

South Pacific Regional Fisheries Management Organisation

13 January 2012

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Dr Valerio Gutiérrez
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100 metros al Sur del Estadio
Nacional, Tegucigalpa, M.D.C
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By email: sdespacho@yahoo.com

Dear Dr Gutiérrez

I have the honour to present my compliments and to refer to the [Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean](#). This Convention, which establishes a South Pacific Regional Fisheries Management Organisation (SPRFMO), was adopted in Auckland, New Zealand on 14 November 2009 and is now awaiting receipt of the necessary number of ratifications, accessions, acceptances or approvals for entry into force under Article 38. The negotiations that resulted in the adoption of this Convention were open to all states and fishing entities with an interest in the high seas fishery resources of the South Pacific. The participants in the negotiations adopted interim conservation and management measures and arrangements to apply during the negotiations and the period between adoption of the Convention and its entry into force. These arrangements included the establishment of an Interim Secretariat of which I have the honour to be the Executive Secretary.

I write to advise you that the Interim Secretariat has received detailed information from a participant (including photographic evidence) that a vessel flying the Honduran flag, the *Pion*, was recently fishing in the SPRFMO area, and in a manner that is contrary to the [SPRFMO Interim Measures](#). In particular, I would point out that the fishing method being used by the *Pion* (deep water gill netting) is prohibited under these measures.

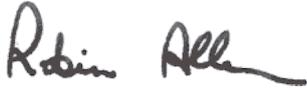
I am attaching copies of the SPRFMO Interim Measures and respectfully request you to refer these to the relevant authorities in Honduras and, in accordance with the relevant provisions of the United Nations Conventions on the Law of the Sea and Fish Stocks of 1982 and 1995 respectively, ensure that Honduran vessels cooperate in the conservation and management of the high seas living resources in the Convention area and observe these measures, including the prohibition on deep water gill nets.

I should further note that the SPRFMO Interim Measures include the commitment by the participants to collect, verify and report data on the activities of their vessels fishing in the area in accordance with the Standards for Data that I am also attaching. It would be greatly appreciated if the Honduran authorities would provide data on the fishing activities of the above vessel and any others from Honduras that may be fishing in the South Pacific Ocean to the Interim Secretariat.

Finally, may I take this opportunity to advise you that the Convention is open to accession by any state having an interest in fishery resources in the Convention area and to note that the text of the Convention, a map of the Convention Area, a list of participants in the negotiations and the Preparatory Conference for the Commission of the new Organisation and much additional information is available on the SPRFMO website.

Please accept, Your Excellency, the assurances of my highest consideration.

Yours sincerely,

A handwritten signature in black ink that reads "Robin Allen". The signature is written in a cursive style with a long, sweeping underline.

Robin Allen
Executive Secretary

Interim Measure for Deepwater Gillnets in the Convention Area

Participants commit themselves to:

1. require any vessel flying their flag not to use deepwater gillnets in the Convention Area until relevant conservation and management measures are adopted by the future Commission, which will be established following the entry into force of the Convention; and
2. require any vessel flying their flag seeking to transit the Convention Area carrying gillnets to give advance notice of its intent, including the expected dates of its passage through the Convention Area, to the Interim Secretariat.

This Interim Measure will have effect for all participants from 1 February 2010. If a participant informs the Interim Secretariat before 1 February 2010 that it will not apply this Interim Measure, this Interim Measure will not apply to that participant.

INTERIM MEASURES ADOPTED BY PARTICIPANTS IN NEGOTIATIONS TO ESTABLISH SOUTH PACIFIC REGIONAL FISHERIES MANAGEMENT ORGANISATION

Participants in the negotiations to establish a South Pacific Regional Fisheries Management Organisation (SPRFMO) **are to** take the following interim measures in accordance with their laws and regulations, taking into account an ecosystem approach to fisheries management and the precautionary approach, for vessels flying their flag and fishing for non highly migratory fish species in the high seas of the South Pacific Ocean (the Area)¹ in order to achieve the sustainable management of fish stocks and the protection of vulnerable marine ecosystems of the Area.

These interim measures are voluntary and are not legally binding under international law.

Period of Application and Review

These interim measures are to be effective from 30 September 2007 and, unless specified otherwise, are to apply until the entry into force of the Agreement under negotiation to establish the SPRFMO and the adoption of conservation and management measures pursuant to that Agreement.

The Participants are to review these interim measures, as necessary, so that they may be revised at future meetings.

The interim Secretariat is requested to make these interim measures publicly available.

Pelagic fisheries

In respect of pelagic fisheries, Participants resolve:

¹ The area is under negotiation, but for the purposes of these interim measures it will be the high seas area south of the Equator, north of the CCAMLR Convention area, east of the SIOFA Convention Area and west of the areas of fisheries jurisdictions of South American States.

1. To commit themselves to limit the total level of gross tonnage (GT) of vessels flying their flag fishing for pelagic stocks in 2008 and 2009 to the levels of total GT recorded in 2007 in the Area. Participants will communicate by 1 January 2008 to the interim Secretariat the total level of GT recorded in the Area in 2007 for those vessels flying their flag actively fishing in 2007. In notifying this information, Participants will verify the effective presence of their vessels in the Area in 2007 through VMS records, catch reports, port calls or other means. The interim Secretariat will have access to such information upon request.
2. That taking into account the interests of coastal and fishing States with a catch history in the pelagic fisheries in the South Pacific, but not exercising their fisheries activities in 2007, these States may enter the fishery in the Area in 2008 and 2009 and will exercise voluntary restraint of fishing effort. These States will promptly notify the Interim Secretariat of the names and characteristics, including GT, of their vessels engaged in the fishery in the Area.
3. To submit for review to the interim Science Working Group any stock assessments and research in respect of pelagic stocks in the Area and to promote the active participation of their scientific experts in the Jack Mackerel Stock Structure Task Team, the Jack Mackerel Stock Structure and Assessment Workshop, and, when established, the interim Science Working Group's Jack Mackerel subgroup.
4. That in 2009, the interim Science Working Group will give advice to the Meeting of Participants on the status of the pelagic stocks and that the Participants, based on the advice from the interim Science Working Group, will determine the conservation and management measures to be applied from 2010 onwards.
5. To cooperate through coastal States adjacent to the Area informing the interim Secretariat of their own conservation and management measures in respect of straddling pelagic stocks.
6. In undertaking scientific research activities on pelagic stocks in the Area, including joint research, for assessment purposes, to do so in accordance with a research plan that has been provided to the interim Secretariat for forwarding to the interim Science Working Group and all Participants, preferably 60 days prior to the commencement of that activity. Participants will provide promptly a report of the results of such scientific research activities to the interim Secretariat for circulation to all Participants.
7. To ensure, to the extent practicable, an appropriate level of observer coverage on fishing vessels flying their flag in order to observe the pelagic fisheries in the Area and collect relevant scientific information.
8. To strengthen its control over vessels flying its flag fishing for pelagic fisheries by ensuring that all such vessels operating in the Area be equipped with an operational vessel monitoring system no later than 31 December 2007, or earlier if so decided by the flag State.
9. That these interim measures do not apply to squid fisheries in the Area.

