



FIRMS Steering Committee Meeting
Third Session
Madrid, Spain, 13-15 February 2006
FINAL REPORT
Author: FSC Secretariat

1. Opening of Session and the Welcome Address

The Third Session of the FIRMS Steering Committee (FSC3) was opened in the ICCAT headquarter Madrid, by Mr Victor Restrepo, on behalf of Mr Driss Meski, Executive Secretary of ICCAT, 9.00 hrs on Monday 13 February 2006. He welcomed FIRMS FSC representatives of the following Partner agencies: EUROSTAT, ICES, FAO and NAFO, CCAMLR, and the FAO FIRMS Secretariat, as well as the Observer North-East Atlantic Fisheries Commission (NEAFC), being in the process of becoming a partner.

The list of participants is included in Annex 1.

2. Adoption of the agenda

The chairperson, Mr Hans Lassen (ICES) presented the agenda. Under agenda item No 10, 'Any other business', FAO Secretariat proposed to add Information statement about a new FAO project about "Fisheries Ontology for a Stock over-fishing alert system", and the agenda was adopted (see Annex 2). Two additional documents (one on the EUROSTAT contribution, one on status and trends descriptors by FIRM) were also added to the list of information documents.

3. FIRMS membership

(i) Progress on the development of FIRMS Partnership

CCAMLR has prepared the agreement for becoming a member of the FIRMS Partnership Arrangement and it has been signed by the CCAMLR Executive Secretary.

NEAFC is being close to becoming a member and the NEAFC representative, participating in the meeting, informed the meeting that he has been mandated by his organisation to sign the partnership agreement.

It was noted that International Whaling Commission (IWC) has expressed interest in becoming a member but the organisation has not yet made it clear what they would like to contribute to the FIRMS Partnership Arrangement and membership is not planned at this moment. Likewise, in contacts that the ICES representative has had with the Western and Central Pacific Fishery Commission (WCPFC), the organisation has answered that it is interested but not likely to be in a position to make a decision regarding membership at this point in time.

The General Fisheries Commission for the Mediterranean (GFCM), involved in FIRMS as FAO statutory body, has become a more autonomous body, operating its own independent budget. This opens a perspective of GFCM to become a full FIRMS partner and FIRMS will look favourably on such an initiative from the Commission.

(ii) Review of new perspective partners

Other organisations that could be invited to join FIRMS were considered. NEAFC offered to discuss the possibility of partnership with North Atlantic Salmon Conservation Organization (NASCO), North Atlantic Marine Mammal Commission (NAMCO) and South East Atlantic Fisheries Organization (SEAFO) informally. It was noted that there could be certain overlaps between IWC and NAMCO, something that should be avoided according to FIRMS Partnership Arrangement and would need to be considered if and when discussing potential memberships.

It was noted that FIRMS does not have any partners in South America. The *Comisión Permanente del Pacífico Sur* (CPPS) was mentioned in this context as well as the *Comisión Técnica Mixta del Frente Marítimo*. It was concluded that potential memberships from South America should be considered further.

The North Pacific Marine Science Organization (PICES) was also mentioned in the context of potential new members. However, participants noted that PICES apparently focuses more on research coordination and does not manage the type of data relevant to FIRMS.

Furthermore, the possibility to invite national agencies to join was discussed. This issue has been brought up before and there is a general agreement that the possibility should be pursued in the future, but not at present.

In general, it was felt that, at this moment, the main priority of the partnership should be to develop the FIRMS product with the information contributed by current regional partners. Once FIRMS has become operational and is recognised as a useful and powerful tool for information sharing, other – regional and national – organisations and agencies are likely to be inclined to join.

Decisions:

- NEAFC will informally approach NASCO, NAMMCO and SEAFO.
- Potential partners in South America will be considered further and the chair will write to *Comisión Técnica Mixta del Frente Marítimo* encouraging them to

become a Partner. The chair will furthermore write to CPPS and enquire whether they would qualify as Partner.

- GFCM's initiative to approach FIRMS for partnership will be awaited.
- National partners will be considered in the future, after studying the need for any additional funds (see Agenda item 8).

4. Review of Annex 2 of new Partners

CCAMLR's contribution to FIRMS is outlined in Annex 2 of its partnership agreement (FSC3/2006/4). The information to be contributed will be derived from the Annual Reports of the meetings of CCAMLR's Commission and the Scientific Committee. This information will deal with the marine living resources and fisheries in the Southern Ocean (Statistical Areas 48, 58, 88) which fall within CCAMLR's mandate. The fishery resources include toothfish (*Dissostichus* spp.), icefish (*Champsocephalus gunnari*), krill (*Euphausia superba*), crab (*Paralomis* spp.) and squid (*Martialia hyadesi*).

At the meeting, CCAMLR advised that it hoped to contribute information on toothfish by early 2007. To this end, two draft fact sheets were prepared and discussed at the meeting. Information on other resources and fisheries would be contributed in subsequent years. CCAMLR's has four official languages (English, French, Russian and Spanish) and requested that all four languages be considered when FSC developed the multi-lingual features of the FIRMS website.

NEAFC had no particular comments on Annex 2 of the partnership agreement at this stage. Nevertheless, with regard to its future contributions to FIRMS, it was noted that focus is likely to be on 5-6 major fisheries and that information on management measures may also be included. NEAFC works closely with ICES on several issues, e.g. the Commission receives scientific advice from ICES, which it sometimes modifies, and there is a need to coordinate contributions between the two organisations. It was suggested that a list of issues to be discussed in this respect is drawn up.

