data Formats and Procedures for Monitoring, Control and Surveillance, held in Bergen, Norway from 25 to 27 October 2004. The Consultation was convened as requested by the Twenty-fifth Session of the Committee on Fisheries (COFI), with a view to facilitating implementation of the International Plan of Action to Deter, Prevent and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU).

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The collaboration of Sigmund Engestæter, Ellen Fasmer, Grethe Kuhnlem and their colleagues at the Norway Directorate of Fisheries in arranging the Expert Consultation is gratefully acknowledged. Special thanks are due to Tania Abdirizzak, Pilar Bravo de Rueda Cabrera, Mary Cullinan and Giovanna Martone-Boccia of the FAO Fisheries Department for the effective administrative support they provided during planning and implementation of the Consultation. The able assistance of Robert Harman, Kieran Kelleher and Robert Gallagher with preparation and presentation of the reference documents, meeting logistics and finalizing the Consultation report is also acknowledged with thanks.

This document is issued in English, the language in which the Expert Consultation was conducted.

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FAO Fisheries Department
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ABSTRACT

This document contains the report of the Expert Consultation on Data Formats and Procedures for Monitoring, Control and Surveillance (MCS) held in Bergen, Norway, from 25 to 27 October 2004. The Expert Consultation was convened in accordance with the recommendation of the FAO's Committee on Fisheries, with a view to facilitating implementation of the International Plan of Action to Deter, Prevent and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU). The Consultation was hosted by the Directorate of Fisheries, Norway, and attended by 14 experts and resource persons. Participants were invited in their individual capacities, based on their experience with data formats and procedures in MCS.

The experts focused on the harmonization of data formats for MCS information that is exchanged internationally. Background papers presented to the Consultation covered topics including: fishing vessel monitoring system (VMS) reporting procedures; licences and fishing authorizations; exchange of catch certificates and trade documents; electronic fishing logbooks; progress made by the Coordinating Working Party on Fishery Statistics (CWP); and the use of Customs Tariff Codes, and linkages with traceability and ecolabelling.

A round-table discussion following the presentations led to the adoption of several recommendations for more effective harmonization and exchange of MCS information. The Consultation emphasized that an efficient path to standardized data formats would be the use of existing and developing data sets from the CWP. The Consultation recommended, *inter alia*, that the CWP be encouraged to establish a formal process for proposing and advising on standards and formats for the exchange of MCS data, in particular where such data have not been the subject of previous CWP recommendations. The Consultation recommended that the CWP should consider adopting the North Atlantic Format as a model for the standard for exchange of a range of MCS data and communications. In addition, the CWP, in coordination with regional fisheries management organizations and other stakeholders, should continue efforts to standardize field codes and formats for data in vessel databases. Other recommendations addressed the use of United Nations Code for Trade and Transport Locations (UN-LOCODE) for specifying locations, the introduction of standard codes for communication of information on vessel authorizations to fish, and the need to specify codes for exchange of information on defined violations.

CONTENTS

Acronyms and abbreviations

CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCRF	Code of Conduct for Responsible Fisheries
CCSBT	Commission for the Conservation of Southern Bluefin Tuna
COFI	Committee on Fisheries, FAO
COLTO	Coalition of Legal Toothfish Operators
CWP	Coordinating Working Party on Fishery Statistics
EC	European Community
EDIFACT	Electronic Data Interchange for Administration, Commerce and Transport
EEZ	Exclusive Economic Zone
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FFA	South Pacific Forum Fisheries Agency
FMC	Fisheries Monitoring Centre
GIS	Geographical Information System
HSVAR	High Seas Vessels Authorization Record, FAO
IATTC	Inter-American Tropical Tuna Commission
ICCAT	International Commission for the Conservation of Atlantic Tunas
IOTC	Indian Ocean Tuna Commission
ISO	International Organization for Standardization
ISSCFC	International Standard Statistical Classification of Fishery Commodities
ISSCFV	International Standard Statistical Classification of Fishing Vessels
IUU Fishing	Illegal, Unreported and Unregulated Fishing
MCS	Monitoring, Control and Surveillance
NAF	North Atlantic Format
NAFO	Northwest Atlantic Fisheries Organization
NEAFC	North East Atlantic Fisheries Commission
RFMO	Regional Fisheries Management Organization
SHEEL	Secure and Harmonised European Electronic Logbook
UNFSA	“United Nations Fish Stock Agreement”, properly 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
UN-LOCODE	United Nations Code for Trade and Transport Locations
VMS	Vessel Monitoring System
XML	Extensible Markup Language