Bottom fisheries

Management of bottom fishing

In respect of bottom fisheries, Participants resolve to:

1. Limit bottom fishing effort or catch in the Area to existing levels² in terms of the number of fishing vessels and other parameters that reflect the level of catch, fishing effort, and fishing capacity.
2. Not expand bottom fishing activities into new regions of the Area where such fishing is not currently occurring.
3. Starting in 2010, before opening new regions of the Area or expanding fishing effort or catch beyond existing levels, establish conservation and management measures to prevent significant adverse impacts on vulnerable marine ecosystems³ and the long-term sustainability of deep sea fish stocks from individual bottom fishing activities or determine that such activities will not have adverse impacts, based on an assessment undertaken in accordance with paragraphs 11 and 12 below.
4. Cooperate through coastal States adjacent to the Area informing the interim Secretariat of their own conservation and management measures in respect of deep sea fish stocks.
5. Cooperate to identify, on the basis of the best available scientific information, vulnerable marine ecosystems in the Area and to map sites where these ecosystems are located, and provide such data and information to the Interim Secretariat for circulation to all Participants.
6. In respect of areas where vulnerable marine ecosystems are known to occur or are likely to occur based on the best available scientific information, close such areas to bottom fishing unless, based on an assessment undertaken in accordance with paragraphs 11 and 12 below, conservation and management measures have been established to prevent significant adverse impacts on vulnerable marine ecosystems and the long-term sustainability of deep sea fish stocks or it has been determined that such bottom fishing will not have significant adverse impacts on vulnerable marine ecosystems or the long term sustainability of deep sea fish stocks.
7. Require that vessels flying their flag cease bottom fishing activities within five (5) nautical miles of any site in the Area where, in the course of fishing operations, evidence of vulnerable marine ecosystems is encountered, and report the encounter, including the location, and the type of ecosystem in question, to the interim Secretariat so that appropriate measures can be adopted in respect of the relevant site. Such sites will then be treated in accordance with paragraph 6 above.
8. Notwithstanding paragraph 2, in regions of the Area where bottom fishing is not currently occurring, undertake, as appropriate, scientific research activities for stock assessment purposes in identified parts of such regions and only in accordance with a research plan that has been provided to the interim Secretariat for forwarding to the interim Science Working Group and all Participants, preferably 60 days prior to the

² Existing levels of fishing effort or catch means the average annual levels over the period 1 January 2002 to 31 December 2006.

³ For the purposes of these interim measures, “vulnerable marine ecosystems” includes seamounts, hydrothermal vents, cold water corals and sponge fields.

commencement of that activity. Participants will provide promptly a report of the results of such scientific research activities to the interim Secretariat for circulation to all Participants.

9. Appoint observers to each vessel flying their flag and undertaking or proposing to undertake bottom trawling activities in the Area and ensure an appropriate level of observer coverage on vessels flying their flag and undertaking other bottom fishing activities in the Area.
10. To strengthen its control over bottom fishing vessels flying its flag, each participant will ensure that all such vessels operating in the Area be equipped with an operational vessel monitoring system no later than 31 December 2007, or earlier if so decided by the flag State.

Assessment of bottom fishing

Participants resolve to:

11. Assess, on the basis of the best available scientific information, whether individual bottom fishing activities would have significant adverse impacts on vulnerable marine ecosystems, and to ensure that if it is assessed that these activities would have significant adverse impacts, they are managed to prevent such impacts, or not authorized to proceed.
12. Apply the following procedures regarding the assessment described in paragraph 11 above:
 - a) Participants are to submit to the interim Science Working Group their assessments of whether individual bottom fishing activities would have significant adverse impacts on vulnerable marine ecosystems, including the proposed management measures to prevent such impacts, and make these assessments publicly available.
 - b) The interim Scientific Working Group will review the assessments and proposed management measures and provide comments to the submitting Participant. For the purposes of carrying out such reviews, the interim Scientific Working Group will design a preliminary interim standard for reviewing the assessments and develop a process to ensure comments are provided to the submitting Participant and all other Participants within two months. In the meantime, the submitting Participant may provisionally apply their proposed management measures.
 - c) Participants may, on the basis of the assessments submitted under sub-paragraph (a) above and the comments provided under sub-paragraph (b) above, authorize vessels flying their flag to undertake bottom fishing activities in the region of the Area for which the assessment was conducted and require such vessels to implement conservation and management measures to prevent significant adverse impacts.
 - d) Participants are to notify the interim Secretariat of the measures required under sub-paragraph (c) above and a list of the vessels to which the measures relate, and to make that information publicly available.
13. In undertaking the assessments as described in paragraphs 11 and 12 above, take into account any international technical guidelines regarding standards, criteria or

specifications for identifying vulnerable marine ecosystems and the impacts of fishing activities on such ecosystems that may have been developed.

Data collection and sharing

In respect of data collection and sharing, Participants resolve:

To collect, verify and provide data in accordance with the procedures outlined in the SPRFMO Standards for the collection, reporting, verification and exchange of data.

Cooperation with other States

Participants resolve, individually or jointly, to request those States that are fishing for non-highly migratory fish species in the Area but not participating in the negotiations to establish a South Pacific Regional Fisheries Management Organisation (SPRFMO) to cooperate fully in the implementation of these interim measures and to consider participating in the SPRFMO negotiations.

Special Requirements of Developing States

In recognition of the special requirements of developing States, in particular small island developing States and territories, Participants are urged to provide financial, scientific and technical assistance, where available, to enhance the ability of those developing States to implement these interim measures and participate effectively in the negotiations for the SPRFMO Agreement under discussion.

2011 Interim Measures for Pelagic Fisheries

General Provisions

1. These revised Interim Measures (2011 Interim Measures) apply to fisheries for *Trachurus* species over which the Commission will have competence in accordance with the Convention. They replace the 2009 Revised Interim Measures and, as relevant, revise the 2007 Interim Measures.
2. These Interim Measures have been developed on the basis of the advice of the Scientific Working Group (SWG) in accordance with the stock assessment carried out in October of 2010, which was called for in paragraph 22 of the 2009 Interim Measures, and are adopted with the objective of rebuilding the stock of *Trachurus* species and ensuring its long term conservation and sustainable use in accordance with the objective of the Convention.
3. These Interim Measures are to be effective from 1 February 2011 until the Convention enters into force and conservation and management measures for *Trachurus* species are established. The first year of implementation of these Interim Measures should be reviewed and these Interim Measures should, as appropriate, be revised at the Third Session of the Preparatory Conference in 2012 to take account of the updated stock assessment for *Trachurus* species proposed by the SWG to be undertaken in 2011, which will be guided by the request for scientific advice in Annex 1. The updated stock assessment will be made available to Participants at least two months before the Third Session of the Preparatory Conference. These Interim Measures will subsequently be reviewed and revised as appropriate.
4. In undertaking the review of these Interim Measures, as called for in paragraph 3 above, the Participants are to consider the extent to which these measures have been complied with.
5. These Interim Measures are adopted within a framework of a provisional approach for the management of the *Trachurus* species concerned. Therefore, the management measures in these Interim Measures in no way constitute a precedent or should serve as a reference for future management decisions of the Commission.
6. Further, the provisions of these Interim Measures are not to be considered precedents for future allocation or other decisions taken by the Commission, in accordance with Article 21 of the Convention, relating to participation in fisheries for *Trachurus* species, and are not to affect the full recognition of the special requirements, including the fisheries development aspirations and interests of developing States, in particular small island developing States, and territories and possessions in the region, in accordance with the Convention. The Participants acknowledge that implementation of these Interim Measures is necessary for the rebuilding of the *Trachurus* stock and, as a result, compliance with them will be a relevant consideration when taking decisions under the Convention.
7. These Interim Measures are voluntary and are not legally binding under international law.

In respect of fisheries for *Trachurus* species, participants resolve the following:

Effort management measures

8. Participants are to limit the gross tonnage (GT)⁴ of vessels flying their flag to those that have been actively fishing in 2007 or 2008 or 2009 in the Convention Area, and may substitute their vessels as long as the total level of GT that was submitted by Participants to the Interim Secretariat in accordance with the 2009 Interim Measures for *Trachurus* fisheries, as provided for in Table 1, is not exceeded.
9. Participants will verify the effective presence of their vessels referred to in paragraph 8 through VMS records and catch reports.
10. From 1 February 2011, participants are not to exceed the levels of total GT¹ listed in Table 1.