In this context, the need to cooperate due to the new information provided by VMS and electronic logbooks was brought up. It was also noted that the legal status of fishing areas in relation to this development would be a subject for discussion in CWP.

Eurostat presented its initial thoughts on its contributions to FIRMS (Document FIRMS FSC/2006/Inf.3). In the long-term it proposes to include socio-economic indicators on fisheries derived from data collected by Member States under the EU data collection legislation. However a proposal for a revision of this legislation (including an extension to cover the fish processing industry and the aquaculture sector) is under consideration and work still has to be done on the harmonisation at EU level of definitions and concepts for socio-economic indicators.

Final decisions on this contribution to FIRMS will not be possible until the new legislation has been adopted (late-2006) and until agreement has been reached with the Member States as to indicators to be included in a submission to FIRMS. Therefore, in the short-term Eurostat proposes to submit to FIRMS summaries of the annual reports on the economic performance of selected segments of European fishing fleets developed by national experts under a series of EU financed "Concerted Actions". In response to a question as to the stability of the sectors included in the "Concerted Actions" and those to be included in the revised EU legislation Eurostat said that the EU experts were aware of the advisability of an overlap between two sources of information and were considering how this could be achieved. Eurostat accepted a proposal from the meeting

that the proposed “short-term” fleet segment reports should be included in FIRMS as case studies (“production system approach”) rather than incorporated into the basic data system. Case studies are more flexible and if changes to coverage, concepts and definitions result from the new EU legislation, adjustments are more readily carried out.

The meeting further suggested that the FIRMS Secretariat should investigate the possibility of participation in an observer capacity at the meetings of EU experts groups considering revisions to the EU data collection legislation.

Decisions:

- ICES and NEAFC to clarify their respective FIRMS contributions.

5. Report of the technical working group (TWG1, December 2005) (cf Doc. FIRMS FSC3/2006/2)

The report of the TWG1, held on 5-8 December 2005, was reviewed with regard to aspects requiring decisions to be made by the Steering Committee meeting. These key issues, defined in the annotated agenda, were introduced by the FIRMS Secretariat (relevant paragraph of the TWG1 report in brackets).

(i) “Uncertain” as possible value of attribute “considered a single stock” (para. 10e)

A discussion ensued about the different ways in which Partners may use the terms “Stock” and “Management unit”. In some cases the two terms are used interchangeably. In other cases, a stock can be comprised of several management units, or vice versa. It was concluded that the qualifier “uncertain” would not clarify the matter and it should therefore not be adopted. Furthermore, fact sheets on the FIRMS website should contain clear references to the original reports so that users can understand the context in which the terms “Stock” or “Management unit” are used.

Decision:

- The term “uncertain” will not be used as a qualifier for consider as a single stock. Clear references to original reports need to be added when referring to “stock”.

(ii) Sets of descriptors to describe stock status (para. 11).

FAO had prepared a short working paper (FSC3/2006/Inf5) with a new proposal for exploitation status descriptors to be used in FIRMS. This proposal was presented to the meeting by the Fisheries Marine Resources Service (FIRM). It included the seven descriptors used since the nineteen seventies by FIRM in their reports on the state of marine resources and suggested how the 9 descriptors, currently proposed for FIRMS, could be reduced to the seven FAO descriptors. The same was shown for a subset of the two different proposals made by ICCAT and discussed in TWG1.

ICCAT raised its requirement, and ICES and NAFO shared similar concerns, that contributions from the organisations to FIRMS should not be altered from what their respective scientific committees have stated in their reports. ICCAT also strongly felt that the seven proposed descriptors do not accurately cover the many possibilities of stock status for which two dimensions are needed: stock abundance status (biomass) and exploitation rate status (fishing mortality). If not quantitatively defined as separate biomass and fishing mortality descriptors, these two levels could possibly be translated into qualitative descriptors but both aspects are needed.

In a power point slide, ICES showed the meeting their agreed phraseology on the matter. ICES uses a two-dimensional matrix combining biomass and spawning stock indicators, giving a total of nine descriptors. Each level of stock status is expressed in wording that has been agreed and adopted by ICES and which would be difficult to change.

ICCAT and NAFO also expressed concern over the seven FAO descriptors. It would be unfortunate and confusing if FAO and FIRMS apply such a descriptor for a stock that is described in a different way by its managing body. ICCAT and NAFO suggested that a separate terminology be developed for the use by FIRMS to avoid confusion with already existing terms and to allow for cross-organisational searches in the database.

The meeting stressed the importance to agree on one common set of descriptors for stock status. The possibility of cross-mapping was discussed as a means to keep Partners existing descriptors and at the same time have a common search facility. It was concluded that the matter needed to be further investigated and discussed internally by the partner organisations. However, most partners felt that it would not be possible to adopt the descriptors used by any single Partner for general search purposes.

A new proposal (Annex 3) for standard search terms was prepared during the meeting, including two dimensions of biomass and fishing mortality, and it was agreed that this would form the basis for further discussions. The standard search terms would not impede individual partners to continue indexing their reports using their own set of terms. FIRMS partners should discuss with their members the possibility to agree to the development of common descriptors in general and give comments on the new proposal. The chair will facilitate information exchange of the results of Partners' internal discussions, including with Partners not present at the FSC meeting. The chair and FIRMS Secretariat will report the synthesis of discussions at the next Steering Committee meeting.

