

CCSBT-ESC/0309/14

7.2 CCSBT Collaboration with FIGIS/FIRMS

Purpose

To review the concept of FIGIS-FIRMS and to recommend to the Commission on the practicality of CCSBT entering into a FIRMS partnership arrangement with FAO.

Any recommendation on the partnership arrangement should include advice on an appropriate contribution from the CCSBT (e.g. level of detail of any aggregate data provided) and a suitable timeline for CCSBT contributions.

Background

At CCSBT 8, the Commission agreed in principle to cooperating with FAO on the FIGIS-FIRMS system, but as there would be budgetary and resource implications, the Commission also required a draft agreement before any firm decisions could be made.

The Fisheries Global Information System (FIGIS) is a web based information management tool developed by FAO that is designed to offer a single entry point to strategic information and data on a broad range of fisheries subjects. FIGIS contains a suite of tools that allow users to: use a search engine to find fisheries information they require; view dynamically generated fact sheets, create queries to obtain various types of statistics in tabular or graphical formats; and to access many other types of information such as glossaries, maps, references and reports etc.

FIGIS is a tool that requires the presence of an underlying suite of quality information to be useful. The system for providing the quality information for fisheries resources is known as the Fisheries Resources Monitoring System (FIRMS). FIRMS is perhaps best described as being a collection of partnership arrangements with FAO together with the information and data provided by these partnership arrangements.

The principal objective of the FIRMS arrangement is to promote development and extension of fisheries status and trends reporting to all fishery resources by:

- building a community of responsible institutions that will report in an objective way on fisheries status and trends, thus contributing to the promotion of responsible fisheries management; and
- developing, sharing and maintaining services for the collation, management and dissemination of information.

The FIRMS partnership arrangement is based on the following principles:

- information on fisheries is shared and appropriately disseminated;
- contributions remain within the full control and ownership of the Partner which has primary monitoring or management responsibility over resource and fishery units, including control of what and when information is made available, and how it is processed; and
- whenever possible, the Partner will maintain the documentation on information sources, ownership, data origins and collection methodologies, and on their rules on dissemination and publication.

A final draft of the FIRMS partnership arrangement has been developed between FAO and the Regional Fishery Bodies (RFB's). This draft is provided at Attachment A. It is expected that most RFB's will be signing this arrangement in the near future. ICCAT, IATTC and IOTC have already indicated to the FAO that they will participate, although formal agreement has not been completed. The FIRMS timeline seeks a minimum of five signatories by 1 February 2004.

The major responsibilities for a FIRMS Partner (from Article 3 of the Partnership Arrangement) are:

- To present for inclusion in the FIRMS databases fishery assessment and management reports, statistics and other related information in a timely manner and according to its own policies on ownership, transparency and quality assurance, as referred to in Annex 2;
- To collate fishery information, or to establish databases jointly with FAO or with others;
- Where compatible with their mandate, to receive and process information inputs from the Partner, in particular for developing country institutions;
- In general to ensure collaboration with and participate in the work of the FSC¹, including in the identification of information that will complement each Partner's information sources and prevent duplication, and in attending meetings of the FSC.

The precise information to be provided by Partner's has not been defined. This will be agreed (and specified in Annex 2 of the arrangement) on an individual basis to provide each Partner with the flexibility to contribute in a manner consistent with its own policies and availability of information.

Nevertheless, there is an expectation that data would be provided in accordance with applicable international standards and in sufficient detail to allow sound statistical analysis and presentation through FIRMS. Therefore, an unstated expectation exists that tuna RFB's would contribute to the Tuna nominal catches database and that they would provide aggregated total catch and effort data on a 5x5 by quarter by gear basis. In addition to data, annual reports (or information updates) would be provided by Partners and these would contain sections on the current status of the stock, current management

-

¹ FIRMS Steering Committee

arrangements and assessment approaches being used. There is also an expectation that general fishery descriptions and information reflecting accumulated scientific knowledge (e.g. SBT biology) would be provided.

Attachments B and C provide examples of a resource and stock fact sheet generated by FIGIS from information provided by ICCAT. Attachments D and E define the types of information categories that can be provided to FIGIS-FIRMS. Together, these four attachments provide an insight into the kind of information that a FIRMS Partner might provide.

It is important to note that any information contributed to FIRMS by the CCSBT would be owned and controlled by CCSBT. Placement of data and reports into the FIGIS-FIRMS system would be conducted by the CCSBT Secretariat, not FAO staff. FIGIS has been developed in such a manner as to give individual Parties complete control over their data and information. Therefore, the CCSBT can load, amend, or delete its own information on its own accord. There are also certain controls that the CCSBT can enforce over the display of its information. This can include controls such as: requiring that certain text elements are never separated in one of FIGIS's dynamically generated facts sheet (this is important to ensure that information is not presented out of context).

Discussion

The FIRMS partnership will require additional resources from members of the Extended Scientific Committee and from the Extended Scientific Committee itself.