Catch management

11. The Interim Secretariat shall verify the annual catch reports submitted by the Participants against the submitted data (tow by tow in the case of trawlers, and set by set or trip by trip in the case of purse-seining fishing vessels).⁵ The Interim Secretariat shall inform the Participants of the outcome of the verification exercise and any possible discrepancies encountered.
12. For 2011, each Participant is to limit its annual catch of *Trachurus* species by vessels flying its flag to 60% of its final recorded annual catch of that species in 2010 as reported to the Interim Secretariat. The Third Session of the Preparatory Conference will review the stock assessment for *Trachurus* species to be carried out by the SWG in 2011 in accordance with paragraph 3, and, unless decided otherwise, in 2012 Participants will, in principle, limit their annual catches of *Trachurus* species by vessels flying their flag to the order of 40% of their final recorded catch of that species in 2010, and taking into account paragraph 1.⁶
13. It is recognized that Participants may elect to reduce their catches of *Trachurus* species in 2011 by more than 40% of their final recorded annual catch of that species in 2010, as reported to the Interim Secretariat, as specified in paragraph 12.

⁴ In the event that GT is not available, participants are to utilise Gross Registered Tonnage (GRT) for the purposes of these Interim Measures.

⁵ The Russian Federation will not apply this paragraph for its 2010 catch data which will be provided in accordance with 2009 Interim Measures.

⁶ In applying this paragraph, account shall be taken of the procedures set out in article 20, paragraph 4, subparagraph a) of the Convention.

Data collection and reporting

14. Monthly catch data should be sent by all Participants engaged in the fishery to the Interim Secretariat in the format prescribed by the Data Standards adopted at the Second Preparatory Conference in 2011 and using the templates on the SPRFMO website. These data and records should be provided within 30 days of the end of the month. The Interim Secretariat will circulate monthly catches, aggregated by flag State, to all Participants on a quarterly basis.
15. Except as described in paragraph 14 above, all Participants engaged in the fishery are to collect, verify, and provide all required data to the Interim Secretariat, in accordance with the 2011 Data Standards and the templates available on the SPRFMO website.
16. Using the information provided by Participants, in accordance with the 2011 SPRFMO Data Standards, the Interim Secretariat will maintain a register of authorised vessels, by flag. Participants are to notify the Interim Secretariat of VMS records in the format prescribed by the 2011 Data Standards and using the templates on the SPRFMO website, and vessels which are actively fishing or engaged in transshipment in the Convention Area within 10 days of the end of the quarter. The Interim Secretariat will post the list of actively fishing vessels on the SPRFMO website. Using data provided under the 2011 Standard for Transshipment Data the Interim Secretariat will report a list of fishing and reefer vessels that engaged in transshipment the previous year.
17. In order to facilitate the work of the SWG, Participants will provide their annual national reports, in accordance with the existing guidelines for such reports, in advance of the 2011 SWG meeting. Participants will also provide observer data for the 2011 fishing season to the SWG to the maximum extent possible.
18. All Participants engaged in the *Trachurus* species fishery are to provide to the Interim Secretariat by 15 January of each year a report describing their implementation of these Interim Measures. Such implementation reports will be made available to all Participants and be posted on the SPRFMO website.

Monitoring and control measures

19. In the event that a Participant reaches 70% of their catch limit established in accordance with paragraph 12, the Secretariat shall inform the Participant, with a copy to other Participants, of that fact. The Participant shall close the fishery for vessels flying its flag when their catch is equal to 100% of their catch limit. Such Participant shall promptly notify the Interim Secretariat of the date of the closure.
20. The Participants, as port States, should, subject to their national laws, facilitate access to their ports on a case by case basis to reefer vessels, supply vessels, and vessels fishing for *Trachurus* species in accordance with the requirements established in these Interim Measures. The Participants should implement measures to verify catches of *Trachurus* species caught in the Convention Area that are landed or transhipped in its ports. When taking such measures, a Participant shall not discriminate in form or fact against fishing, reefer or supply vessels of any other Participant. Nothing in this paragraph shall prejudice the rights, jurisdiction and duties of these Participants under international law. In particular, nothing in this paragraph shall be construed to affect:
 - (a) the sovereignty of the Participants over their internal, archipelagic and territorial waters or their sovereign rights over their continental shelf and in their exclusive economic zone;

(b) the exercise by the Participants of their sovereignty over ports in their territory in accordance with international law, including their right to deny entry thereto as well as adopt more stringent port State measures than those provided for in these Interim Measures.

21. All Participants engaged in the *Trachurus* species fishery are to ensure a minimum of ten percent scientific observer coverage of trips for vessels flying their flag and ensure that such observers collect and report data as described in the 2011 SPRFMO Data Standards.
22. All Participants engaged in the *Trachurus* species fishery are to implement a vessel monitoring system (VMS) in accordance with the 2011 SPRFMO Data Standards.
23. Coastal States adjacent to the Convention Area are to cooperate with other Participants in ensuring compatibility in the conservation and management of *Trachurus* species fisheries when these resources straddle areas under national jurisdiction and the Convention Area. Such Coastal States are to inform the Interim Secretariat of the conservation and management measures in effect for *Trachurus* species fisheries in waters under their national jurisdictions when these resources straddle areas under national jurisdiction and the Convention Area.
24. The information collected under paragraphs 14, 15, and 17, and any stock assessments and research in respect of *Trachurus* species fisheries in the Convention Area will be submitted for review to the SWG. The SWG will conduct the necessary analysis and assessment, which will be guided by the request for scientific advice attached at Annex 1, in order to provide updated advice on stock status and recovery.

Cooperation with other States

25. Participants resolve, individually or jointly, to request those States that are fishing for *Trachurus* species in the Convention Area, but that did not participate in the negotiations to establish the SPRFMO, to cooperate fully in the implementation of these Interim Measures, and to consider becoming party to the Convention.

Special requirements of developing States

26. In recognition of the special requirements of developing States, in particular small island developing States and territories and possessions in the region, Participants are urged to provide financial, scientific and technical assistance, where available, to enhance the ability of those developing States and territories and possessions to implement these Interim Measures and participate effectively in the Preparatory Conference to establish the Commission.

Table 1.

Participant	GT or GRT for 2010
Belize	9,814 GT
Chile	96,867.24 GT + 3,755.81 GRT
China	74,516 GT
Cook Islands	12,613 GRT
European Union	78,600 GT
Faroe Islands	23,415 GT
Korea	15,222 GT
Peru	75,416 GT

Vanuatu	31,220 GRT
Russian Federation	74,470 GT

Annex 1

Request for Scientific Advice

The Second session of the Preparatory Conference for the establishment of the Commission of the South Pacific Regional Fisheries Management Organisation (SPRFMO) acknowledges the important efforts and the work performed by the SWG during 2009 and 2010 to develop the stock assessment of Jack Mackerel and to provide clear scientific advice in the October 2010 SWG report.

The Second session of the Preparatory Conference requests that in 2011 the SWG conduct the following work and provide advice to the Third session of the Preparatory Conference. This work includes further development an update to the stock assessment for *Trachurus spp*, analysis of a range of biological reference points which could be used in management and providing scientific advice on the state of the stock, projections for recovery and the effect of management measures following the points below.

The Second session of the Preparatory Conference recognises that the present request implies a substantial level of work and is dependent on the human resources available and on the level and detail of data submitted by participants.

Specifically

The SWG should further develop and update the 2010 jack mackerel stock assessment, following the recommendations given in the SWG October 2010 report. Where possible and appropriate, the stock assessment should incorporate:

- The most up to date information on ageing and growth rates and associated uncertainties, which should be provided by the ageing workshop to be held in Lima, Peru, in June 2011, and size at maturity;
- Standardized catch-per-unit-effort data (which are used in the model as abundance indices). The standardizations should account for historical changes in vessels, fishing areas and seasons, environmental factors and other relevant factors. This would need to be provided by participants;
- All data available for 2010 and if possible, all data available for 2011 at the time of the assessment.