INTRODUCTION

1. The Expert Consultation on Data Formats and Procedures for Monitoring, Control and Surveillance was held from 25 to 27 October 2004 in Bergen, Norway.

2. Participants, who attended in their personal capacity rather than as representatives of their agency or organization, noted that the convening of the Expert Consultation had been endorsed by the twenty-fifth session of the FAO Committee on Fisheries (COFI) in February 2003, and that Norway had offered to host it. The report of the Expert Consultation would be made available at the twenty-sixth session of COFI in March 2005.

ELECTION OF OFFICERS

3. The experts unanimously elected Mr Sigmund Engesæter as Chair of the Consultation and Dr Saif Al-Ghais as Vice-Chair.

ADOPTION OF THE AGENDA

4. The Consultation adopted the agenda as contained in Appendix A to this report.

5. The list of the participants, resource persons and members of the secretariat is provided in Appendix B.

6. The list of reference documents[1] discussed at the Consultation is provided in Appendix C.

VESSEL MONITORING SYSTEM REPORTING PROCEDURES

7. The Consultation noted that fishing vessel monitoring systems (VMS) typically report in one, or a combination, of three scenarios:

a) domestic fishing (vessels reporting to their national authority and normally fishing within their own flag State's EEZ);
b) distant water fishing (foreign vessels within the EEZ of a coastal State and reporting to that State); or
c) high seas fishing (vessels reporting to regional fisheries management bodies).

8. The experts noted that VMS control centres are usually located within a national fisheries agency's fisheries monitoring centre (FMC). The VMS control centre validates and stores the data reports, and facilitates their display and analyses. The VMS is essentially a specialized geographical information system (GIS) for the historical and statistical analysis of the positions of fishing vessels. Vessel Monitoring Systems are increasingly being used to collect, collate and interpret catch, effort data and other fisheries information.

[1] Available at: www.fao.org/fi/NEMS/events/fisheries_events.asp?lang=en

9. For suitable fisheries, VMS programmes have been widely used in developed countries to complement other management measures. In many developing countries such systems are gradually being introduced, often through pilot projects.

10. VMS programmes have been implemented for a variety of strategic objectives. In Iceland, all fishing vessels are obliged to be equipped, primarily for safety reasons. In other European countries, VMS has been progressively deployed on fishing vessels according to size classes, starting with the larger industrial vessels of 24 meters and subsequently to vessels of 15 meters. In the USA, VMS has been introduced on a fishery-by-fishery basis to enforce underlying regulations, such as those relating to restricted areas or time quota (effort limitations).

11. In some countries the VMS architecture has been "open". This means that multiple communications systems, for example, using different satellites, are used to communicate with fisheries monitoring centres. Other VMS programmes mandate the use of a single type of shipboard equipment and means of communication. The improved communications and availability of vessel position information through VMS also provides significant benefits to fishers in the event of emergencies at sea.

12. The Consultation noted that in some countries, mandating a certain type of equipment may be contrary to national policy, because such mandates are perceived as inhibiting product development and innovation. The VMS legislation may set out the functional specification for the on-board VMS equipment, rather than specifying the type of equipment. It was pointed out, however, that by dissuading proprietary formats, the standardization of data formats could in some cases provide an incentive to promote technological development.