It is envisaged that the CCSBT contribution to FIRMS would involve a significant once off workload, followed by a more manageable annual set of tasks.

The initial work would require:

- Specifying the precise details of the information that would be provided to FIRMS and the conditions under which it would be made available. This meeting of the Extended Scientific Committee needs to provide guidance on this issue.
- Preparing and agreeing to document(s) that describes the basic biology, fisheries and management of SBT in the categories required by FIGIS-FIRMS.
- Preparing and agreeing to documents that describe the exploitation of SBT and the current assessment of the resource. Again, this should be developed considering the categories of information required by FIGIS-FIRMS.
- Preparing the necessary historical data summaries. This should be provided from the CCSBT central database.
- The Secretariat undergoing training in the FIGIS-FIRMS system and prepare a "case study" for SBT. The case study would essentially be a compilation of the above information from CCSBT submitted into a private version FIGIS for evaluation.

There are two issues to consider:

- (1) whether to recommend to CCSBT 10 that the CCSBT should participate; and
- (2) the Extended Scientific Committee should consider an appropriate process and timetable for conducting the above work. The Secretariat's initial thought is that all the work should be completed prior to the 2004 ESC meeting so that the 2004 meeting can review the work and make any necessary changes prior to the information being made public following the Commission meeting in the same year.

The ongoing work of members and the Extended Scientific Committee would be to provide updated information on management, exploitation, assessment as well as updated data summaries. The Extended Scientific Committee would need to agree on the wording of updated information that was provided to FIRMS. A good way of achieving this would be to structure the Extended Scientific Committee meeting report to have sections that correspond to information requirements of FIRMS. This would then enable sections of the report to be used by FIRMS without alteration.

Prepared by the Secretariat

Revised Partnership Arrangement

From the "AD HOC MEETING ON THE ESTABLISHMENT OF THE FISHERIES RESOURCES MONITORING SYSTEM"

The attached final draft Partnership Arrangement is essentially three parts and consists of:

1. Preamble:

Recognising the origins of the need to develop the FIRMS through a variety of partnerships.

2. Articles:

- Article 1. OBJECTIVES OF THE PARTNERSHIP ARRANGEMENT
- Article 2. PRINCIPLES OF THE PARTNERSHIP ARRANGEMENT
- Article 3. PARTNERS RESPONSIBILITIES
- Article 4. PARTNERS BENEFITS AND RIGHTS
- Article 5. INSTITUTIONAL ARRANGEMENTS

3. Annexes:

These three Annexes currently contain 'Notes' that will not be included in the text of the Partnership Arrangement.

Annex 1. Current FIRMS Partners on the date of signature by the two Parties.

To be updated and revised on each new Partnership Arrangement.

Annex 2: Outline and detailed arrangements on the nature of information and the conditions under which it is made available under this partnership arrangement, including any institutional collaborations and additional entitlements that a partner may wish to include.

To be defined entirely according to the requirements of the parties, not necessarily the attached guideline, within the scope of, but not limited to, the FIRMS Information Management Policy.

Annex 3. (DRAFT) Rules of Procedure of the FIRMS Steering Committee

To be considered as an appropriate first task of the FSC, the attached may be completely replaced or revised.

DRAFT FIRMS Partnership

Partnership Arrangement providing for international cooperation in the development and maintenance of the Fisheries Resources Monitoring System (FIRMS)

PREAMBLE

WHEREAS the Code of Conduct for Responsible Fisheries:

- provides guidance which may be used where appropriate in the formulation of international agreements and other legal instruments, both binding and voluntary;
- calls for the promotion of international cooperation and coordination in all matters related to fisheries, including information gathering and data exchange, and fisheries research, management and development; and
- recognises that the special requirements of developing countries in implementing the Code need to be taken into account.

RECOGNIZING that partnerships between international and national institutions will assist in meeting the objectives of the Code of Conduct for Responsible Fisheries, including the implementation of International Plans of Action and the Food and Agriculture Organization of the United Nations (FAO) Strategy for Improving Information on Status and Trends of Capture Fisheries.

RECOGNIZING ALSO that such partnerships may occur at many levels, including

- global and regional fisheries organisations and arrangements (Regional Fishery Bodies);
- national agencies and research institutions;
- global and regional network partners providing complementary information; and
- programmes and projects through which the objectives of this arrangement may be promoted.

NOTING that international and national fisheries institutions have a wide variety of mandates and responsibilities, which may change over time, and that Partnership Arrangements should reflect such mandates and responsibilities and adapt to new and changing institutional circumstances, as appropriate. Also noting that the Regional Fishery Bodies have an obligation to disseminate information on the status of fisheries and fish stocks, or to provide assistance to their member countries for that purpose.

TAKING INTO CONSIDERATION the (**Note:** agreement, memorandum of understanding, or exchange of letters concerning these recognitions; and noting the appropriate detail) that exists between the partners to this arrangement.

