



FIRMS Steering Committee Meeting

Ninth Session

Swakopmund, Namibia, 23–24 and 27 February 2015

REPORT

Author: FIRMS chairperson, with inputs from Steering Committee members

EXECUTIVE SUMMARY

The ninth session of the Fisheries and Resources Monitoring System (FIRMS) Steering Committee (FSC9) offered the opportunity to celebrate “ten years of FIRMS” to the four member and three observer organizations that were represented (FAO, Western Central Atlantic Fishery Commission [WECAFC], Northwest Atlantic Fisheries Organization [NAFO], South East Atlantic Fisheries Organization [SEAFO]; Benguela Current Commission [BCC], South Pacific Regional Fisheries Management Organization [SPRFMO], and Western Indian Ocean Fisheries Database [WIOFish]). The relatively low attendance from partners was offset by a very motivated core group that strongly supported the value of FIRMS and was able to agree on strategic moves to breathe new life into FIRMS, to enable its renewal, and to foster re-engagement by partners.

The Steering Committee (the Committee) recognized that FIRMS had built strong foundations for global reporting on fisheries status and trends and that it had met expectations of most partners. It acknowledged the ongoing progress towards **timelier reporting**, e.g. with the forthcoming International Council for the Exploration of the Sea (ICES) web-services, or the harvesting capacities developed for serving the Chimaera portal under the SmartFish project. These foundations can now be exploited to **expand reporting coverage**, and to **respond to target audience needs**, through various pathways:

- **Increased membership:** the meeting acknowledged SPRFMO’s intention to join the partnership, as well as WIOFish’s willingness to initiate discussions with the Southwest Indian Ocean Fisheries Commission (SWIOFC) towards a statute of associate partner.

- **Strategic collaboration with large marine ecosystem (LME) initiatives** and programmes is seen as a way to strengthen national reporting in FIRMS, and the Committee encouraged the developing of experience with the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+) and Bay of Bengal Large Marine Ecosystem (BOBLME) (where the focus is on positioning FIRMS as tool to support adaptive fisheries management), and welcomed BCC's intention to follow a similar process.
- FSC9 supported the proposed project of a **Global record of stocks and fisheries** (a component of BlueBRIDGE), which will federate knowledge on status/trends of stocks and fisheries across various sources, and as such is expected to offer key services to stakeholders involved in "regional/global state of stocks indicators", as well as public and private actors involved in ecolabelling, traceability and sustainable fisheries.
- The Committee endorsed the **renewal of the FIRMS website** which is expected to better serve expectations of the general public, in particular through the proposed **stocks and fisheries maps viewer**.

Judging from satisfactory activity reports from the majority of its members (see Annex 3), which include information contributions and attendance at e-meetings of technical working groups (e-TWGs) , the Committee was not overly concerned regarding low attendance of its members at this meeting. It recognized that low attendance also resulted from a conjunction of institutional and personal conflicting agendas, and finance-driven priorities. Nonetheless, FSC9 urged the Secretariat to re-engage some partners in order to harness them on the above-described goals. The incoming chairperson is Mr Neil Campbell (NAFO) and vice chairperson Ms Nancy Cummings (WECAFC). FSC10 will be held in Rome in 2017, and a technical working group (TWG) might be organized in connection with the twenty-fifth session of the Coordinating Working Party on Fishery Statistics (CWP25) in February 2016.

1. OPENING OF THE SESSION AND WELCOME (AGENDA ITEM 1)

1. The FSC9 was held at SEAFO headquarters in Swakopmund, Namibia, 23–24 February 2015. The meeting was opened by Mr Marc Taconet, FIRMS Secretary, at 09.00 hours on Monday 23 February 2014. Dr Ben van Zyl (Executive Secretary) and Mr George Campanis, SEAFO, welcomed the meeting participants.
2. Ms. Barbara Marshall (NAFO), the chairperson, thanked the SEAFO Secretariat for hosting the meeting, the FIRMS Secretariat for organizing the meeting, and the partners and their member States for their ongoing contributions and commitment. She also welcomed associated members and observers.
3. FIRMS members present:
 - Food and Agriculture Organization of the United Nations (FAO);
 - Northwest Atlantic Fisheries Organization (NAFO);
 - South East Atlantic Fisheries Organization (SEAFO).

FIRMS associated member present:

- Western Central Atlantic Fishery Commission (WECAFC).

FIRMS observers present:

- Benguela Current Commission (BCC);
- South Pacific Regional Fisheries Management Organization (SPRFMO);
- Western Indian Ocean Fisheries Database (WIOFish), via teleconference.

Members or associated members not present:

- Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR);
- Commission for the Conservation of Southern Bluefin Tuna (CCSBT);
- Fishery Committee for the Eastern Central Atlantic (CECAF);
- European Union (EU);
- General Fisheries Commission for the Mediterranean (GFCM);
- International Commission for the Conservation of Atlantic Tunas (ICCAT);
- International Council for the Exploration of the Sea (ICES);
- Inter-American Tropical Tuna Commission (IATTC);
- Indian Ocean Tuna Commission (IOTC);
- North Atlantic Salmon Conservation Organization (NASCO) (new partner in 2013);
- North East Atlantic Fisheries Commission (NEAFC);
- Southeast Asian Fisheries Development Center (SEAFDEC).

The list of FIRMS participants present (members, associate members and observers) can be found in Annex 1.

2. ADOPTION OF THE AGENDA (AGENDA ITEM 2)

4. The agenda was reviewed. It was noted that items 3 (membership, information, contributions), 4 (Annex 2, partners information contributions and modifications) and 8 (information management policy [IMP] including standards and guidelines) were standard items dealing mainly with previous work. Item 5, FIRMS branding, was new and had been brought forward for immediate discussion. Items 6 (review of FIRMS activities), 7 (TWG4 report) and 9 (strategic aspects including Caribbean projects, BlueBRIDGE, iMarine) were to be presented by the Secretariat, Mr Aureliano Gentile and Mr Marc Taconet. Items 10 (intersessional work plan) and 11 (planning for the next session), also standard items, were forward looking. Under other business (item 12), it was noted that information on FAO domain names would be presented. The chairperson noted that, under item 13 (election of chairperson and vice-chairperson), the vice-chair, Mette Bertelsen was retiring. This had created a need to identify both a new chair and vice-chair and this was done at the meeting. The agenda was adopted.

3. FIRMS MEMBERSHIP (AGENDA ITEM 3)

FIRMS, 10 years after (agenda item 3a)

5. Launched in 2004 by 6 founding partners, FIRMS membership increased by 2014 to 14 partners representing 19 fisheries bodies including 5 FAO entities

(<http://firms.fao.org/firms/about/en>). Progress on the development of FIRMS partnerships was addressed in agenda item 3b.