Decision:

- Common FIRMS descriptors for Stock status to be reviewed and discussed by each Partner. The chair will facilitate exchange of pertinent discussions among partners and report to FSC4 with assistance from the Secretariat.
- As an interim solution, information on Marine resource Status and trends will be composed of 4 columns: "Exploitation rate", "Abundance level", "State of Resource" (which refers specifically to the seven standard FAO descriptors), and "free description text". Partners can choose to use any of these fields according to their needs. This should be flexible enough to enable Partners to contribute in a satisfactory way their latest information on the Status of Resources under their mandate for the UNGA milestone.

(iii) Presentation of inventories developed outside of FIRMS (i.e. Strategy-STF ones) (para. 13).

The possibility to include resources and information on management bodies other than the FIRMS partners in the FIRMS website inventory list of resources was brought to the attention of the meeting. An example was given in which a known resource is included in the list (FIRMS website menu item Data base / browse inventory) but, when clicking on the link, a message comes up informing the user that the owner of the resource data is not a member of FIRMS.

Although it was recognised that the FIRMS inventory list of resources would be more complete with this information available, it was felt that it was premature to include and handle any such information from non-members. The agreement from the discussion under agenda item 3 was recalled: priority should be given to the development of the

FIRMS product using existing partners' contributions only. Accordingly, the FIRMS website should only include information on species, stocks, fisheries etc, that are managed by partners and for which agreement of submission to FIRMS has been obtained. The webpage "Inventory of marine resources" should be renamed "FIRMS inventory of marine resources" to alert users to this limitation of the information on the website. Further clarification in this respect could also be given in the preamble.

Decision:

- The webpage "Inventory of marine resources" should be renamed "FIRMS inventory of marine resources" to alert users to this limitation of the information on the website. Further clarification in this respect could also be given in the preamble.
- Inventories developed outside FIRMS should not be presented on the website; information should be strictly limited to data submitted by FIRMS partners.

(iv) Stock status and trend summaries: validation of mock-ups evolving from TWG1 comments (para. 17).

The FIRMS Secretariat presented the mock-ups that had been prepared for the stock status and trends summaries, insisting that this is presented to the public from the home page as a different type of report (or view) than the individual fact sheets. The meeting was asked to discuss two aspects: the layout and format of the webpage, and the data export mechanism.

It was noted that the search engine was currently designed based on organisations. The meeting felt it would be more useful to allow for a choice for searches on species and geographical areas. The search will not allow the selection of Partners. This query interface would thus not present all the features of the advance search page already available under the "Search fact sheets" menu item.

With regard to links, it was decided that the link from the Status and Trends Summary should only lead to the fact sheet, and not to the source document from which the fact sheet is elaborated, by the wording 'see full fact sheet'. The link to the full source report should be presented using the fully developed bibliographic reference (it is also given from the fact sheet). The meeting pointed out that it was important to keep the terminology consistent and clear, e.g. when referring to fact sheets or reports. It should also be made clear to the user that the summary, fact sheet and full report are all the same, i.e. from the original source. On the html search result page, the Partner's acronym will be added on each row of the result list.

On the issue of down loads, it was agreed to keep the two download possibilities as designed in the mock-up. No issue was raised on the first format "save as html page". However with regard to the second format, instead of referring to an Excel file format download, the correct designation should be 'comma separated text file'. The wording of the downloaded files should be changed to be consistent with the layout as described above.

Decision:

- The search engine for summaries of status and trends should be changed to give the options 'species' and 'area'. Consistent language should be applied and clear links provided.
- The third row of the "Status and Trends summaries" result page was chosen as providing the right layout for the results list.

(v) Comments made by FIRMS editors upon their tests of the workflow interface (para. 19)

It has not yet been possible to carry out tests and testing by editors of FIRMS Partners will start after the May 2006 milestone for publishing FIRMS on the internet.

(vi) Revised mock-ups for fisheries modules (para. 46)

and

(vii) Required case studies for the fisheries module, for the management system approach (para. 41), and the production system approach (para. 42)

The first case study (based on information provided by SEAFDEC) was sent out for review only on Friday 10 February and partners had therefore not yet been able to give their comments and inputs. The meeting agreed that decisions with regard to the fisheries module would have to be postponed until the case study and proposal had been reviewed and discussed.

NAFO and Eurostat offered to provide case study material. NEAFC also indicated an interest in this work. It was noted that there could be a particular interest in carrying out a case study including both information from ICES – as a scientific body – and NEAFC, being a management organisation. The meeting requested further guidance from the FIRMS Secretariat with regard to a list of priorities and desired structures for case studies. However, this work was not considered an immediate priority; the meeting considered it more important to ensure that the two current components – on the resources and stocks inventory and the summaries of status and trends – are made operational before additional modules are added (see also Agenda items 7 and 8).

Decision:

- The case study developed based on SEAFDEC data needs to be reviewed. Further work on the fisheries module will be undertaken as soon as other priorities permit.

(viii) Setting priority levels for the translation of terms and definitions (para. 51).

The TWG identified a need to verify that the terms that are being used in English can be translated into other languages. The FSC considered that eventually, a translation of the website could be foreseen but not of contributions. Contributions are allowed in the languages of the partners. However, the issue of translation should not be a priority for the time being.