13. The Consultation stressed that the fundamental differences between a position report that could be generated automatically and a message report that would require manual input from the originator. A further distinction was drawn between data that had to be reported in near real time and catch and effort data that could be delayed until the fishing vessel had landed its catch.

14. In some cases, the data in VMS position reports are packaged in a manner that is sub-optimal in terms of message size and cost. Concern was expressed that, as the volume of VMS reports has increased, so has the volume of lost messages. The possibility was discussed of approaching the service providers to request that they establish a dedicated VMS format for position reports. The format should be non-proprietary and freely available for use by all. The VMS position report should include, as a minimum, a unique identifier for the originator of the report, date, time, longitude, latitude, speed and course.

15. The Consultation noted the detailed and well-established vessel position and catch reporting formats and standards agreed at international level in the North Atlantic and used by the North East Atlantic Fisheries Commission (NEAFC), the Northwest Atlantic Fisheries Organization (NAFO), and several bilateral agreements in the area. These standards and formats are known as the "North Atlantic Format" (NAF). Similar formats and standards have recently been proposed for adoption by the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR). The NAF is computer readable and can be imported into databases. The messages are

short and compact, which reduces communication costs. The NAF ensures that most critical information required for MCS is effectively transmitted and facilitates exchange of information between VMS programmes. The possible evolution of the NAF to an XML format was noted.

16. The Consultation considered whether or not the design, concepts and codes used in the NAF could be adopted as an international standard for VMS position, catch and activity reporting, and it was agreed that the suitability of the NAF for such purposes be brought to the attention of the Coordinating Working Party on Fishery Statistics (CWP)[2].

CATCH AND ACTIVITY REPORTING

17. The Consultation recognized that, while the key data generated and transmitted by the VMS is with respect to the position of the vessel, the VMS is a communications tool and it is increasingly used for reporting of vessel catches and activities. The Consultation noted an evolving and rapidly expanding spectrum of electronic reporting by vessels, ranging from the basic position reports to catch and activity reports to electronic logbooks.

18. The Consultation noted that the NAF made provisions for the formats required for catch and activity reporting, including catch on entry to an EEZ (or management area), transshipment, and for notifications from the authorities to the fishing vessels.

19. The Consultation agreed that States should ensure that vessels communicating information that is not generated automatically, such as “catch on board on entry to an EEZ” reports (also known as “hail” reports) be provided with a verification message confirming to the vessel operator that the communication has been received.

FISHING VESSEL DATABASES

20. The Consultation noted the requirements of flag States to communicate information to FAO with respect to fishing vessels authorized to fish on the high seas, in accordance with the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, and that a High Seas Vessel Register (HSVAR) had been established in FAO for such a purpose.

21. The Consultation agreed that the exchange of information between parties maintaining such vessel databases could be facilitated by the standardization of data formats, as already noted by the CWP at its Victoria meeting in 2003. The Consultation considered that the CWP, in close coordination with relevant Regional Fisheries Management Organizations (RFMOs), review standards and codes for information used to identify and describe vessels in vessel databases, in particular in vessel databases established at an international level for the purposes of compliance control.

[2] Also see section on the mission and activities of the CWP later in this report.

22. The experts noted that several RFMOs and other organizations maintain lists of delinquent and authorized fishing vessels, but noted that lists of delinquent vessels rarely contain information on violations. The Consultation was informed of the NEAFC system of preparing "A" lists of vessels that are provisionally considered delinquent, and "B" lists of vessels determined to be delinquent and are to be denied access to ports and services of NEAFC Member States. Similar vessel databases are in use in other RFMOs (e.g. the Forum Fisheries Agency and CCAMLR), non-governmental entities (e.g. the Coalition of Legal Toothfish Operators, COLTO) and flag States.

23. The Consultation noted that at least one fishing vessel database contained crew lists, details of the Certificate of Registry, details of the officers' Certificates of Competency, and even the Social Security Numbers of the crew.