Further development of the model should consider, if possible:

- The explicit modelling of length composition data;
- Evaluation of possible improvements to existing acoustic abundance indices;
- Sensitivity to alternative plausible levels of natural mortality and to age-variable natural mortality;
- Evaluation of the effect of minimum size limits and minimum fishery specific net mesh sizes.

Regarding biological reference points, the SWG is also requested to:

- Estimate and evaluate the usefulness for management of a range of fishing mortality and biomass reference points. The SWG is requested to provide proposals for target and limit reference points to be used in management of jack mackerel, based on evaluation of the range of alternative reference points.

Based on the requested improvements described above, an update of the assessment in 2011 should be performed, including all information available for 2010 and if possible all data available for 2011 at the time of the assessment. In particular, the SWG should assess the recent data on recruitment and recruitment indices.

It is emphasized that much of the above work will need to be done inter-sessionally by flag state scientists prior to the next SWG meeting, and results brought to the next SWG meeting for review and incorporation into updated assessments.

ANNEX F

Standards for the collection, reporting, verification and exchange of data

28 January 2011

With regard to the fishing vessels flying their flag and fishing for non-highly migratory fishery resources in the Area -

1. Data on fishing activities and the impacts of fishing

Participants are to develop, implement and improve systems to:

- (a) Ensure that for each calendar year, Participants collate annual catch totals raised to 'live' weight for all species/ species groups caught during that year, and that these are collated as described in Annex 14. Participants will provide by the 30th September, their previous (January to December) year's data on fishing activities and the impacts of fishing;
- (b) Ensure that data on fishing activities are collected from vessels according to the operational characteristics of each fishing method.
 - (i) For trawling methods, Participants are to collect the data described in annex 1;
 - (ii) For purse seining methods, Participants are to collect the data described in Annex 2;
 - (iii) For bottom long lining, methods Participants are to collect the data described in annex 3;
 - (iv) For squid jigging, Participants are to collect the data described in Annex 4.
 - (v) For potting methods, Participants are to collect the data described in Annex 5.
 - (vi) For drop/ dahn lining methods, Participants are to collect the data described in Annex 6.
- (c) Ensure that data to assess the impacts of fishing on non-target and associated or dependant species are collected from vessels.
- (d) Ensure that data on landings and transshipment are collected from vessels according to Annexes 12 and 13 respectively.
- (e) Compile data on fishing activities and the impacts of fishing and provide these in a timely manner to the interim Secretariat of the proposed South Pacific Regional Fisheries Management Organisation (SPRFMO). Such data are to be provided in sufficient detail to facilitate effective stock assessment. Participants will provide by the 30th June, their previous (January to December) year's data on fishing activities and the impacts of fishing.

2. Vessel data

Participants are to:

- (a) Establish a national record of vessels authorized to fish in the Area;
- (b) Collect vessel related data for standardizing fleet composition and vessel fishing power and for converting between different measures of effort in the analysis of catch and effort data. Participants will collect the data described in annex 7;
- (c) Compile vessel data and provide them in a timely manner to the interim Secretariat of the proposed SPRFMO. Participants are to provide data on vessels that they have authorized to fish in the following year, at least 3 months prior to the start of that year. Additionally, Participants are to provide data on vessels that they newly authorize to fish during a year, or when authorizations to fish are revoked during a year, within 1 month of granting or revoking such an authorization.

3. Observer Data

(a) Implementation of Observer Programmes

Participants are to develop, implement and improve Observer Programmes to attain the following objectives:

- i) To collect vessel information, effort and catch data for all fisheries and fished species in the Area, including target, by-catch and associated and dependent species.
- ii) To collect biological or other data and information relevant to the management of fishery resources in the Area, as specified in these standards, or as identified from time to time by the Science Working Group or through processes identified by the Commission.
- iii) To collect relevant scientific information related to the implementation of the provisions of the Interim Measures adopted by the Participants to the negotiations for the formation of a South Pacific RFMO.
- iv) To collect representative data, including length-frequency and biological samples, across the Area, distribution of fishing effort, seasons, fishing fleets and fleet types.

(b) Information and Data to be Collected

All national observer programmes operating in the SPRFMO Area should provide the information in Annex 8.

(c) Data Provision

Observer data should be provided to the interim Secretariat of the proposed SPRFMO in a standardised format, to be included in a SPRFMO Observer Database. Specifications and standards for Observer data submissions are on the SPRFMO website. Until the Interim Secretariat determines a change is needed, observer data will be submitted in Microsoft Excel format. Participants will provide by the 30th September, their previous (January to December) year's data.

(d) Annual Reporting

All SPRFMO participants should provide annual observer implementation reports, which should include sections covering: observer training, programme design and coverage, type of data collected, and any problems encountered during the year. These reports shall be adequate enough to allow the Data & Information Working Group, the Scientific Working

Group or the Commission to evaluate the implementation and effectiveness of observer programmes implemented under this standard.

(e) Maintenance of Confidentiality

The interim Secretariat of the proposed SPRFMO is to compile and disseminate accurate and complete observer data to ensure that the best scientific evidence is available, while maintaining confidentiality where appropriate. In doing so, the Interim Secretariat is to follow the procedures specified in Section 8.

4. Vessel Monitoring System data

(a) Implementation of Vessel Monitoring Systems

Participants are to develop, implement and improve systems to:

- (i) Ensure that all of their vessels fishing in the Area are fitted with fully operational automatic location communicator (ALC) reporting back to the flag state.
- (ii) Ensure that ALC on their vessels remain operational, and report in accordance with this standard, at all times and in all areas while operational in the SPRFMO area.
- (iii) Maintain a record of all vessel position information reported while these vessels are operational in the SPRFMO area, such that this information may be used to document vessel activity in the SPRFMO area, and to validate fishing position information provided by those vessels.

(b) Frequency and Accuracy of VMS Position Reports

Participants are to ensure that:

- (i) VMS position reports are reported by each of their vessels:
 - (1) at least once every 2 hours if fishing using benthic or benthic-pelagic⁷ trawling or if operating within 20nm of an EEZ boundary;
 - (2) at least once every four hours in other circumstances.
- (ii) All VMS Position reports are made in accordance with the specification in paragraph (c) of this standard.
- (iii) Under normal satellite navigation operating conditions, positions derived from the data reported are to be accurate to within 500⁸m.

(c) Content of VMS Position Reports

Participants are to ensure that all VMS Position Reports made by their vessels include at least the following information:

Category	Data Element	Remarks
Vessel registration	Static unique vessel identifier	For example, country code followed by national vessel registration number
Activity detail	Latitude	Position latitude (decimal degrees, to the nearest 0.01 degree)
Activity detail	Longitude	Position longitude (decimal degrees, to the nearest 0.01 degree)

⁷ Benthic-pelagic trawling is interpreted here to mean trawling with a mid-water net where the net has a likelihood of coming into contact with the seabed at any time during the trawling operation.

⁸ 500m should be adequate for scientific purposes but for compliance purposes a greater accuracy may be required.

Message detail	Date	Position date in UTC
Message detail	Time	Position time in UTC

5. Historical data

Participants are to:

- (a) Collate pre-2007 data on fishing activities in the Area and provide these to the interim Secretariat of the proposed SPRFMO by 30th September 2007, in sufficient detail to facilitate effective stock assessment and in a format as close as is practical to that described in annexes 1 - 6;
- (b) Because of the value of such data for stock assessments - at their discretion collate pre-2007 data on fishing activities by vessels flying their flag and fishing within areas under their national jurisdiction, and provide these to the interim Secretariat of the proposed SPRFMO by 30th September 2007 in sufficient detail to facilitate effective stock assessment and in a format as close as is practical to that described in annexes 1 - 6;
- (c) Collate pre-2008 vessel data and provide these to the Interim Secretariat of the proposed SPRFMO by 30th September 2007, in a format as close as is practical to that described Annex 7.