Decision:

- Develop FIRMS product in English for the time being and consider translations at a later stage.

(iv) Other issues with regard to the TWG1

The FIRMS Secretariat and the Partners who had participated in the TWG1 found it very useful. However, it was not felt necessary to decide on a second TWG at this moment. It was agreed that the technical work would continue based on contacts via email – and by setting up a web based work space – and then a decision on organising a new TWG can be taken if and when needed.

6. FIRMS Information Management Policy (IMP)

This item was discussed following the numbering order of documents presented under FIRMS IMP. It was recognized that information standards for the various areas of FIRMS are in different stages of maturity and that FIRMS should adopt a terminology to reflect this process: e.g. in the early stages of development, information standard proposals should be presented as “draft guidelines”, they could then become “guidelines” once they have passed a first peer reviewing stage, and be endorsed as “FIRMS standards” and be added as chapter of the IMP when Partners have had the opportunity to test the guidelines and the revision history shows sufficient stability. These later would anyhow not be cast in stone and the Partners will keep them under review.

Citation standards (FSC3/2006/5): the change essentially concerns the distinction to be brought between the creation date and the updated date, which seemed to meet the range of needs of FIRMS Partners.

Decisions:

- In the short citation, the serial “FIRMS reports” should be displayed
- In both the short citation and the full bibliographic reference, the words “via FIGIS” should be replaced with the words “via FIRMS”.
- this standard thus modified should become a chapter of the IMP.

Marine Resource naming standards (FSC3/2006/6): this document has not undergone any change since the latest modifications requested by FSC2, and Partners were able to comply with the standard on their inventories of Marine resources.

Decision:

- This standard should become a chapter of the IMP.

Marine Resource data dictionary (FSC3/2006/7): this document was primarily designed for editors working with the FIRMS system, and its format was deemed very helpful. Revisions made on Reference terms standard (see next document discussion below) caused an immediate change in the topic structure of the data dictionary: “Assessment Methods” should be renamed “Assessment models” with the agreed list of reference terms. The “Assessment model” should be considered together with “Assessment Data”. Reference terms are proposed in Annex 4 and do no longer include “Direct” or “Indirect”. Changes introduced on the reference terms (see below) will have implications on the data dictionary and the Secretariat will handle such changes in consultation with Partners. The data dictionary document will be accessible for the Partners only.

Decisions:

- The format was adopted by FSC3.
- As far as content is concerned, the document should be considered as “guidelines”.
- The Secretariat will replicate in the Members area the current Concepts and Definition page of the public site, and extend this page with link to the Marine Resource data dictionary.

Reference terms proposed standards (FSC3/2006/8): considering the non conclusive discussion on Status and Trends terms, it was decided not to discuss the related section of this document (addressed as part of Agenda item 5), and to drop it temporarily of the list of standard reference terms. For the other classes of reference terms, the lists were generally found too detailed at first glance, and it was suggested that i) some lists of terms be organized in a hierarchical way, ii) an “unspecified” term be added at this first level, iii) where necessary authorize more than one term to be used. FSC agreed that such simplified structure would be more workable for Partners, and easier for end users. This would not hamper possibility to index inventories using more detailed levels. FSC3 went through a revision of the lists of Reference terms proposed standard terms according to these principles, as presented in Annex 4.

Although there was general agreement for the higher level terms of the revised list, it was agreed that some classes of terms require more work (Reference points, Assessment indicators) or confirmation that they are suitable (Jurisdictional terms).

Decisions:

- As far as content is concerned, the document should be considered as “guidelines”;
- The Secretariat will extend the Concepts and Definitions page of the Members’ area with links to list of Reference terms.
- Johanne Fischer will lead an email discussion aiming at finalizing the terms list.
- FIRMS Secretariat will immediately update the Excel inventory template in accordance with the decisions of FSC, and FIRMS Partners will revise within the two following weeks their excel based inventories with the objective of filling in all columns with the revised list of terms.

Geo-referencing proposed standards (FSC3/2006/9): these standards have been developed in order to enable each Partner to use the most appropriate geographical system for representation of the location of the Marine resources or Fishery on a map. The proposed standard was experimented through inventories for some Partners (ICCAT, GFCM, IATTC) and it appeared to meet requirements.

Decision:

- The document should be considered as a chapter of the IMP.

Fisheries naming convention revised standards (FSC3/2006/10): this current version is the third revision of that document within one year period. It evolved together with the design of the inventory of fisheries and the fisheries module. This version is the third edition and it will provide guidelines for the next stage of Fishcode-STF inventory of fisheries.

Decision:

- This document should be considered as draft guidelines, and will be kept under review as work on the fisheries module progresses.

7. Review of the Progress of the FIRMS Database and Module Development*(i) Presentation and discussion of the FIRMS website*

Since TWG1 meeting in December, time has been spent on implementing TWG recommendations then integrating the system with other FIGIS developments and on 9 February it was possible to start loading reference observations and fact sheets provided by partners. The website includes two main products: the full fact sheets accessible through either the resource inventory tree or the simple/advanced Search fact sheets page, and the status and trends summaries. Other features include links to the websites and to summary descriptions of partner organisations, and to quality assurance reports (i.e. explanatory notes extracted from Annex 2 of the partnership agreements giving details and supporting information to the contents of the contributions of individual partners).