6. The FIRMS Secretariat noted that FIRMS had achieved substantial outputs over the years, and a review of FIRMS activities was presented and discussed. It was asked whether FIRMS served partners' expectations and needs. Was it fulfilling its mandate?
7. Dr Neil Campbell (NAFO) indicated that FIRMS was a very useful tool for regional fisheries management organizations (RFMOs), particularly with respect to stock status. However, the FIRMS interface could be made more friendly for the end user. This would promote wider use of the system.
8. Mr Campanis noted that FIRMS was a good vehicle for disseminating information produced by its Steering Committee and for finding information, and that it served purpose and needs. SEAFO does not have in-depth information on all species in its area, and so it concentrates its efforts on the major species being assessed by the SEAFO Steering Committee.
9. Mr Yimin Ye (FAO) noted that FIRMS was useful for RFMOs that had given good information on stock status and for other users, particularly with respect to learning about the fisheries of developing countries. He noted that FIRMS had expanded its scope from resources to fisheries, a quite substantial effort, and that other non-governmental organizations (NGOs) were working in parallel on global reporting to support the ecolabelling driving force.
10. Large marine ecosystems (LMEs) were seen as an opportunity to acquire additional inventories. Mr Campanis endorsed partnerships with LMEs as a way to move forwards under a mature framework.
11. Mr Campanis asked whether there was any activity or plans concerning NatFIRMS. This is a significant component of the world fisheries not captured in FIRMS. This initiative remains in the conceptual realm. Mr Taconet noted that FAO did not have the means to capture data for the whole world. Although the current focus of FIRMS is with RFMOs, FIRMS has attempted to acquire what constitutes national data. National data are being captured through the RFMOs, e.g. CECAF obtains data from 10–20 countries in its jurisdiction.
12. WIOFish noted that external users could access catch information from other jurisdictions using FIRMS but that, in order to avoid duplication and lessen the burden, FIRMS should link to FAO catch databases. Mr Campanis noted that FIRMS provided much more than just catch information. Mr Taconet pointed out that FIRMS captured components not contained in FAO catch statistics
13. Ms Nancie Cummings (WECAFC regional focal point) noted that, from the WECAFC perspective, it was still developing its expectations of the system. It is currently in the early stages of capacity building. Buy-in at the subregional level requires information dissemination and training through workshops. Mr Taconet summarized what had been done in that regard to date. The Caribbean Regional Fisheries Mechanism (CFRM) is also strengthening and widening their relationships. There is a good opportunity to engage the National Oceanic and Atmospheric Administration (NOAA) as well.

14. Mr Hutu (BCC) referred to FIRMS as a major framework providing reporting standards for regional fishery bodies (RFBs) and their member countries. However, he wondered how well FIRMS was known and what FAO's strategy was to make it more popular.
15. In summary, FIRMS has matured but there are many possibilities to further develop and broaden FIRMS. One aspect that Mr Campanis considered might be useful was a finer scale in how the data are presented/made available where finer resolution exists. This may not be practical for many partners although technical capacity to do this now exists.
16. Several participants noted that it was unfortunate that a significant number of partners were not present at the meeting, making the process perhaps less effective. However, the chairperson pointed out that missing partners were still participating through their system contributions and also through e-technical meetings. This issue was discussed further under agenda item 11.
17. The chairperson summarized that performance had been excellent, data were being kept up to date and the Secretariat was maintaining the system current, and serving the needs of the users. FIRMS is now mature but needs to be refreshed, highlighting that on this, the tenth anniversary of FIRMS, the partners need to think strategically how the project should move forwards to more effectively share what has been compiled, providing products that are user-friendly and accessible. Branding as a way to promote FIRMS was discussed under Agenda item 5.

Progress on the development of FIRMS partnership (agenda item 3b)

18. NASCO joined the FIRMS partnership (December 2013).
19. The FIRMS Secretariat noted that, recently, FIRMS had been working with the FAO RFBs to establish fisheries inventories, i.e. CECAF, SWIOFC, Regional Commission for Fisheries (RECOFI) and in the near future WECAFC. CECAF and GFCM stock reports are updated by the Secretariat, and there would be a need for mainstreaming reporting efforts from the source provided by the Scientific Committee. Extra-budgetary funds are required for these bodies to be able to attend the FIRMS Steering Committee.
20. In addition, CCAMLR, CCSBT, IATTC, ICCAT, ICES, NAFO, NASCO and SEAFO all contributed content in the recent intersessional period.
21. The SPRFMO favours becoming a member of FIRMS, but it needs to bring the partnership matter to its members first.
22. WIOFish is in a very preliminary stage of assessing its relationship with FIRMS. Limited finances are hampering progress. Progress towards more formal relationships should be discussed through SWIOFC.
23. The WECAFC regional representative, Ms Cummings, indicated that there was an endorsement of FIRMS by WECAFC, including subregional partners the CRFM and Organization of Fishing and Aquaculture in Central America (OSPESCA). She presented input on two other SC9 agenda items:

- WECAFC Annex 2 for FIRMS Partnership: within the WECAFC region, uptake of the FIRMS process would need to recognize the individual needs within the region at a country (subregion) level while it would be necessary to incorporate the political and geopolitical differences. The FIRMS process would primarily be promoted within the region by the subregional bodies currently endorsing FIRMS as an observer (CRFM and OSPESCA). Initially, the process would focus on the FIRMS objectives to build and improve inventories within the region, focusing on regional management plans and species prioritized with the region/subregion. It should also emphasize the capacity-building efforts, network collaborations, and standards required to accomplish the FIRMS objectives. WECAFC considers that use of FIRMS could contribute to agreed validation accomplished through regional and subregional experts (focal points), transparency and better management performance of regional and subregional marine resources and fisheries.
 - Future data collection framework as relating to the WECAFC region in a data-poor context: The current situation of data deficiencies within the WECAFC region was noted, as was its impact on science and management. The regional involvement and promotion of FIRMS within the region could be a mechanism to lead to improved management through reducing data gaps. However, the need to strengthen collaborative efforts and build capacity along this need was noted as a priority. Within the region, the continued development of stock status through incorporating information from regional stock assessments and working group meetings would be a primary element towards reducing data gaps and increasing knowledge in the region.
24. The BCC, which is an observer in FIRMS, will resume talks while evaluating in the short term how its membership will allow it to realize synergies with its strategic action plan. During the meeting, the BCC indicated its plans to become a full partner.
25. SEAFDEC attended all FSC meetings up to the last FSC8, but has provided only a few reports. IOTC was originally strongly involved in the FIRMS set-up, but has since been relatively inactive in terms of reporting. NEAFC has been more recently involved with a first round of reporting on its fisheries and is expected to update its reports.
26. The meeting participants concluded that the Committee should have a process for dealing with inactive partners as well as observers that have not indicated their intentions, taking into consideration that participation in FIRMS is voluntary. It was pointed out that finances were often a stumbling block to partnering and participation. The meeting agreed to task the FIRMS Secretariat with writing formal letters to inactive partners to encourage them to contribute and to see whether they are still committed to some level of participation (rather than crossing them off the list).

Review of new prospective partners (agenda item 3c)

27. New prospective partners include the BCC, Permanent Commission for the South Pacific (CPPS), SPRFMO and Western and Central Pacific Fisheries Commission (WCPFC).

28. It was suggested that letters be sent to prospective partners, seeking clarification with respect to their intentions.

29. Other engagements are:

- CRFM and OSPESCA, considering joining FIRMS, as observers following the FIRMS–WECAFC workshop (November 2013).
- South African Oceanographic Research Institute through the WIOFish Project in the SWIOFC region.
- BOBLME phase II is envisaging an arrangement, and FCWC is stepping into FIRMS activity in the CECAF region.
- Also, it was suggested that there was scope to extend participation to other entities such as LMEs that deal with fisheries while engaging with countries.

Decisions:

- Send letters to inactive partners to encourage participation (FSC9/D3.1)
- Open up the partnership to LME projects and organizations in order to broaden coverage (FSC9/D3.2)
- Send letters to prospective partners to clarify their intentions (FSC9/D3.3)

4. REVIEW OF ANNEX 2 (AGENDA ITEM 4)

Proposed information contributions of new partner(s) (agenda item 4a)

30. The “Annex 2 to FIRMS partnership arrangement” describes the information each partner intends to provide to FIRMS modules (marine resources and fishery).

31. NASCO, the newest partner, does not assess stocks, and so it provides only management information on the basis of ICES scientific advice. That is reflected in its Annex 2.