6. Data verification

Participants are to ensure that fishery data are verified through an appropriate system. Participants are to develop, implement and improve mechanisms for verifying data, such as:

- (a) Position verification through vessel monitoring systems;
- (b) Scientific observer programmes to collect verification data on catch, effort, catch composition (target and non-target), discards and other details of fishing operations;
- (c) Vessel trip, landing and transshipment reports; and
- (d) Port sampling.

7. Data exchange

When Participants provide data to the interim Secretariat of the proposed SPRFMO, they will do so in accordance with the specifications and format described in Annex 9 of this document.

8. Maintenance of confidentiality

The interim Secretariat of the proposed SPRFMO is to compile and disseminate accurate and complete statistical data to ensure that the best scientific evidence is available while maintaining confidentiality where appropriate. Specifically the interim Secretariat is to:

- (a) Compile and disseminate on request the following “public domain” data:
 - (i) Data on fishing activities, aggregated by flag state and calendar year and 5 degree by 5 degree areas, except in those cases where such data describes the activities of less than 3 vessels (in which case a lower resolution will be used);
 - (ii) Data on the number and type of vessels authorized to fish, aggregated by flag state and calendar year;

- (b) Operate comprehensive and robust processes to maintain the confidentiality of the non-public domain data that Participants provide to it. These processes will be based on the ISO/IEC27002:2005 (updates ISO/IEC 17799:2005) international standard for information security management⁹. SPRFMO specific data security standards will be developed over time;

⁹ www.iso.org/iso/en/prods-services/popstds/informationsecurity.html

- (c) Compile and disseminate to Participants or their designates non-public domain data (being any data not described in 8(a)):
 - (i) In response to a written request from the collective Parties to the Negotiation, for the purposes documented by those Parties; and
 - (ii) In the absence of a written request from the collective Parties to the Negotiation - only with the authorization of the Participant(s) that originally provided that data.

In the case that an Interim Secretariat has not been established, the Convener of the Data and Information Working Group will assume the roles of the Interim Secretariat with regard to the Maintenance of Confidentiality.

These standards will be reviewed periodically to ensure that they are adequate for the current and foreseeable needs of the proposed SPRFMO.

Annex 1

Standard for trawl fishing activity data

1. Data are to be collected on an un-aggregated (tow by tow) basis.
2. The following fields of data are to be collected:
 - (a) Vessel flag
 - (b) Vessel name
 - (c) Vessel call sign
 - (d) Registration number of vessel
 - (e) Tow start date
 - (f) Tow start time
 - (g) Tow end date
 - (h) Tow end time
 - (i) Tow start position (1/10th degree resolution)
 - (j) Tow end position (1/10th degree resolution)
 - (k) Intended target species
 - (l) Type of trawl, bottom or mid-water
(use appropriate bottom or midwater trawl codes from the standard ISCCFG fishing gear standards attached at Annex 10)
 - (m) Type of trawl: single, double or triple (S, D or T).
 - (n) Height of net opening
 - (o) Width of net opening
 - (p) Gear depth at start of fishing
 - (q) Bottom depth at start of fishing
 - (r) Catch retained on board by species in live weight
 - (s) An estimation of the amount of living marine resources discarded by species if possible
 - (t) Were any marine mammals, seabirds or reptiles caught (yes/no/unknown – Y,N,U)

Annex 2

Standard for purse seine fishing activity data

1. Data are to be collected on an un-aggregated (set by set) basis.
2. The following fields of data are to be collected:
 - (a) Vessel flag
 - (b) Vessel name
 - (c) Vessel call sign
 - (d) Registration number of vessel
 - (e) Set start date
 - (f) Set start time
 - (g) Set end date
 - (h) Set end time
 - (i) Set start position (1/10th degree resolution)
 - (j) Net length
 - (k) Net height
 - (l) Intended target species

 - (m) Catch retained on board by species in live weight
 - (n) An estimation of the amount of living marine resources discarded by species if possible
 - (o) Were any marine mammals, seabirds or reptiles caught (yes/no/unknown – Y,N,U)

Annex 3

Standard for bottom long lining fishing activity data

1. Data are to be collected on an un-aggregated (set by set) basis.
2. The following fields of data are to be collected:
 - (a) Vessel flag
 - (b) Vessel name
 - (c) Vessel call sign
 - (d) Registration number of vessel
 - (e) Set start date
 - (f) Set start time
 - (g) Set end date
 - (h) Set end time
 - (i) Set start position (1/10th degree resolution)
 - (j) Set end position (1/10th degree resolution)
 - (k) Intended target species
 - (l) Number of hooks
 - (m) Bottom depth at start of set
 - (n) Catch retained on board by species in live weight
 - (o) An estimation of the amount of living marine resources discarded by species if possible
 - (p) Were any marine mammals, seabirds or reptiles caught (yes/no/unknown – Y,N,U)

Annex 4

Standard for squid jigging fishing activity data

1. Data are to be collected on a daily basis
2. The following fields of data are to be collected:
 - (a) Vessel flag
 - (b) Vessel name
 - (c) Vessel call sign
 - (d) Registration number of vessel
 - (e) Date of fishing activity
 - (f) Position at start of drift (1/10th degree resolution)
 - (g) Position at end of drift (1/10th degree resolution)
 - (h) Echo Sounder (Yes/No)
 - (i) Number of crew
 - (j) Number of single jig machines
 - (k) Number of double jig machines
 - (l) Number of jigs per line
 - (m) Operating depth
 - (n) Total deck light power (kW)
 - (o) Total hours fished
 - (p) Catch retained on board by species in live weight
 - (q) An estimation of the amount of living marine resources discarded by species if possible
 - (r) Were any marine mammals, seabirds or reptiles caught (Yes/No/Unknown – Y,N,U)

Annex 5

Standard for potting methods fishing activity data

1. Data are to be collected on an un-aggregated (set by set) basis
2. The following fields of data are to be collected:
 - (a) Vessel flag
 - (b) Vessel name
 - (c) Vessel call sign
 - (d) Registration number of vessel
 - (e) Set start date
 - (f) Set start time
 - (g) Set end date
 - (h) Set end time
 - (i) Start of set position (1/10th degree resolution)
 - (j) End of set position (1/10th degree resolution)
 - (k) Intended target species
 - (l) Depth at start of set
 - (m) Depth at end of set
 - (n) Type of pots
 - (o) Total number of pots set
 - (p) Type of bait used
 - (q) Catch retained by species in live weight
 - (r) An estimate of the amount of living marine resources discarded by species if possible
 - (s) Were any marine mammals, seabirds or reptiles caught (Yes/No/Unknown – Y,N,U)

Annex 6

Standard for drop/dahn lining fishing activity data

1. Data are to be collected on an un-aggregated (series by series) basis
2. The following fields of data are to be collected:
 - (a) Vessel flag
 - (b) Vessel name
 - (c) Vessel call sign
 - (d) Registration number of vessel
 - (e) Set start date
 - (f) Set start time
 - (g) Set end date
 - (h) Set end time
 - (i) Start of set position (1/10th degree resolution)
 - (j) End of set position (1/10th degree resolution)
 - (k) Intended target species
 - (l) Depth at start of set
 - (m) Depth at end of set
 - (n) Total number of hooks in the set
 - (o) Number of hooks lost
 - (p) Type of hooks used
 - (q) Type of leader used
 - (r) Total number of line lifts in the set
 - (s) Type of bait used
 - (t) Catch retained by species in live weight
 - (u) An estimate of the amount of living marine resources discarded by species if possible
 - (v) Were any marine mammals, seabirds or reptiles caught
(Yes/No/Unknown – Y,N,U)