The presentation covered the two interfaces of the website: the public accessed version and the working area restricted to FIRMS partners. The guided tour of the website, as it can be accessed by the public, included examples of fact sheets contributed by CECAF, NAFO, ICCAT and ICES. It was shown how page citation, page header, species and geographic information, main descriptors, table of content, images and tables, bibliography and sources, are presented, and options for printing and search engines explained.

After a few comments mainly related to the need to correct specific entries, the meeting concluded that the website design was satisfactory and expressed its appreciation of the work accomplished by the Secretariat. The meeting discussed the critical amount of data that should be available on the site before it is released. Several partners conveyed the view that the release should take place as soon as possible with the information available, even if somewhat limited, since they felt it was important to be able to show progress to their members. Accordingly, it was agreed to launch the website in connection with the UN Review Conference for Straddling Fish Stocks and Highly Migratory Fish Stocks Agreement to be held in New York on 20-24 May 2006. It was also agreed that an internal version of the website should be made available for final review by FIRMS partners around 1 May 2006. A handout, presenting the main features of the FIRMS website, to be used at the conference should be prepared and it was suggested that the actual launch should be publicised through the organisation of a side-event at the conference by the FIRMS Secretariat. FIRMS partners are also encouraged to attend. FIRMS should also be advertised to the organisers by the Conference during the preparatory consultations that are planned for 20-24 March 2006. FAO will participate in these consultations through the Chief of FIRM, Mr J. Csirke, who will be able to brief the organisers of the intention to present the FIRMS website at the conference. Mr K. Hoydal from NEAFC indicated that he will attend as well this preparatory meeting and will support the proposal on behalf of all FIRMS Partners. ICCAT also plans to attend the Conference. In addition, it was also suggested that the FIRMS Secretariat send an official letter announcing the event. A domain name has already been secured: <http://firms.fao.org>.

It was noted that considering the short time available until the release in May, the tasks to be included in the inter-sessional work plan have to be prioritised carefully. It was also recognised that the release would have to be limited only to the marine resource component (and not fisheries and management) and not include harmonised Status search and reference terms and descriptors since it will not be possible to conclude the discussions in time. The release version will instead include descriptors inserted by the data contributing partner (see also Agenda item 5).

The second part of the presentation concerned the working area restricted to partners. The FIRMS Secretariat explained the different publishing workflow processes including: i) security access and user rights (editors, reviewers, approvers, system administrator) and the related stages of approval/publication, ii) the preliminary creation of Reference Observation holding the Marine resource identity card and ownership, iii) the loading of Reporting Observations and their publishing as fact sheet including inheritance of Reference Observation identity card, iv) the on-line editing features to add/modify text, tables, images. It was added that upstream workflow include automated conversion from FIRMS Partners word documents into FIRMS compatible xml document.

The meeting was satisfied with the technical solutions presented, although it was felt that the some of the workflows could be improved to make the data handling easier for contributing partners, e.g. a clear split of workflow between Reference observation and other Reporting observation.

(ii) Status of the inventory of marine resources and stocks and their loading in FIRMS database

and

(iii) Status of the inventory of fisheries

The FIRMS Secretariat presented the number of resource objects, received and uploaded, by organisation. The same information was presented with regard to the inventory of fisheries. It is expected some progress on the inventory of fisheries during the intersession.

iv) Activities carried out by FIRMS Partners during the intersession

Several Partners presented summaries of their FIRMS activities. Progress reports are compiled in Annex 5.

Decisions:

- The FIRMS website will be launched at the UN Review Conference for Straddling Fish Stocks and Highly Migratory Fish Stocks Agreement to be held in New York on 20-24 May 2006 by the FIRMS Secretariat. FIRMS Partners are also encouraged to participate.
- FAO and FIRMS chair will inform the organisers of the Conference of the event by letter and by participating at the preparatory consultations on 20-24 March 2006.
- Considering the tight scheduling, the finalization of the module and the filling of the database according to FSC decisions will require prompt reaction from

- Partners on the revision of their excel sheets or xml documents. The workplan agreed upon in the next agenda item has to be respected.
- Partners should establish links with FIRMS from their website in order to enhance visibility of the website.

8. Inter-sessional work plan

The intersessional workplan was discussed and agreed upon as shown in the Gant chart of Annex 6. The Secretariat stressed that the additional work entailed by the decision of the FSC will delay other commitments in particular the delivery of the fisheries module supported by the STF project. Therefore additional support from FIDI and/or Fishcode-STF will be sought by the FIRMS Secretariat in order to cover the few additional man/month necessary in support to the module developments.

On a more general consideration, the meeting agreed that additional funding support will be necessary for new developments of FIRMS. In that respect, key milestones would be the extension of FIRMS to national agencies. FSC agreed on developing a project proposal for fund raising with donors. The Secretariat will take leadership for the formulation of this project document, in close consultation with FIRMS Partners.

9. Planning for the fourth session of FSC (FSC4)

The fourth session of FIRMS Steering Committee meeting will be held in Rome the week before COFI in end of February/early March 2007. It will be held in connection with the 22nd CWP Session. The two meetings will be planned not to exceed a total of four working days, plus a session to adopt the 2 reports.

10. Any other business

FIRMS Secretariat informed the meeting of a new FAO project component (EU funded) on "Fisheries Ontology for a Stock over-fishing alert system". This component is part of a broader European project, involving a number of university partners in which FAO participates through FIDI. A launching meeting will be held in March 2006. More information will be dispatched to Partners when available.