NOW THEREFORE the (*Institution name*), (hereinafter, the 'Partner'¹) and the FAO, a partner, acting in the interest of furthering the FIRMS objectives, have agreed a Partnership Arrangement:

- to establish the rights, responsibilities and obligations of the partners; and
- to specify the detailed provisions on the nature, scope and conditions under which information is made available.

¹ Or replace throughout with an institution acronym.

Article 1. OBJECTIVES OF THE PARTNERSHIP ARRANGEMENT

- 1.1 The principal objective of this arrangement is to establish a framework between the Partners as listed in Annex 1 that will promote development and extension of fisheries status and trends reporting to all fishery resources by:
 - 1.1.1 building a community of responsible institutions that will report in an objective way on fisheries status and trends, thus contributing to the promotion of responsible fisheries management; and
 - 1.1.2 developing, sharing and maintaining services for the collation, management and dissemination of information through a system for Fisheries Resources Monitoring (FIRMS), hereafter referred to as the "FIRMS Partnership".

Article 2. PRINCIPLES OF THE PARTNERSHIP ARRANGEMENT

- 2.1 This arrangement is based on the following principles:
 - 2.1.1 information on fisheries is shared and appropriately disseminated;
 - 2.1.2 contributions remain within the full control and ownership of the Partner which has primary monitoring or management responsibility over resource and fishery units, including control of what and when information is made available, and how it is processed; and
 - 2.1.3 whenever possible, the Partner will maintain the documentation on information sources, ownership, data origins and collection methodologies, and on their rules on dissemination and publication.

Article 3. PARTNERS RESPONSIBILITIES

- 3.1 FAO will provide a FIRMS Secretariat with the following responsibilities:
 - 3.1.1 to support the FIRMS Steering Committee (FSC) with roles and responsibilities as described in Article 5;
 - 3.1.2 to implement decisions of the FSC in accordance with the Information Management policy and Rules of Procedures established by the FSC;
 - 3.1.3 to coordinate and administer financial inputs, in conformity with FAO financial rules and regulations, to the development of FIRMS and for the conduct of this partnership;
 - 3.1.4 to maintain databases for the presentation of fishery information;
 - 3.1.5 to make available the information provided under this arrangement;
 - 3.1.6 to supervise the implementation of FIRMS Partnership services, including
 - 3.1.6.1. the application of systems of information quality control for presentation and consistency purpose;
 - 3.1.6.2. the development and implementation of software and information methodologies; and
 - 3.1.6.3. the development and implementation of training tools and methods, and the conduct of training, as appropriate.
 - 3.1.7 where required, to receive and process information inputs from the Partner, in particular for developing country institutions;
 - 3.1.8 where required, to collate, control and process information on the status and trends of fisheries; and
 - 3.1.9 to seek to ensure that the FIRMS Partnership will include global level information on the status of fisheries in accordance with agreed information management policies of the FSC.

- 3.2 The Partner will contribute to FIRMS according to its mandate, including responsibilities, inter alia:
 - 3.2.1 to present for inclusion in FIRMS databases fishery assessment and management reports, statistics and other related information in a timely manner and according to its own policies on ownership, transparency and quality assurance, as referred to in Annex 2;
 - 3.2.2 to collate fishery information, or to establish databases jointly with FAO or with others:
 - 3.2.3 where compatible with their mandate, to receive and process information inputs from the Partner, in particular for developing country institutions;
 - 3.2.4 in general to ensure collaboration with and participate in the work of the FSC, including in the identification of information that will complement each Partner's information sources and prevent duplication, and in attending meetings of the FSC.

Article 4. PARTNERS BENEFITS AND RIGHTS

- 4.1 The general benefits of this arrangement are to enable the Partners:
 - 4.1.1 to assist them fulfilling their commitment to improving transparency and accuracy of information of fishery resources status, while respecting confidentiality and security under which the information has been submitted, in ways that satisfy the owners of information concerned.
 - 4.1.2 to make available to the public, through dissemination channels referred to in Annex 2, information on fisheries status and trends in ways that provide background for, and facilitate interpretation of, fishery resources assessments and fishery management advisory reports. This information covers, *inter alia*:
 - 4.1.2.1. the distribution and population dynamics of a fishery resource;
 - 4.1.2.2. the techniques, nature, conduct and production of the fishery for that resource;
 - 4.1.2.3. the fishery management systems in place or being developed, and
 - 4.1.2.4. indicators of the effect of such management.
- 4.2 In addition to what may be provided for in Annex 2, the Partner will, for FIRMS purposes, have access to:
 - 4.2.1 FIRMS system tools for the editing, dissemination and maintenance of information;
 - 4.2.2 FIRMS information and databases beyond the restrictions normally applied under FAO dissemination policy, e.g. to geographic information system (GIS) layers or other value-added products;
 - 4.2.3 FIRMS Secretariat services for training in the use of information tools and standards, for use of the shared software library and other information products.