Proposed modifications by existing partners (agenda item 4b)

32. Recent changes among partners were reviewed. FAO underwent a change with its WECAFC Article VI body becoming an active FAO associated partner in FIRMS. The WECAFC Annex 2 includes and formalizes collaboration with CRFM and OSPESCA:

33. FAO WECAFC Annex 2 will focus on four priority regional fishery management plans (queen conch, spiny lobster, Guyana-Brazil shelf penaeid shrimp, four-wing flying fish); WECAFC will be completing its inventory through seven stock-assessment working groups handled in collaboration with CRFM and OSPESCA. The inventory will be coordinated by a single focal point for FIRMS submissions working with subregional focal points.

5. FIRMS BRANDING (DOC. FIRMS FSC9/2015/4D) (AGENDA ITEM 5)

34. Mr Taconet provided an overview of FIRMS branding. Along its geographic expansion, new stakeholders are invited to collaborate with FIRMS and to consider how to apply the FIRMS global framework in their regional context. This

interaction generates new ideas and proposals for purposing FIRMS in local contexts and makes it more useful for the partners.

A mature framework for data collection, in data-poor contexts (Doc. FIRMS FSC9/2015/Inf.10) (agenda item 5a)

35. Regarding its functional scope, the FIRMS experience in developing well-structured methodologies, protocols and standards to increase data coverage, and to respond to the need of some partners to channel national data, has resulted in the recognition of FIRMS as a tool for supporting data assemblage and sharing in data-poor contexts. This need has been expressed:
- In the WECAFC context, where fisheries inventories are seen as a data collection mechanism in a data-poor situation. For the sake of communicating a simple message, the FIRMS branding has also been used to cover the objective of a regional database to support fisheries management and stock assessment.
 - In the Western Indian Ocean, WIOFish provides yet another testimony of a very similar function delivered through its inventory of fisheries. Ms Everett indicated that data collection for some countries such as in her area did not have the resources to collect detailed fishery information as is used in assessments.
 - In West Africa (Fishery Committee for the West Central Gulf of Guinea [FCWC] and Regional Fisheries Committee for the Gulf of Guinea [COREP]) to a certain extent.
36. Mr Campanis indicated that his understanding of FIRMS was that of a mechanism to present summarized assessment and fishery management information and not one originally intended as a tool for assessing stocks.
37. Mr Loveridge (SPRFMO) cautioned that there was an inherent danger when a system designed for one purpose was used for another. Mr Gentile and others reiterated that FIRMS was also designed as an inventory system. In the inventory process, summarized data coming from other sources as may be found in grey literature data are collated and inputted.
38. There was some discussion aiming at clarifying the utility of FIRMS to provide data that could be inputs to stock assessments, and whether it was a more auxiliary source to support adaptive management decisions where there are few data for assessing stocks. It was noted that FIRMS had been used as a tool to provide supplemental information for assessments.
39. The participants agreed that a fundamental distinction had to be made between the term “data collection” (which concerns the collection of “raw/observed data”) and “information collection” (which concerns an assemblage of data, information and knowledge). Therefore, the former term is not appropriate for inclusion in the FIRMS mandate. However, it was felt that the concept of “information collection” could be introduced to reflect the emerging function of FIRMS. In this context, data collation is understood to mean information collection.

40. The chairperson concluded that FIRMS might be a different thing to different organizations, and that it had to be flexible in accepting partners with varying levels of detail to contribute.

FIRMS and the long-term governance of the VME DataBase (agenda item 5b)

41. Regarding its thematic scope, FIRMS agreed at past FSCs that it should cover reporting on ecosystem assessments. On this occasion, FSC9 was called to examine whether the VME DataBase could fall under its remit.

42. Mr Campanis indicated that, at the second FAO workshop on the Global Database for Vulnerable Marine Ecosystems (Rome, May 2014), sustainability of the VME DataBase had been discussed. Currently, the VME DataBase is managed by the FAO Deep-sea Fisheries Team. It is likely that this will continue through the forthcoming ABNJ Deep-seas Project and as further components are developed. Among the longer-term options, there have been indications that the FIRMS Steering Committee could be approached regarding its possible role in respect of the VME DataBase.

43. FIRMS partners were asked to provide an opinion on possible inclusion of the VME DataBase within the scope of FIRMS:

- Mr Gentile suggested that, where there was overlap, an interface could be created to facilitate interchange: the measures on vulnerable marine ecosystems (VMEs) included in the VME DataBase are logically part of the overall management strategies described in FIRMS fishery fact sheets.
- Any VME-related information presented in FIRMS would apply only to those stocks that were part of the FIRMS mandate.
- It was generally agreed that FIRMS and VME steering groups should have more interaction, possibly in the form of joint governance.
- As a first step, as participation is substantially overlapping, it should be ensured that, where practical, the two groups have back-to-back meetings.

Decisions:

- The FIRMS Secretariat should examine how to enable linkages between the VME DataBase and FIRMS fact sheets. (FSC9/D5.1)
- Further discussions concerning possible inclusion of VME governance within the scope of FIRMS will take place at the VME meeting 2–4 March 2015. (FSC9/D5.2)
- The deep-seas RFMOs at FIRMS and participating in the VME meeting agreed to recommend that the planned inventory of deep-seas fisheries should be implemented, taking into account inclusion in FIRMS. (FSC9/D5.3)

6. REVIEW OF FIRMS ACTIVITIES DURING THE INTERSESSION (FIRMS FSC9/2015/2A) (AGENDA ITEM 6)

Report on intersessional activities (agenda item 6a)

44. Seven partners provided a report of their activities: CCSBT, FAO–WECAFC, IATTC, ICCAT, NAFO, NASCO and SEAFO. Mr Gentile and Mr Taconet presented the Secretariat report on FIRMS activities carried out during the

intersession, including: marine resource and fishery modules; database content; fact sheet layout improvements; coverage maps; web trends; applications development; training; promotional activities; Secretariat resources in support of FIRMS; difficulties encountered; and planned activities (FSC9/2015/2a). Some of these points were addressed in more detail, as reported below.

45. Time trends and breakdown by FAO major fishing area of inventory and fact sheets were presented. The total number of marine resource units in the database was 1 282, with the largest number of contributions from ICES, WECAFC and CECAF. There are now 686 fisheries inventoried, mostly from CECAF and WECAFC; however, many WECAFC components have not yet been validated or published.
46. Fact sheet update turn-over by members since 2004 has fluctuated without trend, achieving on 12 February 2015 a total of 1 009 marine resource fact sheets and 218 fishery fact sheets produced. The Secretariat also reported that additional fact sheets had been published shortly before the meeting by IATTC and SEAFO but not computed in this report.
47. Beyond the regular workflow and dissemination activity by FIRMS partners and Secretariat, the following was accomplished:

Marine resources module:

- CCAMLR, ICES: enriched inventory and new fact sheets;
- GFCM: enriched inventory;
- CECAF: revision of the section “Coastal small pelagics - Northern Area of the Eastern Central Atlantic (FAO Area 34)” and new fact sheets;
- WECAFC: a first version of the marine resources inventory drafted;
- BOBLME: draft inventory.
- FAO: new regional marine resource fact sheets based on the latest “Review of the state of world marine fisheries resources” (2011) and links to state and trend summaries per area added (harvesting partners’ contributions);

Fisheries module:

- NASCO: a first version of the fisheries inventory and a jurisdictional approach fact sheet published;
- Directorate-General for Maritime Affairs and Fisheries of the European Commission (DG MARE): two case studies fact sheets (production system approach);
- CCAMLR: updated fishery inventory matching the marine resources and new fact sheets;
- SEAFO: fishery management units in progress.