11. Election of Chairperson and Vice-Chairperson

A new Chairperson, Victor Restrepo, and Vice chairperson, Johanne Fischer, were elected for the coming session and inter-sessional period.

12. Adoption of the report

The report has been reviewed by FSC representatives during the following CWP meeting and adopted.

Annex 1: List of participants

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Senior Fishery Statistician
Senior Fishery Resources Officer
Associate Professional Officer (FIGIS)
Consultant

Mr Richard Grainger
Mr Marc Taconet
Ms Sachiko Tsuji
Mr Jordi Lleonart
Mr Sylvain Caillot
Ms Lena Westlund

Annex 2: Agenda

Monday, 13 February 2006

all day: 09:00 hours to 18:00 hours

1. Opening of session and Welcome address
2. Adoption of agenda
3. FIRMS membership

- Progress on the development of FIRMS Partnership

The FIRMS partnership welcomes as a new Partners EUROSTAT (which signed the agreement during the intersession, and CCAMLR and IWC on the brink of signing the agreement.

- Review of new perspective Partners

NEAFC made a request to become member. This item will also consider status for other foreseen partners, and ways to approach them.

4. Review of Annex 2 of new Partners

Each new Partner will present the content of its Annex 2 in order to raise common awareness on the contributions that each intends to make to FIRMS and on important aspects that could have been addressed with respect to contribution specifications.

5. Report of the technical working group (TWG1, December 2005) (cf Doc. FIRMS FSC3/2006/2)

The report of TWG1 will be reviewed with focus on aspects requiring decision making by FSC3. In particular, FSC's attention was called on:

- "Uncertain" as possible value of attribute "considered a single stock" (par.10e)
- sets of descriptors to describe stock status (par.11)
- presentation of inventories developed outside of FIRMS (ie Strategy-STF ones) (par.13)

Immediate follow-up actions to TWG1 will be reviewed. In particular, FSC's attention is called on:

- stock status and trend summaries: validation of mock-up evolving from TWG1 comments (par.17)
- comments made by FIRMS editors upon their tests of the workflow interface (par.19)
- revised mock-ups for the Fisheries module (par.46)
- required case studies for the fisheries module, for the management system approach (par.41), and the production system approach (par.42)
- setting priority levels for the translation of terms and definitions (par.51)

6. FIRMS Information Management Policy (IMP)

The FIRMS IMP is a living document providing the framework for the continuing development of FIRMS standards, through the addition of chapters. Candidate chapters are the documents submitted to and supported by TWG1. These documents are:

- Georeferencing standards (par.10C)
- Citations guidelines (par.10d)
- Marine resource topic structure and related definitions (par.10, and 11)
- Fisheries naming convention (par.22)

Tuesday, 14 February 2006

Morning: 09:00 hours to 13:00 hours

7. Review of the Progress Status of the FIRMS Database and Module Development

- Status of the inventory of Marine resources and Stocks and their loading in FIRMS data base
- Status of the inventory of Fisheries

FIRMS partners and the FIRMS Secretariat are invited to present short papers of the activities carried out during the intersession on the inventories, the development of the FIRMS data base, and the intended activities during the coming intersessional period.

- Presentation and discussion of the FIRMS web-site

FIRMS Secretariat will present status of the pre-release version of the FIRMS web-site highlighting progress made according to the recommendations of TWG1. FSC3 should decide whether FIRMS website can be published on the Internet.

8. Intersessional work plan

The various discussions held under the previous agenda item should pinpoint forthcoming activities and result in the development of an agreed workplan.

9. Planning for the third session of FSC (FSC3)

10. Any other business

11. Election of Chairperson and Vice-Chairperson

Wednesday, 15 February 2006

Afternoon: 14:00 hours to 16:00 hours

12. Adoption of the Report

Annex 3: Proposal for Stock Status descriptors

The FIRMS Steering Committee recommends that for the purpose of allowing a search of the FIRMS database by status of stocks, the following proposal for common descriptors be used as a starting point. This proposal foresees that two different and independent sets of descriptors be used, one for stock abundance (biomass) and the other for the fishery exploitation rate. These descriptors will not become part of the contribution of each FIRMS Partner; they are solely meant to serve as terms that would enable a search on all contributions independently from the specific terminology used by different partners. It is expected that FIRMS Partners consult with their organization and provide feedback on the acceptability of these terms at the next FIRMS Steering Committee meeting.

Relative Stock Status

1. Exploitation rate status

- a. No or low fishing mortality
- b. Moderate fishing mortality
- c. High fishing mortality
- d. Uncertain/Not assessed

2. Stock abundance status

- a. Virgin or high abundance
- b. Intermediate abundance
- c. Low abundance
- d. Depleted
- e. Uncertain/Not assessed

Annex 4: Proposal for a List of Reference Terms

Remarks: The FIRMS Steering Committee recommends that the following list of reference terms be used for the development of search tools for the FIRMS database. It is understood that this is a first list of basic terms that is kept open for the addition of new terms and definition of sub-terms in future meetings of the FIRMS Steering Committee. Each category should be supplemented with an “unspecified” entry.