Article 5. INSTITUTIONAL ARRANGEMENTS

- 5.1 Eligibility of partners
 - 5.1.1 National institutions, mandated by a national government, and intergovernmental bodies, mandated by national governments, that hold responsibilities for the preparation or publication of fisheries information relevant to the framework of the partnership may become a Partner.
 - 5.1.2 Only one institution per country endorsed by its national government may become a FIRMS Partner. That institution may act as focal point to other institutions in a given country, as appropriate.
- 5.2 FIRMS Steering Committee (FSC)

- 5.2.1 The FSC is constituted of one member of each Partner, including FAO in its capacity of Partner.
- 5.2.2 FAO will in addition provide the Secretariat to the FSC.
- 5.2.3 The FSC will be activated when the FIRMS Partnership has entered into force.
- 5.3 In administrative matters, the FSC will:
 - 5.3.1 meet at regular intervals, as appropriate or required.
 - 5.3.2 adopt its rules of procedures and any amendment thereof;
 - 5.3.3 make decisions according to the Rules of Procedures (see Annex 3), within the scope of this Partnership Arrangement.
 - 5.3.4 identify potential partners that will contribute to the achievement of the FIRMS objectives, and prioritise their eligibility, intending to ensure that:
 - 5.3.4.1. their reporting complements what FIRMS already covers;
 - 5.3.4.2. their internal information policies are in conformity with quality assurance rules and standards provided for in the FIRMS Information Management Policy;
 - 5.3.4.3. their mandate fits the FIRMS thematic scope; and
 - 5.3.4.4. the additional workload generated can be absorbed by the FIRMS Secretariat.
 - 5.3.5 declare a Partner withdrawn based on inactivity of the Partner in FIRMS; and
 - 5.3.6 discuss and advise on any other matters pertaining to FIRMS.
- 5.4 In technical matters, the FSC will:
 - 5.4.1 monitor the development and performance of FIRMS and advise on improvements;
 - 5.4.2 consider Partners' requests on additional analyses or presentations;
 - 5.4.3 discuss, advise and take decisions on further system developments;
 - 5.4.4 formulate, adopt and keep under review the Information Management Policy;
 - 5.4.5 review and comment upon the resources made available for the furthering of FIRMS objectives whether made in kind or financial, and advise the FIRMS Secretariat on their allocation.
- 5.5 Cost sharing the FIRMS Partnership
 - 5.5.1 FAO will cover the costs of FIRMS development, FSC administration and the provision of the Partner entitlements under this arrangement through regular and trust fund arrangements, to the extent that these funds allow.
 - 5.5.2 The Partner will cover the costs of information contributions to FIRMS, attendance at FSC meetings and additional FIRMS services, which might include information system functionality or customisation for the specific use of the Partner, to the extent that available funds allow.
- 5.6 Entry into force, amendment and termination of this arrangement
 - 5.6.1 This arrangement will enter into force on the date following the signature of five Partnership Arrangements.
 - 5.6.2 A Partner may withdraw from this arrangement, after giving three months notice to the FIRMS Secretariat who will inform the other Partners.
 - 5.6.3 FAO can terminate its service as the FIRMS Secretariat. FAO will give twenty-four months notice to FSC before this termination.
 - 5.6.4 This arrangement can be reviewed by the Partners as deemed appropriate by FSC through its Rules of Procedure. The arrangement can only be amended or terminated with the consensus of all Partners.

5.6.5 The FSC will hold a first session within one year from the date of entry into force of this arrangement.

IN WITNESS WHEREOF, the Partners affix their signatures:

Signature:	Name:	
Position:	Date:	
For and on behalf of:	The (Partner- name):	
Signature:	Name:	
Position:	Date:	
For and on behalf of:	Secretariat: on behalf of the FIRMS Partnership (Food and Agriculture Organization of the United Nations)	

Note: The following three Annexes will be attached to the Partnership Arrangement to be discussed between the new Partners. 'Note' text is indicative, not for inclusion in the signatured document.

Annex 1.

Current FIRMS Partners on the date of signature by the two Parties.

ote: To be revised for each new Partnership Arrangement

	Institutional Partner	Date of Signature
1		
2		
3		
4		
5		

Annex 2:

Outline and detailed arrangements on the nature of information and the conditions under which it is made available under this partnership arrangement, including any institutional collaborations and additional entitlements that a partner may wish to include.

Note: Fisheries data and statistical information will be provided by the FIRMS Partners mandated to develop and use it in ways that support their work programmes, and which are reported to the public in ways that can also be achieved through the FIRMS Partnership.

This Annex is a specific text to be agreed by the signatory partners. The following is a general outline of the possible contents of the Annex in relation to important issues that the signatory partners need to agree in support of the main text of the arrangement, including but not limited to the following:

1. Data and statistical information:

Types and scope of information to be contributed. Considerations will be made on the standards to be used in this Partnership Agreement, referring to the FIRMS Partnership's Information Management Policy.

2. Metadata and information management:

Methods of collection; bibliographical sources, ownership and responsibilities, including criteria and methods used in authentication and verification; processing methods and transmission protocols; and dissemination channels.