FAO:

- world oceans – global tuna fisheries; world oceans – deep-sea fisheries; Pacific islands region – marine fisheries (extracted from “Review of the state of world marine fisheries resources”);
- FAO – Article VI RFBs;

- CECAF: national inventories and fact sheets for Spain, Angola, Côte d'Ivoire and Gabon, with Morocco, Congo and Benin pending final clearance,
- SWIOFC: updated inventory for the Chimaera portal under the SmartFish project in collaboration with WIOFish and STATBASE databases,
- WECAFC: first draft regional inventory and prototype fact sheets (Workshop November 2013);
- BOBLME project: prototype fact sheets (November 2014);
- RECOFI (FAO – Article XIV RFBs): fisheries inventories finalized for Bahrain, Iran (Islamic Republic of), Qatar and Oman. Fact sheets (fishing activity and management unit approaches) published.

48. In terms of systems improvements to fact sheet and website layout:

- Marine resource and fishery modules – new use and display of reporting year and reference year was reported as completed.
- Marine resources – FIRMS standard state and trend descriptors in fact sheet layout were reported as ready for release (see TWG4 recommendation).
- Fishery – indicator of data reliability was reported as in progress (see TWG4 recommendation).
- Home page – news box for advertising latest fact sheets was added.
- Thematic page – a dedicated webpage giving access to the latest FAO reports on “Review of the state of world marine fisheries resources” was added.

49. Completing FCS8 decisions:

- The change to the new FIRMS extended name “Fisheries and Resources Monitoring System (FIRMS)” and logo was reported as completed. All official FIRMS documents and templates should be updated accordingly.
- Partner’s logo in the fact sheet – indicator of data reliability was reported as in progress (see TWG4 recommendation).
- Alternative layout for “no longer monitored marine resources (monitoring period) and closed fisheries (fishery life cycle)” was reported as not yet started.

50. In terms of development of applications:

- Word/Excel-to-XML converter tool – further configured and massively utilized to produce and publish reference observations and fact sheets.
- The species name finder, an iMarine “bionym” component, was used to facilitate the validation of species scientific names within the Excel-based fishery inventories.
- Development of mapping application – through the Fisheries Global Information System (FIGIS) integration, the recent work done on VME DataBase map interface had positive side-effects on FIRMS (e.g. faster map loading and display, additional layers for the stocks and fisheries map viewer).
- Stocks and fisheries map viewer – start of collection of requirements (see TWG4.4 report and FIRMS Wiki documentation).

51. Intersessional training included:

- WECAFC–FIRMS Workshop on Marine Resources and Fisheries Inventories (the United States of America, November 2013).
- The FIRMS Secretariat ensured continuing remote technical support to partners in their information contributions to FIRMS, or in the development of their inventories or reporting templates.
- Recent focused assistance has included liaising with CCAMLR and NASCO for the submission of new reports.

52. Concerning capacity-building activities for FAO RFBs, Mr Campanis asked how resources were allocated. Mr Taconet indicated that these were essentially funded through specific FAO extra-budgetary projects.

53. Promotional and outreach interventions by the Secretariat were undertaken at the FIRMS WECAFC Corpus Christi workshop, WECAFC Commission 15, SWIOFC SmartFish Chimaera validation workshop and BOBLME Hilsa Assessment Working Group in 2014.

54. The funding support to the FIRMS Secretariat was reviewed. It was reported that the regular activities during the intersession had been covered both by FAO's Regular Programme allotments and other project funding support. The majority of funds were dedicated to supporting data submission and training activities, relatively stable during the intersessional period. There were no specific concerns regarding support to routine maintenance by the regular programme funds in the near future.

55. In terms of difficulties encountered:

- Budgetary: no real budgetary constraints for routine maintenance. The FIRMS programme has remained a priority area for the Fisheries and Aquaculture Department and has become part of the FAO Strategic Objective 2 "Sustainable use of natural resources".
- Technical: no particular difficulties, but maintaining applications requires a considerable amount of developers' time. Switching reporting year vs reference year was a delicate process. Maintaining high ranking in search engines is challenging.
- Scheduling: responses from a few partners are occasionally delayed or absent, both in regard to updating the inventories and producing fact sheets.

Key topics regarding status of the FIRMS website (agenda item 6b)

56. Web trends in the period 2007–2014 were reported. In terms of traffic sources, about 44 percent reach FIRMS through referral sites, 37 percent of visitors access FIRMS through search engines (mostly Google), 19 percent of visits is due to direct traffic. The Google search engine and FAO referral site represent the majority of all sources of traffic. North America and then Europe are the regions with the highest level of visits. Most visits are made through English-language-based browsers.

57. Among the most frequently viewed pages are the home page, the search interfaces and several fact sheets. The most frequently viewed are marine resource fact sheets and the fishery domain related to tuna, followed by the higher level global or regional syntheses, sourced from the FAO regional review, and by several fishery fact sheets, particularly those containing management information.
58. With some negative fluctuations (including technical incidents that temporarily reduced search engines' crawling/indexing capacities) both number of visits and pages increased in the period considered. The total amount of page views for 2014 was less than 2013; however, the negative trend started after May 2013 and slowed down until October 2014 when corrective actions were made to the defective page crawling/indexing in FIGIS.
59. Combining these data with the considerations on the bounce rates, it may be concluded that users access the site but leave it prematurely. This trend also suggests that users are interested in authoritative sources of information on status of fishery resources, but, in some cases, they give up for various reasons. Possible causes could be: complex navigation, lack of user friendliness, incomplete coverage, and difficulty for users to find what they are looking for.
60. The need to promote the system (Twitter, Facebook, LinkedIn, pamphlets, etc.) was indicated.

7. REPORT OF E-TECHNICAL WORKING GROUP 4 (SUMMARY REPORT OF E-TWG 4, DOC. FIRMS FSC9/2015/3 AND RELATED INFO DOCUMENTS INF. 7.A, B, C, D) (AGENDA ITEM 7)

61. Mr Gentile reported on the activities of the fourth Technical Working Group (TWG4) which materialized across four e-meetings during the intersessional period using Adobe Connect. Each meeting lasted about an hour and focused on specific topics. (FIRMS FSC9/2015/Inf.7a-d). Main themes discussed were:
 - TWG 4.1 – 15 May 2014
 - planning schedules and content of the next e-meetings,
 - displaying state and trend standard descriptors,
 - partners reporting on other activities;
 - TWG 4.2 – 17 July 2014
 - renewing of the FIRMS website - first discussion,
 - partners reporting on other activities;
 - TWG 4.3 – 14 October 2014
 - inventory template improvement (data reliability, fishery importance),
 - first implementation step of rules for reference year/reporting year,
 - partners reporting on other activities;
 - TWG 4.4 – 5 February 2015
 - renewing of the FIRMS website – second discussion.