Climatic Zone

- Polar
- Temperate
- Tropical

Bottom type

- Seagrass
- Coral reef
- Soft bottom
- Hard bottom

Depth Zone

- Coastal
- Shelf
- Slope
- Abyssal

Horizontal Distribution

- Estuarine
- Littoral
- Neritic
- Oceanic

Vertical Distribution

- Demersal/benthic
- Pelagic

Spatial Scale

- Global
- Regional
- Sub-Regional
- National
- Local

Jurisdictional distribution

- National
- Shared between nations
- Highly migratory
- High Seas purely
- Straddling between High Seas and EEZ

Assessment Models

- Age-structured
- Size-structured
- Biomass-aggregated
- Others

Assessment Data

- Fishery Catch and Effort
- Vessel Surveys
- Tagging
- Remote Sensing
- Environmental Data

Reference Points

- MSY
- Others

Assessment Indicators

- Biomass
- Abundance
- Exploitation rate
- SSB
- Recruitment
- Fishing mortality
- Average length
- Average weight

Annex 5: Reports of activities carried out by FIRMS Partners during the intersession

1) *International Commission for the Conservation of Atlantic Tunas (ICCAT)*

Meetings

ICCAT's Publications Coordinator attended the Technical WG Meeting held in Rome, 5-8 December.

Training

Five members of the ICCAT Secretariat staff, including the Publications Coordinator, attended a training course on XML given by a member of the FIRMS Secretariat. The training course was held in the ICCAT headquarters, 12-16 December.

Fact sheets

After the training course, the fact sheets corresponding to Atlantic Yellowfin and Atlantic and Mediterranean Swordfish were implemented and are awaiting validation. That means that three ICCAT resources (Atlantic Albacore, Atlantic Yellowfin and Atlantic and Mediterranean Swordfish) and six stocks (ALB_N, ALB_S, YFT, SWO_N, SWO_S, SWO_M) are available to FIRMS.

Definitions

ICCAT management unit areas were redefined in order to be in agreement with the biological limits of the resources. Also all the ICCAT resources were classified according to the reference terms defined by FIRMS. However, ICCAT has noted that the current set of Exploitation Status descriptors need to be modified in order to allow differentiation between biomass level and fishing mortality level. Until such changes are made, it will not be possible to create fact sheets that fully preserve the integrity of the SCRS reports on stock status.

2) *International Council for the Exploration of the Sea (ICES)*

ICES has worked on providing input to the FIRMS web database based on the ICES advisory report. This work has been divided into two: 1) the development of a conversion tool for converting the ICES word document into a XML document that can be directly uploaded on the FIRMS webpage and 2) providing actual inputs to the FIRMS web database in the form of a complete list of the marine resources that ICES will provide more complete information on and some (about 15) XML formatted summary reports that can be used directly as Fact Sheets.

Conversion tool

ICES deals with about 175 stocks and therefore it is necessary to make the conversion process from the ICES advisory report (in Word) to the XML document required by FIRMS automatic. This work is two fronts: standardising the ICES document and making the conversion program flexible. Technically it has been found necessary to develop a text-table conversion program together with a program that handles the images. There are versions of these programs available but the process still requires manual work on

the documents to prepare them for input. There is further work planned for 2006. Much of the work has been done by the FIRMS secretariat, the assistance of which ICES is conscious and very grateful.

Providing input to the FIRMS webdatabase

ICES/FAO together developed an ICES-FAO schema to map ICES topics to FIRMS titles. ICES has provided an overview of the stocks including four simple stock status indicators and ICES has provided some summary sheets [ICES advisory report vol. 2 (ICES 2005)].

FIRMS Steering Committee and Technical Working Group meetings

ICES has contributed to the work of these committees.

3) Southeast Asian Fisheries Development Centre (SEAFDEC)

Introduction

SEAFDEC has entered into collaboration with the Fishery Resources Monitoring System (FIRMS) in December 2004 with endorsement of the SEAFDEC Council during its 36th Meeting. The partnership is envisaged to assist the Member Countries in achieving the objectives of the Code of Conduct for Responsible Fisheries (CCRF), 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.

Following the collaborative arrangements, SEAFDEC has started the trial phase of developing a test inventory of shark fisheries in Southeast Asian countries based on data/information from a SEAFDEC program to FIRMS Database and Module Development. In addition, SEAFDEC participated in the Second Session of FIRMS Steering Committee Meeting scheduled in February 2005 to review the FIRMS Information Management Policy, development of FIRMS Database and Module, FIRMS web-site, Strategy for FIRMS partnership in promoting the development of a global network for reporting on fisheries and stocks status and trends, etc. Collaboration with FIRMS is envisaged to provide assistance to the Member Countries on the use of fisheries information in a user-friendly manner for their planning and management of fisheries.

Summary of Activities in 2005

During 2005, SEAFDEC collaboration with FIRMS focused on provision of information concluded from SEAFDEC program on Management of Fisheries and Utilization of Shark in Southeast Asia to FIRMS fisheries inventory, which is currently under development stage.

From 19-20 May 2005, Mr. Marc Taconet visited SEAFDEC Secretariat to follow up SEAFDEC contribution (Inventory of Sharks) to FIRMS, provide information/clarification to concerned SEAFDEC staff on the Excel Template of FIRMS fisheries inventory, and obtain views and comments on the FIRMS web-site and the mock-ups, and collaboration on Inventory of ASEAN resources and fisheries.