Annex 7

Standard for vessel data

1. Data are to be collected on an un-aggregated (vessel by vessel) basis.
2. The following fields of data are to be collected:
 - (a) Current vessel flag
 - (b) Name of vessel
 - (c) Registration number
 - (d) International radio call sign (if any)
 - (e) Lloyd's / IMO number (if allocated)
 - (f) Previous Names (if known)
 - (g) Port of registry
 - (h) Previous flag (if any)
 - (i) Type of vessel
(Use appropriate ISSCFV codes, Annex 11)
 - (j) Type of fishing method(s)
(Use appropriate ISSCFG codes, Annex 10)
 - (k) When built
 - (l) Where built
 - (m) Length
 - (n) Length type e.g. "LOA", "LBP"
 - (o) Moulded depth
 - (p) Beam
 - (q) Gross Tonnage – GT (to be provided as the preferred unit of tonnage)
 - (r) Gross register tonnage – GRT –
(to be provided if GT not available; may also be provided in addition to GT)
 - (s) Power of main engine(s)
 - (t) Hold capacity
 - (u) Name of owner(s)
 - (v) Address of owner(s)
 - (w) Name of operator(s)
 - (x) Address of operator(s)
 - (y) Vessel authorisation start date
 - (z) Vessel authorisation end date

Annex 8

Standard for Observer Data

A. Vessel & Observer Data to be Collected for Each Observer Trip

1. Vessel and observer details are to be recorded only once for each observed trip.
2. The following vessel data are to be collected for each observed trip:
 - a) Current vessel flag.
 - b) Name of vessel.
 - c) Name of the Captain.
 - d) Name of the Fishing Master.
 - e) Registration number.
 - f) International radio call sign (if any).
 - g) Lloyd's / IMO number (if allocated).
 - h) Previous Names (if known).
 - i) Port of registry.
 - j) Previous flag (if any).
 - k) Type of vessel (use appropriate ISSCFV codes, Annex 11)
 - l) Type of fishing method(s) (use appropriate ISSCFG codes, Annex 10)
 - m) Length (m)
 - n) Length type e.g. "LOA", "LBP"
 - o) Beam (m).
 - p) Gross Tonnage – GT (to be provided as the preferred unit of tonnage)
 - q) Gross register tonnage – GRT
(to be provided if GT not available; may also be provided in addition to GT)
 - r) Power of main engine(s) (kilowatts).
 - s) Hold capacity (cubic metres).
 - t) Record of the equipment on board which may affect fishing power factors (navigational equipment, radar, sonar systems, weather fax or satellite weather receiver, sea-surface temperature image receiver, Doppler current monitor, radio direction finder), where practical.
 - u) Total number of crew (all staff, excluding observers).
3. The following observer data are to be collected for each observed trip:
 - a) Observer's name.
 - b) Observer's organisation.
 - c) Date observer embarked (UTC date).
 - d) Port of embarkation.
 - e) Date observer disembarked (UTC date).
 - f) Port of disembarkation.

B. Catch & Effort Data to be Collected for Trawl Fishing Activity

1. Data are to be collected on an un-aggregated (tow by tow) basis for all observed trawls.
2. The following data are to be collected for each observed trawl tow:
 - a. Tow start date.
 - b. Tow start time (the time gear starts fishing).

- c. Tow end date.
- d. Tow end time (the time haul back starts).
- e. Tow start position (Lat/Lon, 1 minute resolution).
- f. Tow end position (Lat/Lon, 1 minute resolution).
- g. Intended target species.
- h. Type of trawl, bottom or mid-water
(use appropriate bottom or midwater trawl codes from the standard ISCCFG fishing gear standards attached at Annex 10)
- i. Type of trawl: single, double or triple (S, D or T).
- j. Height of net opening.
- k. Width of net opening.
- l. Mesh size of the cod-end net (stretched mesh, mm) and mesh type (diamond, square, etc).
- m. Gear depth (of footrope) at start of fishing.
- n. Bottom (seabed) depth at start of fishing.
- o. Catch of all species retained on board, split by species, in live weight (to the nearest kg).
- p. Record of the numbers by species of all marine mammals, seabirds or reptiles caught.
- q. Record of sensitive benthic species in the trawl catch, particularly vulnerable or habitat-forming species such as sponges, sea-fans or corals.
- r. Estimate of the amount (weight or volume) of remaining marine resources discards, split to the lowest known taxon, unless the species is less than 100 kg per tow.
- s. Record any bycatch mitigation measures employed.

C. Catch & Effort Data to be Collected for Purse Seine Fishing Activity

1. Data are to be collected on an un-aggregated (set by set) basis for all observed purse-seine sets.
2. The following data are to be collected for each observed purse-seine set:
 - a) Total search time before this set, since the last set.
 - b) Set start date.
 - c) Set start time (the time gear starts fishing).
 - d) Set end date.
 - e) Set end time (the time haul back starts).
 - f) Set start position (Lat/Lon, 1 minute resolution).
 - g) Net length (m).
 - h) Net height (m).
 - i) Net mesh size (stretched mesh, mm) and mesh type (diamond, square, etc)
 - j) Intended target species.
 - k) Catch of all species retained on board, split by species, in live weight (to the nearest kg).
 - l) Record of the numbers by species of all marine mammals, seabirds or reptiles caught.
 - m) Estimate of the amount (weight or volume) of remaining marine resources discards, split to the lowest known taxon, unless the species is less than 100 kg per set.
 - n) Record any bycatch mitigation measures employed.

D. Catch & Effort Data to be Collected for Bottom Long Line Fishing Activity

1. Data are to be collected on an un-aggregated (set by set) basis for all observed longline sets.
2. The following fields of data are to be collected for each set:
 - a) Set start date.
 - b) Set start time.
 - c) Set end date.
 - d) Set end time.
 - e) Set start position (Lat/Lon, 1 minute resolution).
 - f) Set end position (Lat/Lon, 1 minute resolution).
 - g) Intended target species.
 - h) Total length of longline set (km).
 - i) Number of hooks for the set.
 - j) Bottom (seabed) depth at start of set.
 - k) Number of hooks actually observed during the haul.
 - l) Catch of all species retained on board, split by species, in live weight (to the nearest kg).
 - m) Record of the numbers by species of all marine mammals, seabirds or reptiles caught.
 - n) Record of sensitive benthic species in the catch, particularly vulnerable or habitat-forming species such as sponges, sea-fans or corals.
 - o) Estimate of the amount (weight or volume) of remaining marine resources discards, split to the lowest known taxon, unless the species is less than 100 kg per set.
 - p) Record any bycatch mitigation measures employed.

E. Length-Frequency Data to Be Collected

Representative and randomly sampled length-frequency data are to be collected for the target species and, time permitting, for other main by-catch species. Length data should be collected and recorded at the most precise level appropriate for the species (cm or mm and whether to the nearest unit or unit below) and the type of measurement used (total length, fork length, or standard length) should also be recorded. If possible, total weight of length-frequency samples should be recorded, or estimated and the method of estimation recorded, and observers may be required to also determine sex of measured fish to generate length-frequency data stratified by sex.

Commercial Sampling Protocol

i) Fish species other than skates, rays and sharks:

- fork length should be measured to the nearest cm for fish which attain a maximum length greater than 40cm fork length
- fork length should be measured to the nearest mm for fish which attain a maximum length less than 40cm fork length;

ii) Skates and rays

- maximum disk width should be measured

iii) Sharks

- Appropriate length measurement to be used should be selected for each species (see FAO technical report 474 on measuring sharks). As a default, total length should be measured.

Scientific Sampling Protocol

For scientific sampling of species length Measurements may need to be made at a finer resolution than specified above.

F. Biological Sampling to be Conducted

1. The following biological data should be collected for representative samples of the main target species and, time permitting, for other main by-catch species contributing to the catch:
 - a) Species
 - b) Length (mm or cm), with record of the type of length measurement used.
Measurement precision and type should be determined on a species by species basis consistent with that defined in Section E above.
 - c) Sex (male, female, immature, unsexed)
 - d) Maturity stage
2. Observers should collect tissue, otolith and/or stomach samples according to pre-determined specific research programmes implemented by the Scientific Working Group or other national scientific research.
3. Observers are to be briefed and provided with written length-frequency and biological sampling protocols, where appropriate, and priorities for the above sampling specific to each observer trip.