3. Data and information security:

Confidentiality, transparency and feedback.

4. Collaborative institutions:

The institutions that a partner wishes to be included in aspects of this arrangement, and the related information ownership and responsibilities details.

5. Additional entitlements:

When further partnership efforts need to be extended this item may be revised by mutual consent.

Note: This Annex may be structured in any way that the partners wish to agree, not necessarily as above.

Note: Below are normally appropriate committee Rules of Procedures, which may be entirely revised or replaced at the first meeting of the FSC, or at subsequent meetings through a revision submission from a new partner at its first attendance.

FSC will adopt and revise its own Rules of Procedures. Such Rules of Procedure will inform new FSC membership of its current responsibilities and capacities at signature, appropriately recognising that the FIRMS Partnership will immediately respond to its revision submissions.

Note: The following current Rules of Procedures is adopted as Annex 3 to a new Partnership Agreement, noting the capacity of a new partner to seek immediate revision at the FSC, i.e. the standing Rules of Procedures (as amended) at the time of signature.

RULES OF PROCEDURE

1. SESSIONS

The FSC will meet at least once every three years. It may meet upon request of X Partners communicated to the Secretariat or upon proposal of the FSC Secretariat. The FSC Secretariat will announce the session X months before the session starts.

2. AGENDA

A provisional agenda for each session will be prepared by the FSC Secretariat in collaboration with the participating institutions. The first item on the provisional agenda will be the adoption of the agenda. If funds are made available to the FIRMS partnership, the agenda will comprise an element entitled "handling of financial matters". The agenda will be distributed with the announcement of the session.

3. PARTNERS' REPRESENTATIVE

Partners will communicate to the FSC Secretariat the names of its Representative, alternate Representative, and other members of its delegation prior to sessions (one month prior?).

4. DOCUMENTATION

Relevant documents for each session will be, if possible, distributed by the Secretariat to all Partners (at least two months?) before the session. (Each Partner will be responsible for the timely distribution of its documents in accordance with the mailing list supplied by the FSC Secretariat).

5. OFFICERS

At the start of the Session, the Chairman or Vice-Chairman appointed at the previous session will call the session to order. In their absence, the FSC Secretariat will call the session to order. Following adoption of the agenda, the FSC will elect a Chairman and Vice-Chairman from among its members; they will remain in office until the election of the new Chairman and new Vice-Chairman at the next session. The outgoing Chairman and Vice-Chairman will be eligible for re-election. (Task or mandate of the chairman?)

6. EXPENSES

The expenses incurred by delegates, including Representative and alternate Representative, attending sessions of the FSC will be borne by the Partner, unless otherwise provided for.

7. WORKING LANGUAGE

English will be the working language of the FSC.

8. DECISION MAKING

Decisions of the FSC will be taken by consensus of all Partners attending the session. If all attempts to achieve consensus fail then the chairman (in consultation with the Secretariat?) may decide that decision be made by a simple majority of votes cast by those present at the session. Each Partner is entitled to one vote. (When necessary, the Chairman may exercise a casting vote).

9. REPORTS

At each session the FSC will adopt a report of the session, which will include inter alia all decisions and recommendations. The report will be distributed by the FSC Secretariat to the Partners, and to other individuals or organizations as requested by the FSC. FAO should make the report available as widely as possible.

10. MONITORING OF RECOMMENDATIONS

Although recommendations and decisions of the FSC are not binding on Partners, the FSC will monitor and ask the Secretariat to report on the implementation of recommendations and decisions.

11. INTERSESSIONAL ACTIVITIES

The FSC may arrange such intersessional activities as are required for its effective functioning, including inter alia holding informal preparatory meetings, holding meetings of regional or subject groups, preparation of working papers, and communication by correspondence.

12. AMENDMENT TO THE RULES OF PROCEDURE

Amendments to the Rules of Procedure may be adopted by the FSC by a two-thirds majority of the Partners provided that a majority of the Partners to the FIRMS Arrangement will be present. A proposal for the amendment of the Rules of Procedures will be communicated to the Partners by the FAO Secretariat with at least three months notice prior to the session where such amendment(s) will be discussed. The Secretariat will seek to ensure that all Partners acknowledge receipt of proposed amendment(s). The Secretariat may suggest that an amendment proposal be adopted by the majority of the Partners voting through mail system, in which case the vote can take place through such mechanism unless any objection is received by the FSC Secretariat from any Partner within X months after such proposal was made.

13. NEW PARTNERS

New potential Partners will apply to the FIRMS Secretariat. The Secretariat will inform the Partners of such application which will be considered by the FSC at the session following such application, in line with Article 5.3.4 of the FIRMS Partnership Arrangement.

Note: Information Management Policy - to be developed

The Information Management Policy of FIRMS Partnership will review, advise and recommend changes to the databases presented on FIRMS with a view to the identification and elimination of information duplication and data inconsistencies.