62. TWG4 made several recommendations that were reviewed by FSC9:

- Displaying state and trend standard descriptors (TWG 4.1) – FSC9 agreed that a table showing the standard descriptors would be displayed, using both the contributor’s descriptions and FIRMS descriptions where available, and, where not, only the FIRMS descriptions. (approved as FSC9/D7.1)
- Concerning state and trend graphs, the importance of automatic generation based on web services was highlighted. In addition, the need for accessing definitions for both the standard terms and the non-standard terms used by partners, and how these are mapped, was highlighted. In the case of complex values, e.g. “F2011/FMSY = 1.04 range (0.38–1.32)” some additional explanations are expected to be provided by the partners in the text.
- During this meeting, it was agreed to move towards the “traffic light approach” where possible. NAFO will lead this work and it will be referred to an intersessional TWG (to be held in late June) for further elaboration. (approved as FSC9/D7.2)
- Inventory template improvement (TWG 4.3) – indicator of data reliability: addition of a new free text field. This was agreed. (approved as FSC9/D7.3)
- Fishery importance, viewpoint and description: addition of two new free-text fields. This was agreed. (approved as FSC9/D7.4)
- Following decision FSC8/D6.11 (February 2013), the reporting year is from February 2015. (In place of reference year for differentiating observations and for the display of the year value in the fact sheet.)
- For reference year, the definition agreed is: “The last year considered in the stock assessment and/or fishery status.” (approved as FSC9/D7.5)
- For reporting year, the definition agreed is: “The publication year of the source of the information.” (approved as FSC9/D7.6)

63. Renewing of the FIRMS website (TWG 4.2 – 4.4)

- The renewal should be more focused on layout design and new user interface facilities. The new user interface will be designed with the primary concern to respond to users' needs.
- The new FIRMS website and interfaces should:
 - facilitate search and browsing across stocks and fisheries information;
 - offer thematic areas of user interest;
 - build interfaces to respond to competency questions of interest to users;
 - provide summary indicators of stock status at the regional or global level;
 - offer federate search mechanisms to dig into different information systems.
- Concerning the layout, TWG suggested placing emphasis on the following points:
 - less institutional “look and feel” (e.g. use of bright colours);
 - complexity should be reduced in favour of dynamicity and neatness;
 - being more informative through a wider use of nice images, icons and infographics;
 - easier and clearer access points.

- Concerning the new facilities, TWG welcomed the ideas of:
 - a map viewer integrating different layers (FAO major fishing areas, RFB competence areas, species distributions, stock monitoring areas, fishing areas);
 - exclusive economic zones (EEZs), bathymetry, etc.;
 - simple search in the homepage;
 - better identification of the two modules' contexts with dedicated easier search;
 - regularly updated news box for achievements (new fact sheets, FIRMS meetings);
 - new partnerships, etc.
- The need was evidenced to assess costs and resources to be involved in the renewal process.
- It was considered that enabling crossover among FAO information domains (FIRMS, VME, catch statistics, etc.), thereby avoiding the duplication, would constitute a valuable effort.
- Based on the analysis made on FIRMS communication strategy (FSC8), it was recalled that the main target audiences have been identified as:
 - RFBs and their member States;
 - governmental fisheries agencies;
 - global or regional marine science networks in support to state of the environment and ecosystem;
 - international non-governmental organizations (INGOs) and NGOs influencing seafood consumers and industry on sustainable fisheries.

64. Participants were also informed about a draft user survey, which will be further discussed during the intersessional period.

65. These points were all considered by the FSC and a plan to move forwards with the improvement of the website was considered under agenda item 9c.

8. FIRMS INFORMATION MANAGEMENT POLICY (IMP) – FSC8 VERSION (DOC. FIRMS FSC9/2015/5) (AGENDA ITEM 8)

66. The FIRMS IMP is recorded in [Doc. FIRMS FSC9/2015/5](#)

67. FIRMS is based on an XML Schema that materializes the FIRMS information architecture; in the IMP, the concepts and their definitions are laid out as a structured and illustrated data dictionary. This easily accessible dissemination format could be useful for the CWP.

68. The IMP is stable but it is possible to add draft guidelines in the annexes, which can later be incorporated when the definitions become more finalized (e.g. the fisheries module).

69. Major changes from the FSC8 version are:

- new FIRMS name;
- new use of reference year and reporting year and related definitions;
- move of fisheries dictionary from draft guideline to guideline, under Annex 1.5;
- addition of:
 - Annex 1.6 Reference to marine resource inventory guidelines,
 - Annex 1.7 Reference to fishery inventory guidelines.

70. There was further discussion on the use of XML documents. Partners may choose to use them or parts of them in their own websites. It should be reiterated to partners that this option is available.

71. It was noted that, in the web update, better access to the IMP could be shown.

Decision:

- The proposed modifications to IMP (version FSC8) can be applied and the new version published. (FSC9/D8.1)

9. REVIEW OF STRATEGIC ASPECTS – ENABLING MORE TIMELY INFORMATION, BROADENING GEOGRAPHIC/THEMATIC COVERAGE; TARGET AUDIENCE/COMMUNICATION AND PARTNERSHIPS (AGENDA ITEM 9)

Enabling more timely and comprehensive information (agenda item 9a)

- **Partners' reports on the status of the developments towards the dynamic feed of the FIRMS database**

72. Mr Gentile reported that ICES was working on web services to expose content of the ICES scientific advice. Once completed, such web services would be systematically interrogated by the FIRMS application to populate the ICES–FIRMS fact sheets. Thus, ICES colleagues would be relieved from most of the manual part of the workflow.

73. Similar procedures could be identified with the GFCM to exploit its reports, which are handled by SharePoint.

- **New horizons for a FIRMS-distributed database**

74. The Chimaera website, a portal to South West Indian Ocean fisheries data developed under the SmartFish regional fisheries programme, was introduced. The portal provides access to information and data published in three existing distinct information systems. These systems are: WIOFish (a regional knowledge base of Western Indian Ocean fisheries), FIRMS (specifically disseminating marine resources from the Western Indian Ocean) and StatBase (a regional fisheries statistics database disseminating national datasets of Western Indian Ocean countries). The Chimaera portal offers a unique entry point to these information systems, using cutting-edge technologies and standards (e.g. ontology-based search engine). Selected thematic areas and dedicated search

interfaces are provided on state of species, state of marine resources, fisheries management, fisheries activities, catch statistics, and socio-economic information.

75. FSC9 received positively the underlying philosophy of the Chimaera portal and foresaw similar features in the new FIRMS application.

Review of FIRMS-related project proposals / ideas (agenda item 9b)

- **Towards a global record of stocks and fisheries – benefits and role for FIRMS** (Doc. FIRMS FSC9/2015/4a)

76. Mr Taconet presented the rationale, objectives, implementation pathways, and benefits of this project proposal. In summary, the unique identifiers (UIDs) of fish stocks and fisheries will enable the registering of a comprehensive list of distinct stocks and fisheries as part of a global record. This will federate knowledge on status/trends of stocks and fisheries across various sources, and as such is expected to offer key services to stakeholders involved in “regional/global state of stocks indicators”, as well as public and private actors involved in ecolabelling, traceability and sustainable fisheries. The global record will offer services that will help to map and align stocks and fisheries information in a spatial and time context and identify them uniquely. The semantic relationships captured in the FIRMS schema will be used as a central reference for structuring ontologies and mapping logic among the heterogeneous data sources on stocks and fisheries. Initially, the global record will be instantiated from major global sources such as FIRMS, FishSource, and RSLAD (the RAM Legacy Stock Assessment Database), which are partially overlapping and partially complementary sources.
77. Ms Susana Segurado (Sustainable Fisheries Partnership [SFP]), invited to participate in this agenda item, provided a summary of her work. The mission of the SFP is to engage and catalyse global seafood supply chains in rebuilding depleted fish stocks and reducing the environmental impacts of fishing and fish farming. FishSource is an online information resource about the status of fish stocks and fisheries. The SFP created FishSource to provide major seafood buyers with up-to-date, impartial and actionable information on the sustainability of fisheries and the improvements they need to make in order to become sustainable.
78. Another main source considered for the global record, the RSLAD, is a development of Ransom A. Myers' Stock-Recruitment Database, which is currently hosted at the University of Washington. The RLSAD is a database repository for stock assessment results for commercially harvested fish stocks around the world. There are currently 21 national and international management agencies represented and 331 individual fish and invertebrate stocks contained in the database, including 9 of the world's 10 largest fisheries. These stocks are distributed across 27 LMEs in the Atlantic, Pacific, Indian, Arctic and Antarctic Oceans. The database contains total catch and landings data, stock assessment results (including biomass, recruitment and fishing mortality time series, as well as biological reference points), and life-history information, mainly for data-rich stocks that are assessed regularly. A large set of summary information

accompanies the database in the form of maps, tables and figures portraying stock status trends by region.