Regarding SEAFDEC/FAO Collaboration on Fishery Statistical Related Program - Inventory of ASEAN resources and fisheries (under the Implementation of the Strategy for Improving Information on Status and Trends of Capture Fisheries), FAO is looking for contracting regional expert(s) having deep knowledge of the fisheries in at least a few countries of that region, for implementation of the inventory. SEAFDEC provided assistance on names of potential experts of countries in the region and would take part of the review of the regional experts' outputs, and/or at a later stage to be actively involved in the national validation of the inventory through Strategy STF workshops.

For the FIRMS Website, SEAFDEC provided comment for modification of the new structure of the website during the discussion with Marc at SEAFDEC on 19-20 May. Further, SEAFDEC also provided comments on the use of similar title and standardize all the terminology in order to avoid confusion; information in the right column that is quite redundant with the bullet in left button; modification and inputs to Partner Fact Sheet; and comment on FIRMS Fact Sheet Mockups gateway page.

Following the visit of Marc in May, SEAFDEC has started providing information for Fisheries Inventory. To strengthen capacity of SEAFDEC staff to gain better understanding on overall FIRMS system and inventory modules, which includes marine resources, fisheries and fishery management, as well as basic usage of XML program, a one-week training session (28 November – 2 December 2005) at FIRMS Secretariat was organized with participation of two SEAFDEC staff.

In addition, the First FIRMS Technical Working Group Meeting was also organized in the following week (5-8 December 2005), in order to gather views from all FIRMS partners, including SEAFDEC, as basis for further development of the system and summarize the issues to be further discussed during the following FIRMS Steering Committee Meeting to be organized in February 2006.

The progress on Sharks Inventories for FIRMS

- Following up the training session and the 1st TWG Meeting, SEAFDEC has provided all information available on Sharks Inventories (Fisheries) in Cambodia, Indonesia, Malaysia, Myanmar, Thailand and Vietnam to Elena in Excel Template (as the XML template for fisheries inventory is still not available). However, as the XML inventory and the on-line editing system is not available, some information such as table or figure still cannot be uploaded so the attached MS word documents with all the information was also sent to Elena.

Proposal for Future Collaboration in 2006

- *Inventories on Sharks* - Areas for future collaboration are:
 - Sharks inventory need to be put in XML file (when the XML template for fisheries is settled and available); and additional items, like photo and table, are to be put in online editing program.
 - Identification of other information to be provided to FIRMS, new potential area e.g. pelagic fisheries, socio-economic data, etc. However to ensure the relevancy of information and usefulness of the effort, scope and nature of available information need to be carefully investigated with FIRMS.

- Socio-economics data - all the information that has potential to be used are in Thai (as it past produced from the pilot project by the DOF station in Chumporn Province). The general socio-economics information collected by TD (in English) is not relevant as it was collected on professions (e.g. type of each fishery activities) basis.
- A case study on resource inventory – new potential information is sea turtles in Southeast Asia as a case study. To ensure the relevancy of information and usefulness, scope and nature of available information need to be carefully investigated with FIRMS.
- *Inventories in Southeast Asia* - SEAFDEC will continue collaboration in coordination with the potential experts for Cambodia, Thailand and Vietnam; involvement at the regional level on the review and validation of the work when the outputs are advanced enough; as well as the Regional Workshop.
- *Review and contribute to FIRMS Database and Module Development, and Draft FIRMS Website* - SEAFDEC will continue providing comment and suggestion on the development.

Annex 6: FSC3 – FSC4 intersessional workplan

Short-term activities	Calendar Feb-May 2006															
	Feb/3	Feb/4	March/1	March/2	March/3	March/4	April/1	April/2	April/3	April/4	May/1	May/2	May/3	May/4	June	
a Events																
b Reviewing of the resource inventory template																
c Updating of the resource inventories by partners																
d Fixes and validation of current application - version V1.0																
e Status and trend summaries/schema - version V1.1																
f Loading of all reference obs. and UNGA obs.																
g Preparation of Fact sheets by Partners: NAFO, ICCAT, ICES,...																
h Loading of some partners' fact sheets																
i Enhance Worflow module (more integrity control) - version V1.2																
j Fisheries module: fonctionnal requirements and draft schema																
k Fisheries module: cases studies: CCAMLR, SEAFDEC																
l Release of the FIRMS website on internet																
m Utilization of the wokflow module by partners with reviewer rights																
n Review of the FIRMS website																
o Utilization of the wokflow module by partners with editor rights (a version for test)																

Long-term activities	Calendar									
	May 2006	Jun 2006	Jul 2006	Aug 2006	Sep 2006	Oct 2006	Nov 2006	Dec 2006	Jan 2007	Feb 2007
1 Events	UN Conf.									FSC4
2 Provide technical support (converter tools, upload interface,...)										
3 Setting up of an assistance tool (FAQ, forums)										
4 Enhance Worflow module V1.2 (more integrity control)										
5 Loading of partners' comprehensive marine resource fact sheets										
6 Fisheries module: Application development (STF)										
7 Fisheries module: cases studies: CCAMLR, SEAFDEC										
8 Fisheries module: cases studies and inventories: NEAFC, NAFO, ICES, EUROSTAT										
9 Reviewing of status and trends reference terms										
10 Formulate raising-funds project										

Sylvain	
Sylvain	
Nick	Sylvain
Sylvain	
Aureliano	Nick
Aureliano	Elena
Marc	

FIRMS Secretariat	
Both	
Partner	

FIRMS human resources status as per February 2006	available
	risk of unavailability
	unavailability