ATTACHMENT B

Example of a FIGIS Resource Fact Sheet

(Albacore in the Atlantic and Mediterranean Sea, from ICCAT)

MOTE: This is a prototype of the Fishery Resources Monitoring System (FIRMS). Its objective is to present: - validated lists of Stock or Resource units falling under the mandate of ICCAT;

- a harmonised presentation of stocks status reports across various contributing institutions, based on case studies implemented with these institutions.

It may not contain the latest information and so there may be discrepancies between the content of FIRMS and the most recent reports of the partner agency which provided the information.

Comments and suggestions: send an e-mail to figis-comments@fao.org



Resource Fact-Sheet

Ownership ICCAT - Standing Committee on Research and Statistics SCRS Meeting-Reports <??

Cover **Page**

Report of the Standing Committee on Research & Statistics (SCRS) (1)

Albacore in the Atlantic and Mediterranean Sea

resource type: Highly Migratory Resource

Species:



Area:

Atlantic Ocean and Mediterranean Sea



Atlantic, Northwest (FAO statistical area: 21) Atlantic, Northeast (FAO statistical area: 27) Atlantic, Western Central (FAO statistical area: 31) Atlantic, Eastern Central (FAO statistical area: 34) Mediterranean and Black Sea (FAO statistical area:

Atlantic, Southwest (FAO statistical area: 41) Atlantic, Southeast (FAO statistical area: 47)

Observation selected by Owner

ICCAT - Reporting Year: 1999

updated on: 26-Feb-2003

Biblio

Report of the Standing Committee on Research & Statistics (SCRS)

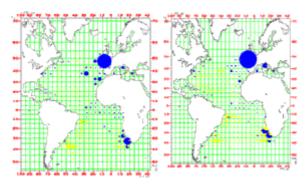
Resource Profile

Habitat and Biology

Albacore spawning areas in the Atlantic are found in subtropical western areas of both hemispheres and throughout the Mediterranean Sea. Spawning takes places during austral and boreal spring-summer. Maturity is considered to occur at about 90cm FL (age 5) in the Atlantic, and somewhat smaller in the Mediterranean. Until this age they are mainly found in surface waters, where they are targeted by surface gears. Some adult albacore are also caught using surface gears but, as a result of their deeper distribution, they are mainly caught using longlines. Young albacore are also caught by longline in temperate waters.

Structure

Albacore is a temperate tuna widely distributed throughout the Atlantic Ocean and Mediterranean Sea. On the basis of the biological information available, for assessment purposes the existence of three stocks is assumed: northern and southern Atlantic stocks (separated at 5°N) and a Mediterranean stock (ALB-Figure 1).



The Committee assessed the status of the Northern and Southern Atlantic albacore stocks after a review of Task I and Task II data available. The Committee recognized the considerable improvement in basic data for both stocks although some uncertainties still remain, especially in relation with some elemental biological parameters. No attempt was made to analyze the status of the Mediterranean stock. The GFCM/ICCAT meeting concluded that a Mediterranean stock assessment could not be attempted as even the level of catches are unknown.

Sub Resource

- Albacore in the North Atlantic
- Albacore in the Mediterranean Sea
- Albacore in the South Atlantic

Resource Features

Resource Exploitation

Fisheries:

DESCRIPTION OF FISHERIES [click here to open the table...]



Status and Trend

ATLANTIC AND MEDITERRANEAN SUMMARY (MT)

[click here to open the table...]

ATTACHMENT C

Example of a FIGIS Stock Fact Sheet

(Albacore in the North Atlantic, from ICCAT)

MOTE: This is a prototype of the Fishery Resources Monitoring System (FIRMS). Its objective is to present: - validated lists of Stock or Resource units falling under the mandate of ICCAT;

- a harmonised presentation of stocks status reports across various contributing institutions, based on case studies implemented with these institutions.

It may not contain the latest information and so there may be discrepancies between the content of FIRMS and the most recent reports of the partner agency which provided the information.

Comments and suggestions: send an e-mail to figis-comments@fao.org



Stock Fact-Sheet

Ownership ICCAT - Standing Committee on Research and Statistics SCRS Meeting-Reports (?)

Cover **Page**

Report of the Standing Committee on Research & Statistics (SCRS) - 2000 (?1)

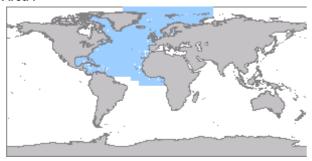
Albacore in the North Atlantic

stock type: Highly Migratory Stock

Species:



Area:



Atlantic, Northwest (FAO statistical area: 21) Atlantic, Northeast (FAO statistical area: 27) Atlantic, Western Central (FAO statistical area: 31) Atlantic, Eastern Central (FAO statistical area: 34)

Observation selected by Owner

ICCAT - Reporting Year: 1999

updated on: 26-Feb-2003

Report of the Standing Committee on Research & Statistics (SCRS)

Stock Features

Stock Exploitation

Fisheries: The Northern stock is exploited by surface and longline fisheries. Traditional surface fisheries include Spanishtrolling and baitboats, used mainly in the Bay of Biscay and adjacent waters, and some Spanish and Portuguese baitboats around the Azorian Islands. New surface fishing gears, driftnets and pair pelagic/midwater trawling, were introduced in 1987 in the Bay of Biscay and adjacent waters by France. Ireland and United Kingdom joined the driftnet fishery at the beginning of the 1990's. In 1998 Ireland initiated experimental fishing trials using trolling and pelagic trawling. These surface fisheries mainly target juveniles and sub-adults (50cm to 90cm FL). A longline fleet from Chinese Taipei targets sub-adult and adultalbacore (60-120cm) in the central and western North Atlantic. Other fleets make minor catches and in most of the cases albacore constitute a component of the by-catch.