FISHING AUTHORIZATIONS AND VIOLATIONS

24. The need was noted for flag States to transmit certain information to RFMOs and coastal States on vessel authorizations to fish, as required under Article 7 of the Code of Conduct for Responsible Fisheries (CCRF) and Articles 18.3(a) and 19.2 of the United Nations Fish Stock Agreement (UNFSA).

25. The Consultation considered that the CWP could be approached with regard to the standards for such information. These standards would provide for communication of information on the period of validity of the authorization and withdrawal of the authorization.

26. The Consultation also noted that few schemes exist at an international level for the definition of violations and sharing of information on violations. The Consultation considered that parties, in close coordination with the CWP, may wish to establish definitions for major violations of management measures, and also propose standard descriptors and codes for international exchange of information on violations.

27. The Consultation was informed that the International MCS Network[3] has been taking steps to establish a mechanism for sharing MCS related information. This recently formed network is a voluntary arrangement of national organizations charged with fisheries enforcement that informally shares experiences and information in order to combat IUU fishing.

EXCHANGE OF CATCH CERTIFICATES AND TRADE DOCUMENTS

28. Catch certificates have been introduced to identify the origin of catches and to track the fish product as it moves through the market chain. If the product enters into international trade, catch certificates are referred to as trade documents. Catch certificates and trade documents were first introduced to monitor trade in tunas and swordfish.

29. The International Commission for the Conservation of Atlantic Tunas (ICCAT) introduced catch certification to monitor catches of bluefin tuna in 1995, and was

[3] www.imcsnet.org

successful at identifying unreported catches. The trade certificates were then used to impose trade embargoes on the import of un-reported bluefin catch into Japan and Europe, and forced several "flag of convenience" countries to join ICCAT, and to implement their Rules and Regulation, including reporting. Numerous fishing vessels that did not wish to be constrained by the ICCAT regulations changed their flags.

30. The success of the ICCAT bluefin tuna measures encouraged the extension of the measures to other species within ICCAT, i.e. swordfish and bigeye tuna. Other RFMOs also adopted similar schemes, e.g. the Indian Ocean Tuna Commission (IOTC), the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) and the Inter-American Tropical Tuna Commission (IATTC). CCAMLR also introduced a similar scheme for Patagonian toothfish.

31. The Consultation reaffirmed the recommendations of the 2002 Expert Consultation of Regional Fisheries Management Bodies on Harmonization of Catch Certification Schemes held in La Jolla, USA. These recommendations are reiterated here for completeness:

a) FAO should investigate the possibility of uniquely identifying fishing vessels.
b) The terms and codes used in catch certification and trade documentation for species, fishing gear etc. should be those adopted by the CWP, and the International Organization for Standardization (ISO) codes should be used for the country codes.
c) FAO should design standard forms based on forms already in use, in consultation with the users of the forms and FAO should encourage their use by current and future schemes.
d) Efforts should continue to achieve harmonization of tariff commodity codes to adequately describe the species subject to trade documentation. Where they exist such codes should be incorporated into the trade documents where a code is available.
e) Consideration should be given to flag States reporting all information contained in catch certificates or trade documents to a central database used by the responsible RFMO.
f) Priority for development of new schemes should be given to fisheries that are or may be subject to significant levels of IUU fishing.
g) Where redundancy in catch certificate and trade document among schemes occurs, RFMOs should consult with an aim to eliminating duplicative documents and to eliminating opportunities for fraud.
h) Further consideration should be given to the feasibility of developing electronic systems for producing information for catch certificates and trade documents.
i) Until an electronic format is developed and implemented effort should be made to limit the size of each document to one page size A4.
j) Consideration should be given to assisting developing countries in meeting the requirements of any catch certification or trade documentation scheme.