79. This global record would in particular further FIRMS objective to facilitate access to global reporting on stocks and fisheries status. It would develop under the BlueBRIDGE project if funding is confirmed, starting from 2016. Under this project, FAO is expected to lead this activity. The following FIRMS partners / associated partners provided letters of support and/or intent to participate: CCAMLR, NAFO, WECAFC, BOBLME.
80. Mr Taconet asked whether FIRMS as whole or specific partners would be willing to play a role in this project. He suggested that a FIRMS TWG could be convened to examine the matter and discuss the requirements, including the method to define a fishery across the various sources. The TWG could examine: the results of a case study that would work on a trial basis on a small subset; meaningful methods to compute summary indicators of stock status at the regional or global level across the various sources; bases for a data-sharing protocol for federating, sharing and disseminating various reporting sources (including intellectual property, licence or copyright, etc.).
81. Mr Ye commented that the sources were quite different and that the generation of UIDs to federate them might be quite challenging. With reference to FSC8 discussions on the possible collaboration with SFP, it was noted that federation had previously been agreed for linking sources provided that proper credit was provided and integrity of the reports was maintained.
82. After clarification that the global record would be a distinct registry on top of the existing sources, and that FIRMS would maintain its integrity of authoritative source among RFBs, it was the general view of participants that this repository would be very useful, in particular for supporting the ecolabelling and traceability efforts. It will be important to pay attention to how FIRMS information will be utilized, and the participants stressed that utilizing the global record will require the elaboration of certain guidelines. It was also recognized that the active participation of FIRMS or selected partners would be important in influencing the way this global record will be shaped.

Decisions:

- The chairperson concluded that the FSC9 supported the project idea and that the proposal for a face-to-face TWG would be made once and if the project funding were confirmed. (FSC9/D9.1)
 - FSC9 reiterated the conclusions of FSC8 regarding guidance on proper credit and maintenance of the integrity of FIRMS reports. (FSC9/D9.2)
 - **TCP/RAF/FCWC: Strengthening routine fisheries data collection in West Africa** (Doc. FIRMS FSC9/2015/Inf.9)
83. Mr Taconet briefly explained that, under an FAO-funded project, the FCWC and its member countries would strengthen their capacities to collect data and exchange fisheries information to support management processes. The project includes capacity building on the development and maintenance of FIRMS inventories by FCWC actors, under the broader CEEAC framework. This activity

could evolve towards the FCWC becoming a FIRMS observer, with the development of institutional arrangements between the FCWC, CECAF and other subregional bodies in the CECAF region, similar to the WECAFC situation.

84. FSC9 welcomed this project as an attempt to enshrine FIRMS in regional and subregional mechanisms, make it useful to management processes, and eventually an up-to-date source.

- **Decision support systems of LME projects (CLME+ project)** (Doc. FIRMS FSC9/2015/4c)

85. Mr Taconet presented the CLME+ as an example of FIRMS usage in different regions increasingly associated to supporting priority national or regional fishery management plans. If confirmed, the project will start in the latter part of 2015.

86. The CLME+ is a GEF-funded project to support the strategic action plan (SAP) in the Caribbean and Brazil–Guyana region. The SAP is an umbrella programme that will deal with the three priority environmental problems in the CLME+, namely: (i) habitat degradation; (ii) unsustainable fisheries; and (iii) pollution. The monitoring and evaluation component includes a decision support system that will be materialized by a portal providing access to a dashboard of indicators on the state of the marine environment. This portal will be built from the content of existing initiatives relevant to the project objectives. In this project, FIRMS, implemented through WECAFC in collaboration with CRFM and OSPESCA, will have a unique role as a reliable source of information on stocks and fisheries status and trends.

87. Mr Hutu said that this was very much in line with how the BCC (the first LME organization to have a signed convention) envisaged its collaboration with FIRMS to make it serve its objectives.

88. FSC9 welcomed this project that materializes an innovative attempt to federate existing sources, and the role of FIRMS. Participants were of the opinion that other LMEs initiatives should be contacted for collaboration with FIRMS with the objective to engage the national levels so to move towards reporting within the EEZs. FSC9 recognized that LMEs had different institutional facets ranging from regional SAPs to fully fledged institutions, and that different mechanisms with FIRMS (including membership in FIRMS, or memoranda of understanding [MoUs] with SAPs) would have to be thought through.

Decisions:

- FSC9 asked the FIRMS Secretariat to send letters, where applicable and affordable in terms of resources, for membership of LME institutions or collaboration with LME projects (FSC9/D9.3)

Direction of FIRMS website revision (agenda item 9c)

89. As noted by the TWG, revisions to the website were needed. It was recognized that the fact sheets structure and layout were still considered satisfactory, and it was suggested that the renewal should be more focused on website layout design and new user-oriented interfaces – new ways of giving access and

consuming the FIRMS content, not only through accessing the full reports but with alternative interfaces and mechanisms to offer quick access to status and trends of stocks and fisheries.

90. Participants felt, in general, that it would be best to move forwards with these plans and that it was not necessary to have too much consultation on technical details. FAO clearly has enough expertise to deliver what is expected.
91. As hereafter specified, FAO provided a time frame of when this work could be implemented and released. It was agreed that the TWG e-meetings could be held throughout the process to give advice to the Secretariat. Moreover, casual interactions with individuals could be decided as required.
92. Mr Gentile indicated three major areas of intervention for the website renewal.

1) First area of intervention at website level was envisaged as follows:

- more appealing presentation of home page;
- simple search;
- latest reports (news box);
- summary status lists with traffic lights;
- easy linkages to other sources (e.g. country profiles);
- marine resources inventory browser redesigned;
- new fishery inventory browser;
- restructuring menu structure of web pages (e.g. easy access to important links).

Schedule: Implemented throughout the intersession on opportunistic basis (including functional developments to the second area of intervention).

2) Second area of intervention, new products exploiting current content – stocks and fisheries maps viewer:

- a new user interface layering on top of what already exists;
- a new way to spatially navigate across FIRMS content based on the experience and the technologies applied for the development of the VME DataBase and the Chimaera portal.

Schedule: Requirements / mock-ups – March to June – 75 percent of the proposal laid out; July to September – final details refined. The two main steps will be discussed in dedicated TWG e-meetings including the identification of additional thematic entry points and underlying competency questions. October 2015 – April 2016: implementation of first (two) tabs “state of resources” and “fisheries management”.

3) Third area of intervention, linkages to / exploitation of additional data sources:

- Implemented later with additional project funds and opportunities (e.g. BlueBRIDGE).

Decision:

- The FSC9 approved the directions and the above schedules (FSC9/D9.4).