Exploitation indicator: Landing

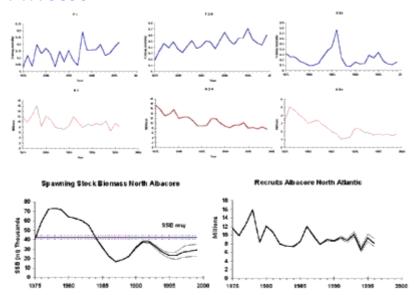
The total catch in the north Atlantic has shown a downward trend since mid 1960's, largely due to a reduction of fishing effort by the traditional surface and longline fisheries. In contrast, effort and catch in the new surface fisheries has increased since 1987. In 1999 ? I the total catch (34,557 ? MT ? I) showed an increase on the catch in recent years (1996-1998). This increase occurred across all gear types. <?

Stock Assessment

Method: The Committee analyzed the state of the northern stock using a model (VPA) and data that were essentially the same as those used in previous assessments.

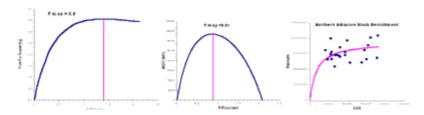
Results: The results obtained (ALB-Figure 3) showed consistency with those from previous assessments. The abundance and biomass of adult fish (ages 5+) appear to have declined from mid-1970's to late 1980's, followed by an slight increase 1988-1990. The abundance and biomass of ages 5+ do not show any clear trend since 1990. [3] [41] Abundance of recruits (age 1) and juveniles (ages 2-4) varied from year to year with, perhaps, some declining trend from 1975-1985. The levels since then have been variable. [3] [41] The Committee noted that global environmental factors might explain some proportion of the recruitment variability during the last two decades. Moreover, previous studies based on historic data, indicate that it is possible that a higher level of recruitment occurred during the 1960's and 1970's associated with a different environmental regime.

The fishing mortality rate of juveniles (ages 2-4) shows a slight increasing trend during the period analyzed. [?] [+1] Fishing mortality rates on adults (ages 5+)increased to a peak in 1986, then declined. [?] Recent rates appear to be relatively high, but not as high as the peak year. [?] [+1] The fishing mortality rate on ages 8+ also appears to be increasing, however, the estimation of this is quite variable. [?] [+1]



Method: With reference to the results shown in ALB-Figure 4 **equilibrium yield analyses**, made on the basis of an estimated relationship between stock size and recruitment, indicate that

Results: current <u>spawning stock biomass</u> is about 30% below that associated with MSY. However, the Committee noted considerable uncertainties in these estimates of current biomass relative to the biomass associated with MSY (B_{MSY}), owing to the difficulty of estimating how recruitment might decline below historical levels of stock biomass. Thus, the Committee concluded that the northern stock is probably below B_{MSY} , but the possibility that it is above it should not be dismissed. However, equilibrium yield per recruit analyses made by the Committee indicate that the northern stock is not being growth-over fished $(F < F_{max})$.



Method : Sensitivity analyseswere also conducted to explore the influence of several inputs and assumptions.

Results: Results of most sensitivity runs examined were very similar to the base case. However, these analyses suggest a possible conflict between two of the CPUE indices used in the model that needs to be addressed through further research. One of the sensitivity runs examined gave results that were considerably more optimistic than the base case.

Overall Results: In terms of yield per recruit, VPA assessment indicates that the fishing intensity is at, or below, the fully exploited level. Concerning MSY-related quantities, the Committee recalls that they are highly dependent on the specific choice of stock-recruitment relationship. The Committee believed that using a particular form of stock-recruitment relationship that allows recruitment to increase with spawning stock size provided a reasonable view of reality. This hypothesis together with the results of the VPA assessment indicate that the spawning stock biomass (B_{99}) for the northern stock (29,000MT) is about 30% below the biomass associated with MSY (42,300MT) and that current F is about 10% above F_{MSY} . However, an alternative model allowing for more stable recruitment values in the range of observed SSB values would provide a lower estimate of SSB at MSY, below the current value.

Stock Management

In 1998, the Commission recommended that contracting parties, entities, and fishing entities fishing for northern albacore limit the number of vessels to the average number in the period 1993-1995. The Committee is unable to assess whether or not this recommendation has had an effect on the stock. However, the Committee noted that a limitation of the number of vessels is likely to be ineffective for this stock, and that, therefore, catch limits may be more appropriate from a practical point of view.