G. Data to be Collected on Incidental Captures of seabirds, mammals, and reptiles (turtles)

1. The following data are to be collected for all seabirds, mammals, and reptiles (turtles) caught in fishing operations:
 - a) Species (identified taxonomically as far as possible, or accompanied by photographs if identification is difficult) and size.
 - b) Count of the number caught per tow or set.
 - c) Life status (vigorous, alive, lethargic, dead) upon release.
 - d) If dead, then collect adequate information or samples for onshore identification in accordance with pre-determined sampling protocols. Where this is not possible, observers may be required to collect sub-samples of identifying parts, as specified in biological sampling protocols.

H. Detection of Fishing in Association with Vulnerable Marine Ecosystems

1. For each observed trawl, the following data are to be collected for all sensitive benthic species caught, particularly vulnerable or habitat-forming species such as sponges, sea fans, or corals:
 - a) Species (identified taxonomically as far as possible, or accompanied by a photograph where identification is difficult).
 - b) An estimate of the quantity (weight (kg) or volume (m³)) of each listed benthic species caught in the tow.
 - c) An overall estimate of the total quantity (weight (kg) or volume (m³)) of all invertebrate benthic species caught in the tow.
 - d) Where possible, and particularly for new or scarce benthic species which do not appear in ID guides, whole samples should be collected and suitably preserved for identification on shore.

I. Data to be Collected for all Tag Recoveries

1. The following data are to be collected for all recovered fish, seabird, mammal or reptile tags if the organism is dead, to be retained, or alive:
 - a) Observer name.
 - b) Vessel name.
 - c) Vessel call sign.
 - d) Vessel flag.
 - e) Collect, label (with all details below) and store the actual tags for later return to the tagging agency.
 - f) Species from which tag recovered.
 - g) Tag colour and type (spaghetti, archival).
 - h) Tag numbers (The tag number is to be provided for all tags when multiple tags were attached to one fish. If only one tag was recorded, a statement is required that specifies whether or not the other tag was missing) If the organism is alive and to be released, tag information should be collected in accordance with pre-determined sampling protocols.
 - i) Date and time of capture (UTC).
 - j) Location of capture (Lat/Lon, to the nearest 1 minute)
 - k) Animal length / size (cm or mm) with description of what measurement was taken (such as total length, fork length, etc).
Length measurements should be collected according to the criteria defined in Section E above.
 - l) Sex (F=female, M=male, I=indeterminate, D=not examined)
 - m) Whether the tags were found during a period of fishing that was being observed (Y/N)
 - n) Reward information (e.g. name and address where to send reward)

(It is recognised that some of the data recorded here duplicates data that already exists in the previous categories of information. This is necessary because tag recovery information may be sent separately to other observer data.)

J. Hierarchies for Observer Data Collection

1. Recognising that observers may not be able to collect all of the data described in these standards on each trip, a hierarchy of priorities is to be implemented for collection of observer data. Trip-specific or programme-specific observer task priorities may be developed in response to specific research programme requirements, in which case such priorities should be followed by observers.
2. In the absence of trip- or programme-specific priorities, the following generalised priorities should be followed by observers:
 - a) Fishing Operation Information
 - All vessel and tow / set / effort information.
 - b) Reporting of Catches
 - Record time, weight of catch sampled versus total catch or effort (e.g. number of hooks), and total numbers of each species caught.
 - Identification and counts of seabirds, mammals, reptiles (turtles), sensitive benthic species and vulnerable species.
 - Record numbers or weights of each species retained or discarded.
 - Record instances of depredation, where appropriate.
 - c) Biological Sampling
 - Check for presence of tags.
 - Length-frequency data for target species.
 - Basic biological data (sex, maturity) for target species.
 - Length-frequency data for main by-catch species.
 - Otoliths (and stomach samples, if being collected) for target species.
 - Basic biological data for by-catch species.
 - Biological samples of by-catch species (if being collected)
 - Take photos
3. The reporting of catches and biological sampling procedures should be prioritised among species groups as follows:

Species	Priority (1 highest)

Primary target species (such as jack mackerel, for pelagic fisheries, and orange roughy for demersal fisheries)	1
Seabirds, mammals, and reptiles (turtles)	2
Other species typically within top 5 in the fishery (such as blue mackerel for pelagic fisheries, and oreos and alfonsino for demersal fisheries)	3
All other species	4

The allocation of observer effort among these activities will depend on the type of operation and setting. The size of sub-samples relative to unobserved quantities (e.g. number of hooks examined for species composition relative to the number of hooks set) should be explicitly recorded under the guidance of member country observer programmes.

K. Coding Specifications to be Used for Recording Observer Data

1. Unless otherwise specified for specific data types, observer data are to be provided in accordance with the same coding specifications as specified in Annex 9 of the SPRFMO Data Standards.
2. Coordinated Universal Time (UTC) is to be used to describe times.
3. Decimal degrees are to be used to describe locations.
4. The following coding schemes are to be used:
 - a) Species are to be described using the FAO 3 letter species codes¹⁰.
 - b) Fishing methods are to be described using the International Standard Classification of Fishing Gear (ISSCFG - 29 July 1980) codes – Annex 10.
 - c) Types of fishing vessel are to be described using the International Standard Classification of Fishery Vessels (ISSCFV) codes – Annex 11.
5. Metric units of measure are to be used, specifically:
 - a) Kilograms are to be used to describe catch weight.
 - b) Metres are to be used to describe height, width, depth, beam or length.
 - c) Cubic metres are to be used to describe volume.
 - d) Kilowatts are to be used to describe engine power.

¹⁰ www.fao.org/fi/statist/fisoft/asfis/asfis.asp

Annex 9

Specifications for the exchange of data

1. Coordinated Universal Time (UTC) is to be used to describe times, using the following submission format:

YYYY-MON-DDThh:mm:ss

Where:

YYYY - represents a 4-digit year e.g. "2007"
MON - represents a 3-character month abbreviation e.g. "APR"
DD - represents a 2-digit day e.g. "05"
T - is a space separator
hh - represents hours based on the 24hr clock (length = 2 digits) e.g. "16"
mm - represents minutes (length = 2 digits) e.g. "05"
ss - represent seconds (length = 2 digits) e.g. "00"

Example

2003-JUL-17T13:10:00 1.10pm (1310h), 17 July 2003

2. Decimal degrees (WGS84) are to be used to describe locations.

The following standard should be used for the submission of latitudinal/
longitudinal information:

- Northern latitudes and eastern longitudes should be indicated by the use of [un-signed] positive decimal degree values
- Southern latitudes and western longitudes should be indicated by the use of negative decimal degree values

Latitude	<ul style="list-style-type: none">• Degrees: Represented as positive (unsigned) or negative numbers from 0 to 89.99 E.g. If value = 83.2, this means 83.2° N E.g. if value = -83.2, this means 83.2° S
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Longitude	<ul style="list-style-type: none"> • Degrees: Represented as positive (unsigned) or negative numbers from 0 to 179.99 E.g. If value = 83.2, this means 83.2° E E.g. if value = -83.2, this means 83.2° W
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3. The following coding schemes are to be used:
 - (a) Species are to be described using the FAO 3 letter species codes¹¹
 - (b) Fishing methods are to be described using the International Standard Classification of Fishing Gear (ISSCFG - 29 July 1980) codes¹² - Annex 10
 - (c) Types of fishing vessel are to be described using the International Standard Classification of Fishery Vessels (ISSCFV) codes¹³ - Annex 11

4. Metric units of measure are to be used, specifically:
 - a. Kilograms are to be used to describe catch weight
 - b. Metres are to be used to describe height, width, depth, beam or length
 - c. Cubic metres are to be used to describe volume
 - d. Kilowatts are to be used to describe engine power