32. The Consultation briefly discussed the acquisition and transmission of reliable information which may be needed to apply the USA's Lacey Act and similar effective legislation in force in other jurisdictions. This is a conservation law that allows USA authorities to seize fish and to prosecute those involved, in situations where the fish

were harvested, possessed or transported illegally in one jurisdiction (State) and then imported into the USA.

ELECTRONIC LOGBOOK DATA REQUIREMENTS

33. The Consultation considered that electronic logbooks require manual data entry, in contrast to vessel position reports, where the data are automatically generated. The data sets required for the electronic logbook must be determined by the information users. These include fish buyers, fisheries statisticians, fisheries managers and enforcement agencies. In addition to the different user requirements, it is important to make use of the most economical and universally recognized formats for data capture. This will minimize communication costs and, where applicable, facilitate international exchange of market information, or of data required under bilateral, or multilateral fisheries arrangements.

34. The benefits of electronic logbooks include reducing illegible entries, reducing data entry errors at the FMC, securing and verifying authorized data entries, timely submission of catch and other information in relation to management requirements, increased efficiency (concomitant reduction of costs) of data entry, timely verification from other data sources (e.g. landings) and access to electronic markets.

35. The experts noted that electronic logbook data need not necessarily be transmitted via a VMS, or even transmitted at all. The logbook information could be transmitted via radio, email, fax or other means. In many fisheries, electronic logbooks are not transmitted at all; the information is stored aboard the vessel for later submission to, or downloading by, the fishery agency. Further, the experts agreed that electronic logbooks are not always required for daily reporting.

36. Electronic logbook programmes have been used or under development in many regions and nations around the world, including the USA, Japan, Iceland, Australia, European Union (EU) and others. The experts provided two examples of electronic logbook systems, while noting that these programmes were not necessarily any more or less desirable than other electronic logbook systems now in use or under development.

a) The Secure and Harmonised European Electronic Logbook (SHEEL) is a project financed by the European Community (EC) and undertaken by several EU Member States, Norway and Iceland, in cooperation with the private sector. The EC's Directorate of Fisheries is not, however, committed to adopting such a programme. The objective is to develop, implement and demonstrate a secure, cost effective and harmonized electronic logbook for European fisheries. Specifically, it is intended that SHEEL (i) define the message type and format, the user interface and the services of the system that will facilitate on board inspections; (ii) define all the security measures for ensuring secure data transmissions; and (iii) define the system requirements for transmitting the fisheries report via several communication services.

b) The Norwegian SatRap system was developed to assist the vessel master with registration of catch and activity reports. Predefined code lists prevent the user from registering wrong codes. The result of a completed registration becomes

a small file in the North Atlantic Format (NAF) that is also encrypted. All messages contain an authenticity code and are saved in an encrypted log. The system requires that the vessel uses an electronic key or "dongle" which is programmed by the Directorate of Fisheries in Norway. The system also gives the ability to confirm whether a message had been sent or not.

37. The discussion of electronic logbooks highlighted a number of design and implementation issues that need to be addressed:

a) the scope of the electronic logbook, i.e. will they be limited to the replacement of the paper logbook in force, include activity reports, effort reports, observer/inspector data, etc.;
b) whether or not the electronic logbook will be used in parallel with a paper logbook (for legal reasons of signature, etc.);
c) management of the process of converting to a totally electronic system;
d) the need for acknowledgement or confirmation of messages that had been sent from electronic logbooks;
e) whether the electronic logbooks would be mandatory or voluntary, i.e. allow individual fishers to decide if they want to switch from the paper logbook, or not;
f) means of integration into regulatory frameworks, with particular attention to the evidential value of the information obtained from the electronic logbook;
g) compatibility and inter-operability of the flag State logbooks with the requirements of third countries and of RFMOs;
h) the issue of compatibility, particularly with regard to language;
i) choice of data standards (e.g. North Atlantic Format, XML, UN/ECE EDIFACT, etc.);
j) routing of the information (to flag State, to coastal State, to RFMO, etc.);
k) problems of back-up and recovery procedures in case of technical failures; and
l) anti-fraud provisions.
m) Should electronic logbooks be used only in specific fisheries or on board specific size classes of vessels?
n) Should electronic logbooks be required only for vessels fitted with VMS, or also for non-VMS vessels?