A role for FIRMS in the iMarine initiative (agenda item 9d) (FIRMS FSC9/2015/4b)

93. Mr Taconet presented an overview of iMarine, a data infrastructure to support the ecosystem approach to fisheries management and conservation of marine living resources. He said that, in the last three years, a few RFBs (essentially FIRMS partners) had been associated in various ways to the development and exploitation of services that this “community cloud” infrastructure delivers. During these collaborations, RFBs had expressed some concerns that moving forwards with such developments would be unwise without an understanding of the governance of the platform and how RFBs and other stakeholders could influence its evolution. Therefore, this item provided an opportunity to report to FSC and RFBs on the plans for iMarine sustainability and to ask RFBs what role they may envisage in the governance process.
94. It was noted that the iMarine consortium had developed a white paper on iMarine sustainability (FIRMS/FSC9/2015/inf11e) the envisaged an iMarine advisory board, for which FAO might provide the Secretariat.
95. Mr Campanis, who has been involved in iMarine, stated that he generally understood the benefits of iMarine. For example, FIRMS could benefit from it in modularizing services and accessing dynamically related information, e.g. to serve its maps viewer with disaggregated catch statistics. However, his concerns were that the platform was far ahead of what ordinary people could perceive and how they could benefit from it, and that there was no clear understanding of where this was going and up to which point FAO intended to outsource its information technology (IT) capacities in iMarine. One primary condition for acceptance is that the software code be open source.
96. Mr Gentile described the comprehensive data access and sharing policy that had been developed with support from FAO Legal Office, with strong pillars describing the rules for data sharing, confidentiality and security. The policy builds on the principles of open data and open-source software, but also caters for data confidentiality aspects. The gCube software (the enabling layer) and the community applications are open source under the European Union Public Licence (EUPL).
97. FIRMS is powered by a FIGIS in-house solution and there are no plans for iMarine to power its core. However, iMarine could provide additional services to enhance the dissemination capacities of FIRMS.
98. The chairperson concluded on how interactions could take place. The FIRMS Secretariat is in a good position to understand and lead iMarine, and FAO should represent the views of FIRMS and its partners with respect to iMarine when sitting on the iMarine advisory board. The FAO/FIRMS Secretariat could funnel information back and forth between FIRMS and iMarine. An additional communication mechanism could be the iMarine extended board, where RFBs

can subscribe. Partners with greater interest could become more involved at a later time.

Decision:

- The FIRMS Secretariat will ensure that FAO, through its position on the iMarine advisory board, will represent the interest of FIRMS and its partners, and will communicate relevant information and strategic decisions back and forth. (FSC9/D9.5).

10. INTERSESSIONAL WORK PLAN

99. In terms of expanding FIRMS coverage and timeliness of reporting:

- Growth in capacity building experience matured with CECAF, RECOFI, SWIOFC (i.e. link WIOFish fisheries inventory through the Chimaera portal) and, more recently, with NASCO and WECAFC.
- In 2015–16, capacity building is planned and partially secured for WECAFC and BOBLME through their extra-budgetary resources for the development of inventories and consolidation of data contribution workflow and framework.
- The South Pacific Ocean represents a new potential area for expansion of data coverage, with the SPRFMO and CPPS having expressed interest.
- Setting capacities for streamlining the process of data contribution. The most promising are:
 - the new ICES web services;
 - FIRMS in SWIOFC with WIOFish and StatBase, through SmartFish phase 2;
 - BlueBRIDGE project, data mining capacities experimented with the Chimaera portal could be extended to CCAMLR and NAFO.

100. In terms of renewal of the FIRMS interface, different timing is foreseen according to the identified areas of intervention:

- improvement of FIRMS Website layout and friendliness (new “local” tools, design improvements) implemented throughout the intersession on opportunistic basis;
- new user-interface product (stocks and fisheries map viewer): bulk requirements in March–June (an eTWG5.1), refined requirements in July–September 2015 (an eTWG5.2); implementation of first tab (or tabs) between October 2015 and April 2016;
- federate search engine by harvesting the FIRMS database and other external sources: will be implemented later with additional project funds and opportunities (e.g. BlueBRIDGE).

101. Requirements for the global record of stocks and fisheries are:

- A FIRMS face-to-face technical working group is proposed for discussing the detailed requirements of the global record of stocks and fisheries:

- building a logic for assignment of global unique identifiers;
 - assessing the conditions for sharing and federating stocks and fisheries records among various sources;
 - defining the services that the global record should provide.
- If the EU selects the BlueBRIDGE project, it will provide funding support in 2016–17. A decision about this FIRMS TWG will be made after the funding decision on BlueBRIDGE. If the TWG does not meet, it was suggested that the partners that had written letters of intent might be able to represent FIRMS.
102. In terms of FIRMS promotional activities, the FIRMS partners and Secretariat are invited to:
- seek participation of more RFBs;
 - adopt a communication plan shared by FIRMS partners, and make more systematic use of Twitter to highlight achievements incrementally;
 - promote links to the FIRMS website from websites of national agencies;
 - increase the dissemination of FIRMS fact sheets from partners' websites (NAFO in particular);
 - communicate broadly on FIRMS new website once launched;
 - act as publicity agents and communicate on FIRMS progress at partners' meetings, also using FIRMS brochure and standard FIRMS PowerPoint presentation;
 - report on FIRMS progress at the FAO Committee on Fisheries (COFI) and the RFB Secretariats Network (RSN), and organize a side event for raising awareness of the ongoing activities;
 - present FIRMS at meetings such as the annual BCC science forum;
 - distribute hard-copy promotional material at their annual meeting.
103. It was agreed that the tool box of promotional material may be incorporated into the refreshed website. NAFO agreed to help update the FIRMS pamphlet, and Ms Cummings agreed to distribute some material via NOAA channels. A future activity once FIRMS website is renewed will be to communicate at seafood expos.
104. It was felt that various other promotional opportunities could be discussed at a future e-meeting.
105. The importance of re-engaging dormant partners by the FIRMS Secretariat sending letters with specific messages was also reiterated. (see agenda item 3).

11. PLANNING FOR THE NEXT SESSION OF FSC (FSC10) (AGENDA ITEM 11)

106. During the CWP meeting, it was noted that the next CWP would take place no later than early 2016. As this was too soon to hold FSC10, it was agreed that this might be an opportunity to hold a face-to-face TWG.

107. However, it was agreed that the FIRMS Steering Committee should endeavour to meet every two years, meaning the next FSC would be held in early 2017, perhaps in conjunction with the VME group and/or the CWP-FC.

12. ANY OTHER BUSINESS (AGENDA ITEM 12)

108. Concerning domain names in FAO, it was reported that in the FAO reform and in new communication directives there was a move towards stricter FAO branding for FAO-related projects. All project websites with their own domain names are being reincorporated under the FAO domain. To-date, no action has been taken for those that have used subdomains (such as FIRMS).

Decisions:

- The Steering Committee felt that a strong statement to the FAO was warranted. The following was agreed: Recognizing FIRMS as a partnership between FAO and various Regional Fishery Bodies, it was felt that using a subdomain web name <http://firms.fao.org> was the most appropriate address to use for FIRMS. (Refer to Article 3 of the FIRMS Partnership Arrangement). Future discussion on this could take place if and when needed. (FSC9/D10.1)
- Executive summary: Noting that a full report can be a daunting task for readers, it was agreed that an executive summary of the full report highlighting the tone of the meeting and the main decisions could be included both as a part of the report and pasted in the body of the e-mail notification. (FSC9/D10.2)

13. ELECTION OF CHAIRPERSON AND VICE-CHAIRPERSON (AGENDA ITEM 13)

109. The chair of the current meeting thanked the participants for their good work and noted that this was her last meeting before her impending retirement. She thanked everyone for the opportunity to have worked with them and to have participated in this rewarding project for many years.
110. The meeting was pleased to elect Ms Cummings (WECAFC) as the incoming vice-chair and Dr Campbell (NAFO) as the incoming chair.
111. The meeting participants thanked the chairperson for her very dedicated support to further the objectives of the partnership throughout her term, and for the smooth and straightforward conduct of the meeting.