Recommendation:

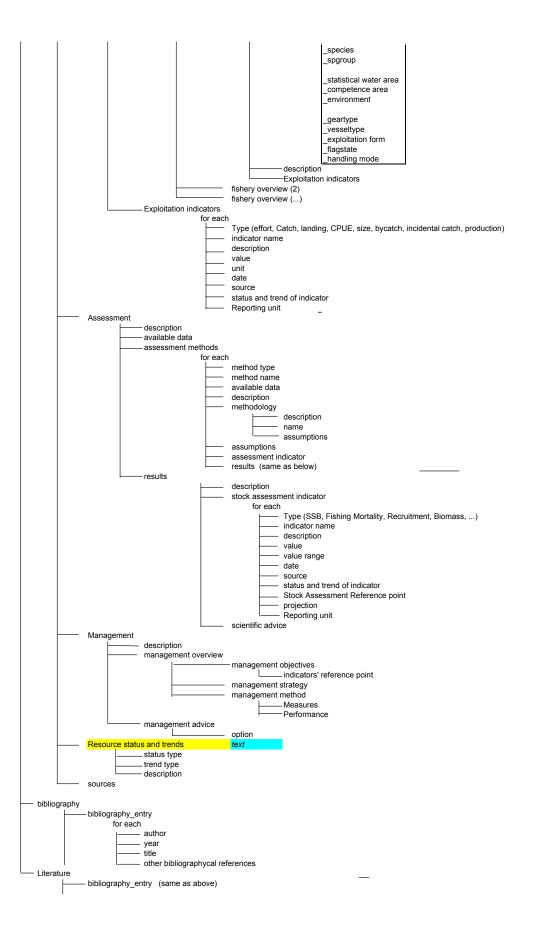
Management option: If the Commission wishes to maintain a stable Spawning Stock Biomass in the near future, 1?1 then the Committee recommends that catch should not exceed the current catch level (34,500 MT) in the period 2001-2002. 1?1

Management option: Alternatively, if the Commission wishes the Spawning Stock Biomass to begin increasing towards the level estimated to support the MSY 1, then catches in 2001 and 2002 should not exceed 31,000 MT.

FIGIS-FIRMS Stocks and Resources Topic Tree (example 1)

This topic tree defines the specific elements of information that can be provided to FIGIS-FIRMS for Resources and Stocks. Items highlighted in yellow are the information elements provided to FIGIS-FIRMS that are shown in the example resources fact sheet shown in Attachment B. Items italised and highlighted in blue indicate the the actual information provided in that example.

RESOURCE - STOCK Object Resource Stock Source Reference Collection nstitutional Programme Standing Com Institution ref. ICCAT Institution ref. Author Year other bibliographical references Resources Stock Identity ore in the Atlantic and Mediterranean Sea Title sequential Id Resource Stock type Resource Stock parent Species ref. Species group ref group name species group external reference species ref. common name id species (alpha code) scientific name aenus species area name Statistical water area ref. -coding system FAO statistical areas -area code 21, 27, 31, 34,37,41,47 Area of competence ref. area name coding system area code Environment area ref area name -coding system area code Resource Stock profile Area profile general description sub-areas Stock-Resource geographical distribution Species Geographical distribution general behaviour habitat description feeding habit -reproduction Stock structure Albacore is a temperate tuna widely distributed throughout the Atlantic Ocean and ... Sub Resource Stock unit Albacore in the North Atlantic; Albacore in the Mediterranean Sea; Alba Resource Stock feature description Exploitation available data Fisheries (exploiting stock) fishery overview (1) - Fisheries short reference name



FIGIS-FIRMS Stocks and Resources Topic Tree (example 2)

This topic tree defines the specific elements of information that can be provided to FIGIS-FIRMS for Resources and Stocks. Items highlighted in yellow are the information elements provided to FIGIS-FIRMS that are shown in the example stocks fact sheet shown in Attachment C. Items italised and highlighted in blue indicate the the actual information provided in that example.

RESOURCE - STOCK Object Resource Stock Source Reference Institution ref. Author Year other bibliographical references Resources Stock Identity sequential Id Resource Stock type Resource Stock parent pecies ref. Species group ref group name species group external reference species ref. common name id species (alpha code) scientific name genus species Area reference Statistical water area ref -area name -coding system -area code Attantic, Northwest, e FAO statistical areas 21, 27, 31, 34 Area of competence ref. area name -coding system -area code Environment area ref. -coding system -area code Resource Stock profile Area profile general description environment Stock-Resource geographical distribution Species Habitat biology |- Species Geographical distribution general behaviour habitat description feeding habit -reproduction L Stock structure ⊢ Sub Resource Stock unit Resource Stock feature history available data description Fisheries short reference _species _spgroup statistical water area competence area environment vesseltype exploitation form flagstate _handling mode

description