38. The Consultation considered the implementation of an electronic logbook system whereby the initial implementation was restricted to a small "pilot" group of users. Later phases would expand to include larger groups, and ultimately, the scheme would be made compulsory for all users in the regulated fishery.

39. The Consultation reviewed a programme where financial rewards were offered for the submission of logbooks. This scheme had not proven to be completely effective, and a more efficient system to collect comprehensive fisheries data was being sought.

40. The Consultation confirmed that near real time position reports are particularly sensitive and must be handled in strict accordance with the law, and the confidentiality requirements of the industry. The electronic submission of catch information which can be linked in near-real time with position reports increases the sensitive nature of the data, with a heightened need for safeguards and data security.

USE OF DATA SETS FROM THE COORDINATING WORKING PARTY ON FISHERY STATISTICS

41. The Coordinating Working Party on Fishery Statistics (CWP) was established in 1959-60, with origins in the North Atlantic area. The CWP has evolved over time, and now has a global mandate. The group is comprised of fisheries management, advisory and scientific bodies, with the FAO functioning as secretariat. The mandates of the CWP are to:

a) keep under continuous review the requirements for fisheries (including aquaculture) statistics for the purposes of research, policy making and management taking into account, *inter alia*, their purpose usefulness, costs, burden in collection and collation, timeliness, quality, confidentiality needs and regional differences;
b) develop and agree standard concepts, definitions, classifications and methodologies for the collection and collation of statistics; and
c) make proposals and recommendations for action in relation to the collection and collation and dissemination of fishery statistics recognising the need to coordinate activities so as to avoid duplication.

42. The CWP[4] has produced a Handbook of Fisheries Statistical Standards which presents harmonized definitions and classifications developed over many years. These include, *inter alia*, different catch concepts, catch nationality, logbooks, conversion factors and fisheries commodities classifications.

43. Of particular interest to MCS, the CWP has developed or recommended upon:

a) country or area codes (3-alpha ISO code);
b) inter-agency 3-alpha code to report statistics by species items[5] and groups of aquatic animals and plants (ISSCAAP);
c) fishing gears (ISSCFG);
d) major fishing areas for statistical purposes;
e) fishing vessels, through the International Standard Statistical Classification of Fishery Vessels (ISSCFV); and
f) commodities, through the International Standard Statistical Classification of Fishery Commodities (ISSCFC).

44. The Consultation recognized the significant progress made in the area of data format standardization by the CWP, and noted that, with assistance from the FAO, CWP members could enhance the usefulness of the CWP to fisheries MCS by:

a) recommending field codes and data formats or database interchange formats for fishing vessel databases, to facilitate the crosschecking of vessel records in such databases;
b) recommending standards for international communication of information on fishing vessel authorizations; and

[4] www.fao.org/fi/body/rfb/cwp/cwp_home.htm
[5] Compiled in the "ASFIS list of species for fishery statistics purposes" (downloadable at www.fao.org/fi/statist/fisoft/asfis/asfis.asp)

c) adopting the United Nations Code for Trade and Transport Locations[6] (UN-LOCODE) as a standard for identification of fishing ports in fisheries-related databases and international exchange of fisheries data; and
d) recommending definitions for major violations and codes for the international exchange of information on major violations.

45. The experts were of the understanding that there appeared to be no formal procedure for establishing international standards for fisheries data and were of the view that FAO, through the CWP, could propose a formal procedure to propose, review and recommend upon such standards as may be required. The procedures used by other international bodies such as ISO may provide a suitable model.