14. ADOPTION OF THE REPORT AND CLOSE OF SESSION (AGENDA ITEM 14)

112. The report was adopted on 27 February 2013 at 13.50 hours. The meeting was closed. The participants expressed their thanks to SEAFO for its superb hospitality, and to FAO and the FIRMS Secretariat for a well-resourced meeting.

Annex 1

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Annex 2

MEETING AGENDA

(Meeting place: Swakopmund Sands Hotel – SEAFO HQ)

Monday, 23–24 and 27 February 2015

All day: 09.00 hours to 18.30 hours

1. **Opening session and Welcome address**
2. **Adoption of agenda**
3. **FIRMS membership**
 - a) FIRMS, 10 years after
Commemorating ten years of activities; sharing Members views: where does FIRMS stand, where does FIRMS go?
 - b) Progress on the development of FIRMS Partnership
NASCO, CECAF/FCWC, WECAFC/[CRFM and OSPESCA], SWIOFC/WIOFish
 - c) Review of new perspective Partners
E.g. BCC, CPPS, SPRFMO, WCPFC
4. **Review of Annex 2**
 - a) Proposed information contributions of new Partner(s)
(Doc. NASCO Partnership arrangement)
Including NASCO Annex 2
 - b) Proposed modifications by existing Partners
(Doc. WECAFC - Annex 2)
New annex formulation for FAO/WECAFC
5. **FIRMS branding** (Doc. FIRMS FSC9/2015/4d)
 - a) A mature framework for data collection, in data poor contexts
(Doc. FIRMS FSC9/2015/Inf.10)
*The long experience, which brought FIRMS in developing well-structured methodology, protocols and standards to increase the data coverage and to respond to the need of some partners to channel national data, has resulted in the recognition of FIRMS as a tool for supporting data assemblage and sharing in data poor contexts. In the same contexts, FIRMS has been seen as useful branding to also encompass the function of a Regional Data Base supporting data collation and analysis for stock assessment and fishery management needs.
SC9 is invited to acknowledge this important function, support its evolution and consider whether the article 1.1.2 of the Partnership Arrangement could be enriched accordingly
(ftp://ftp.fao.org/FI/DOCUMENT/FIGIS_FIRMS/Partnership_Arrangement/FIRMS_Partnership_Arrangement.pdf).*
 - b) FIRMS and the long-term governance of the VME DataBase
Persons to be involved are Deep Seas RFMOs members of FIRMS

- 6. Review of FIRMS activities during the intersession** (Doc. FIRMS FSC9/2015/2a)
- a) Report on intersession activities
 - b) Key topics regarding status of the FIRMS website
 - Marine Resource and Fishery modules - progress on populating the data base
 - Fact sheets' layout/template improvement
E.g. new FIRMS name and logo, new handling of reporting year vs. reference year.
- 7. Report of e-Technical Working Group 4**
Summary report of e-TWG 4
(Doc. FIRMS FSC9/2015/3 and related info documents Inf. 7.a, b, c, d)
Including TWG recommendations for final endorsement by FSC9
- 8. FIRMS Information Management Policy (IMP) – FSC8 version** (Doc. FIRMS FSC9/2015/5)
Report latest updates and raise any issue
- 9. Review of strategic aspects - enabling more timely information, broadening geographic/thematic coverage, target audience/communication and partnerships**
- a) Enabling more timely and comprehensive information
 - Partners' reports on the status of the developments towards the dynamic feed of the FIRMS database
ICES and GFCM data submission workflow based on SharePoint technology and XML web services
 - New horizons for a FIRMS distributed data base
Expanded knowledge base through semantic technologies – presentation of the Chimaera portal

Day 2, Tuesday 24-02-2015

All day: 09:00 hours to 18:00 hours

9 (Continued)

- b) Review of FIRMS-related project proposals / ideas
Addressing FIRMS target audience in the context of different contexts of use/reuse of FIRMS information
 - Towards a Global Record of Stocks and Fisheries - Benefits and role for FIRMS (Doc. FIRMS FSC9/2015/4a)
Towards a federation of information sources on stocks and fisheries for a more comprehensive coverage and global web-services; serving user communities willing to:
 - facilitate traceability and certification of fishery products
Collaboration with iNGOs and private sponsorships for enhancing traceability of fishery products; Interested iNGOs are: Sustainable Fisheries Partnerships, Ocean Trust
 - improve global/regional indicators on the status of fishery resources
E.g. Collaboration between FIRMS and RAM legacy database. Focal person to be involved: Mr Ye, ICES representative, RAM legacy db representative

- TCP/RAF/FCWC: Strengthening routine fisheries data collection in West Africa (Doc. FIRMS FSC9/2015/Inf.9)
Interest in FIRMS expressed by Sub-Regional Fisheries organizations as a tool supporting data collation and dissemination (e.g. FCWC, COREP, CSRP) - Focal person to be involved: Mr Sedzro
- Decision Support Systems of LME projects (CLME+ project) (Doc. FIRMS FSC9/2015/4c)
Implementation and usage of FIRMS in different regions is increasingly associated to the support to priority national or regional fishery management plans. The CLME+ project is presented as one such example; In the context of MDGs and SDGs, this project also constitutes a strategic opportunity to promote and share fisheries data in the context of LME initiatives, and to develop collaborative capacities with other organizations in the endeavour to develop and maintain a "Regional State of the marine ecosystems and associated living marine resources" reporting capacity. Focal person to be involved: FIRMS Secretariat, WECAFC representative, BOBLME representative

- c) Directions for FIRMS website revision
- New layouts
 - New search facilities and user interfaces

- d) A role for FIRMS in the iMarine initiative (FIRMS FSC9/2015/4b)
The iMarine initiative has involved / been presented to a number of FIRMS members through outreach events and development of applications (e.g. VME-database, NEAFC2ICES VMS data transfer, Chimaera portal, Tuna Atlas, mobile Apps for observer on board). This initiative promotes and contributes to the development of Metadata standards, policies and best practices for data exchange and sharing, and operates a platform for scientific collaborative work in the field of the EAF. Questions were raised by those RFBs involved in iMarine regarding the sustainability of the initiative, and its governance. The White Paper on iMarine sustainability is here shared as information document, and can be used to trigger feedback from FIRMS members who might wish to consider how FIRMS might benefit from this initiative, and which role FIRMS or its Members could take in its governance.

10. Intersessional work plan

11. Planning for the next session of FSC (FSC10)

12. Any other business

13. Election of Chairperson and Vice-Chairperson

DAY 3, Friday 27-02-2015

Morning: 10:00 hours to 12:00 hours

14. Adoption of the Report and Close of Session

Annex 3

LEVEL OF ACTIVITY OF FIRMS PARTNERS

	Attendance at FSC		Information contribution	Needs re-engagement
	Total number	Recent trend	Recent trends	
FAO	9	=	Yes	No
CECAF	2	=	Yes	Partial
SWIOFC	0	=	No	Yes
RECOFI	1	-	No	Yes
WECAFC	1	+	Yes	No
NAFO	9	=	Yes	No
SEAFO	4	=	Yes	No
CCAMLR	8	=	Yes	Partial
CCSBT	2	=	Yes	No
European Union (Member Organization)	2	-		Yes
GFCM	5	-	No	Partial
ICCAT	8	=	Yes	No
ICES	8	=	Yes	No
IATTC	7	-	Yes	No
IOTC	2	+	No	Yes
NASCO	0	=	Yes	No
NEAFC	2	-	No	Yes
SEAFDEC	8	-	No	Yes