USE OF CUSTOMS TARIFF CODES

46. It was noted that a number of coding systems existed for fish and fish products, including:

a) Harmonized System (2002): Codes for fish and fisheries products (World Customs Organization);
b) Combined Nomenclature (2004): Codes for fish and fish products (European Community);
c) Harmonized Tariff Schedule (2004): Codes for fish and fish products (USA);
d) Customs Tariff Nomenclature (2002) Codes for fish and fish products (Thailand); and
e) International Standard Statistical Classification of Fishery Commodities (FAO).

47. The experts noted that the CWP had compiled a document cross-correlating the more important of these: FAO's ISSCFC; the International Statistical Standard for the Classification of Aquatic Animal and Plants; the UN Statistical International Trade Classification; and the Harmonised System of the World Customs Organisation. The Consultation expressed its desire that the use of common codes be pursued and that, for fisheries MCS, the code be the FAO ISSCFC.

LINKAGES WITH TRACEABILITY AND ECOLABELLING

48. The experts remarked that traceability is a relatively new concept, introduced in fisheries to assist in improving food safety. The implementation of new regulations within the EU now requires that all food products be traceable back to their source, so that if a food recall were required, all food products emanating from a particular source or through a particular process could be identified and recalled.

49. The advances made by the EC-funded TRACEFISH[7] project were noted. The project developed specifications for information to be generated and held by the food businesses involved in captured fish distribution chains and a technical specification for the electronic encoding of the data involved. The specifications include vessel units, trade units (e.g. individual fish, fish box, fish hold, batch, etc.), and logistic

[6] www.unece.org/cefact/locode/service/main.htm
[7] www.tracefish.org

units with respect to the different actors in the production and distribution chain (e.g. vessel operators, fish auctions, transporters and processors).

50. Ecolabelling in fisheries differs from traceability in that it is designed to ensure that fish for food had been caught in a sustainable or responsible manner. For example, several non-governmental entities are advocates of this process and have certified certain fisheries as being the conducted in a sustainable manner, enabling the products to be labelled accordingly, with the intended goal that such products be preferred by consumers.

51. Ecolabelling and traceability address similar issues and problems and could use similar codes and data formats as in VMS and MCS. The labels or documentation, however, must accompany the products, which is a different concept from VMS and MCS where the objective of the communication is to determine activity remotely. The Consultation, therefore, felt it could not make any recommendations in this regard other than that noting that the promoters of such schemes should also use CWP codes.

52. The experts noted that the market, i.e. consumers, were playing an increasingly large part in demanding increased information about their food products and labelling of fisheries products and, thus, influencing the content and format of information related to these activities.

RECOMMENDATIONS ON DATA FORMATS AND PROCEDURES FOR MCS

53. The experts noted that many of the issues raised at the Consultation had already been the subject of recommendations by other Expert Consultations and similar meetings where the need had been reaffirmed for an effective clearinghouse of MCS data formats and standards.

54. The Consultation further noted that the CWP membership represented most of the parties concerned with the international exchange of MCS information, and considered the CWP to be the primary international body for this purpose.

55. The Expert Consultation recommended as follows:

a) When establishing data formats and procedures for MCS, States, RFMOs and other entities that are concerned with the international exchange of MCS data, are encouraged wherever possible to make use of the existing international codes and standards as recommended by the CWP.

b) FAO should take measures to increase awareness of the mission and objectives of the CWP, improve access to the CWP web site and documents, and facilitate greater use of standards already agreed for fisheries data formats and procedures.

c) The CWP should establish procedures for the proposal and adoption of internationally acceptable data formats and procedures for MCS, including a mechanism for achieving CWP consensus by remote means, so that the CWP

can facilitate its role as a clearinghouse for international fishery data standards and procedures.

d) FAO, in close coordination with the CWP, should identify gaps and/or conflicts in existing data standards, and pursue initiatives to establish required international standards.

e) The CWP should encourage newly established RFMOs and current non-member RFMOs to adopt existing international standards for data collection, recording and international exchange, and to seek membership in the CWP with a view to playing an active role in its activities.

f) Where different coding schemes are used for describing equivalent data elements, FAO should prepare and make available, through the CWP web site and reports, tables indicating the correspondence between the codes as a step towards possible harmonization of such codes.

g) The Secretariat of the CWP should provide copies of this report ("Report of the Expert Consultation on Data Formats and Procedures for Monitoring, Control and Surveillance, Bergen, Norway, 25–27 October 2004") to the members of the CWP.

h) Flag States should require that their vessels report directly to the flag State's FMC.

i) The CWP should consider the "North Atlantic Format" for adoption as the model for developing an international standard for VMS position and catch reporting, and the CWP should enter into a dialogue with NEAFC with regard to the custodianship of the international format, and establish protocols for future alterations of the international format.

j) All flag States should establish an electronic database of their fishing vessels, with particular reference to large vessels and vessels operating outside the waters under their jurisdiction. In establishing such databases, flag States should take due notice of the database structures and codes used at international level.

k) The CWP, with assistance from FAO and CWP members, should:

   (i) recommend field codes and data formats, or database interchange formats, for fishing vessel databases, such as those required under the Compliance Agreement, in order to facilitate the crosschecking in, and exchange among, databases of fishing vessels;
   (ii) recommend standards for the international exchange of information on fishing vessel authorizations;
   (iii) adopt the UN-LOCODE as a standard for identification of fishing ports in fisheries-related databases and international exchange of data; and
   (iv) recommend definitions for major fisheries violations and the respective codes for violations to facilitate international exchange of information on violations.

l) FAO should synthesize available information on electronic logbooks with a view to establishing standard data formats. Where possible, fisheries authorities should use existing codes and formats as recommended by the CWP.

m) Ecolabelling certification bodies should use internationally accepted codes as recommended by the CWP.

ADOPTION OF RECOMMENDATIONS AND REPORT

56. This report and its recommendations were adopted by the Expert Consultation on 27 October 2004.

APPENDIX A

Agenda

1. Opening of session
2. Election of Chair and Vice-Chair
3. Adoption of the agenda
4. VMS reporting procedures

4.a Licences and fishing authorizations

5. Exchange of catch certificates and trade documents
6. Electronic logbook data requirements
7. Use of data sets from the Coordinating Working Party on Statistics
8. Use of Customs Tariff Codes
9. Linkages with traceability and ecolabelling
10. Other matters
11. Adoption of the recommendations and report

APPENDIX B

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APPENDIX C

LIST OF DOCUMENTS

VMS Reporting Procedures

Exchange of Catch Certificates and Trade Documents

Electronic Logbook Data Requirements

Use of data sets from the Coordinating Working Party on Statistics

Use of Customs Tariff Codes

Linkages with Traceability and Ecolabelling

International network for the cooperation and coordination of fisheries-related monitoring, control and surveillance activities: Technical terms of reference

North East Atlantic Fisheries Commission: Scheme of Control and Enforcement

NEAFC Monitoring, Inspection and Surveillance Communication System (Draft)

CCAMLR XXII Report - Annex 9

The Expert Consultation on Data Formats and Procedures for Monitoring, Control and Surveillance, held in Bergen (Norway) in October 2004, made a number of recommendations for more effective harmonization and exchange of fishing vessel information, with a view to facilitating implementation of the International Plan of Action to Deter, Prevent and Eliminate Illegal, Unreported and Unregulated Fishing. The experts emphasized that an efficient path to standardized data formats would be the use of existing and developing data sets from the Coordinating Working Party on Fishery Statistics (CWP). Topics covered at this meeting included: fishing vessel monitoring system reporting procedures; licences and fishing authorizations; exchange of catch certificates and trade documents; electronic fishing logbooks; progress made by the CWP; the use of Customs Tariff Codes; and linkages with traceability and ecolabelling.

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