¹¹ www.fao.org/fi/statist/fisoft/asfis/asfis.asp

¹² <http://www.fao.org/fishery/cwp/handbook/M> - see “Annex M I”

¹³ <http://www.fao.org/fishery/cwp/handbook/L> -see “Annex L.II”

ANNEX 10
ISSCFG Codes
INTERNATIONAL STANDARD STATISTICAL CLASSIFICATION OF FISHING GEAR
(ISSCFG) (29 July 1980)

Gear Categories Abbreviation Code	Standard Abbreviations	ISSCFG
SURROUNDING NETS		01.0.0
With purse lines (purse seines)	PS	01.1.0
- one boat operated purse seines	PS1	01.1.1
- two boats operated purse seines	PS2	01.1.2
Without purse lines (lampara)	LA	01.2.0
SEINE NETS		02.0.0
Beach seines	SB	02.1.0
Boat or vessel seines	SV	02.2.0
- Danish seines	SDN	02.2.1
- Scottish seines	SSC	02.2.2
- pair seines	SPR	02.2.3
Seine nets (not specified)	SX	02.9.0
TRAWLS		03.0.0
Bottom trawls		03.1.0
- beam trawls	TBB	03.1.1
- otter trawls ¹⁴	OTB	03.1.2
- pair trawls	PTB	03.1.3
- nephrops trawls	TBN	03.1.4
- shrimp trawls	TBS	03.1.5
- bottom trawls (not specified)	TB	03.1.9
Midwater trawls	03.2.0	
- otter trawls ¹	OTM	03.2.1
- pair trawls	PTM	03.2.2
- shrimp trawls	TMS	03.2.3
- midwater trawls (not specified)	TM	03.2.9
Otter twin trawls	OTT	03.3.0
Otter trawls (not specified)	OT	03.4.9
Pair trawls (not specified)	PT	03.5.9
Other trawls (not specified)	TX	03.9.0

¹⁴ Fisheries agencies may indicate side and stern bottom, and side and stern midwater trawls, as OTB-1 and OTB-2, and OTM-1 and OTM-2, respectively

DREDGES		04.0.0
Boat dredges	DRB	04.1.0
Hand dredges	DRH	04.2.0
LIFT NETS	05.0.0	
Portable lift nets	LNP	05.1.0
Boat-operated lift nets	LNB	05.2.0
Shore-operated stationary lift nets	LNS	05.3.0
Lift nets (not specified)	LN	05.9.0
FALLING GEAR		06.0.0
Cast nets	FCN	06.1.0
Falling gear (not specified)	FG	06.9.0
GILLNETS AND ENTANGLING NETS		07.0.0
Set gillnets (anchored)	GNS	07.1.0
Driftnets	GND	07.2.0
Encircling gillnets	GNC	07.3.0
Fixed gillnets (on stakes)	GNF	07.4.0
Trammel nets	GTR	07.5.0
Combined gillnets-trammel nets	GTN	07.6.0
Gillnets and entangling nets (not specified)	GEN	07.9.0
Gillnets (not specified)	GN	07.9.1
TRAPS		08.0.0
Stationary uncovered pound nets	FPN	08.1.0
Pots	FPO	08.2.0
Fyke nets	FYK	08.3.0
Stow nets	FSN	08.4.0
Barriers, fences, weirs, etc.	FWR	08.5.0
Aerial traps	FAR	08.6.0
Traps (not specified)	FIX	08.9.0
HOOKS AND LINES		09.0.0
Handlines and pole-lines (hand-operated) ¹⁵	LHP	09.1.0
Handlines and pole-lines (mechanized) ¹⁶	LHM	09.2.0
Set longlines	LLS	09.3.0
Drifting longlines	LLD	09.4.0
Longlines (not specified)	LL	09.5.0
Trolling lines	LTL	09.6.0
Hooks and lines (not specified)	LX	09.9.0

¹⁵ Including jigging lines

¹⁶ Code LDV for dory-operated line gears will be maintained for historical data purposes

GRAPPLING AND WOUNDING		10.0.0
Harpoons	HAR	10.1.0
HARVESTING MACHINES		11.0.0
Pumps	HMP	11.1.0
Mechanized dredges	HMD	11.2.0
Harvesting machines (not specified)	HMX	11.9.0
MISCELLANEOUS GEAR¹⁷	MIS	20.0.0
RECREATIONAL FISHING GEAR	RG	25.0.0
GEAR NOT KNOWN OR NOT SPECIFIED	NK	99.0.0

¹⁷ This item includes: hand and landing nets, drive-in-nets, gathering by hand with simple hand implements with or without diving equipment, poisons and explosives, trained animals, electrical fishing

ANNEX 11
ISSCFV Codes
INTERNATIONAL STANDARD STATISTICAL CLASSIFICATION OF FISHERY VESSELS
BY VESSEL TYPES (approved by CWP-12, 1984)

Code	VesselType	Standard Abbreviation	Code
FISHING VESSELS			
01.0.0	TRAWLERS	TO	
	Side trawlers	TS	01.1.0
	Side trawlers wet-fish	TSW	01.1.1
	Side trawlers freezer	TSF	01.1.2
	Sterntrawlers	TT	01.2.0
	Sterntrawlers wet-fish	TTW	01.2.1
	Sterntrawlers freezer	TTF	01.2.2
	Sterntrawlers factory	TTP	01.2.3
	Outrigger trawlers	TU	01.3.0
	Trawler nei	TOX	01.9.0
02.0.0	SEINERS	SO	
	Purse seiners	SP	02.1.0
	North American type	SPA	02.1.1
	European type	SPE	02.1.2
	Tuna purse seiners	SPT	02.1.3
	Seiner netters	SN	02.2.0
	Seiner nei	SOX	02.9.0
03.0.0	DREDGERS	DO	
	Using boat dredge	DB	03.1.0
	Using mechanical dredge	DM	03.2.0
	Dredgers nei	DOX	03.9.0
04.0.0	LIFT NETTERS	NO	
	Using boat operated net	NB	04.1.0
	Lift netters nei	BOX	04.9.0
05.0.0	GILL NETTERS	GO	
06.0.0	TRAP SETTERS	WO	
	Potvessels	WOP	06.1.0
	Trap setters nei	WOX	06.9.0
07.0.0	LINERS	LO	
	Handliners	LH	07.1.0
	Longliners	LL	07.2.0
	Tuna longliners	LLT	07.2.1
	Pole and line vessels	LP	07.3.0
	Japanese type	LPJ	07.3.1
	American type	LPA	07.3.2
	Trollers	LT	07.4.0
	Liners nei	LOX	07.9.0
08.0.0	VESSELS USING PUMPS FOR FISHING	PO	

11.0.0 MOTHERSHIPS		HO	
	Salted-fish motherships	HSS	11.1.0
	Factory motherships	HSF	11.2.0
	Tuna motherships	HST	11.3.0
	Motherships for two-boat purse seining	HSP	11.4.0
	Motherships nei	HOX	11.9.0
12.0.0 FISH CARRIERS		FO	
13.0.0 HOSPITAL SHIPS		KO	
14.0.0 PROTECTION AND SURVEY VESSELS		BO	
15.0.0 FISHERY RESEARCH VESSELS		ZO	
16.0.0 FISHERY TRAINING VESSELS		CO	
99.0.0 NON-FISHING VESSELS nei		VOX	

Source: CWP Handbook of fishery statistical standards (p.206). FAO, Rome. 2004.

Annex 12

Standard for Landings Data: Fishing and Reefer Vessels

With regard to the fishing vessels flying their flag that directly harvested non-highly migratory fishery resources in the Area-

Participants are to:

1. Collect data on an individual landings basis
2. Collect the following fields of data:
 - a) Current vessel flag
 - b) Name of vessel
 - c) Registration number of vessel
 - d) International radio call sign (if any)
 - e) Lloyd's / IMO number (if allocated)
 - f) Date entered SPRFMO Area
 - g) Date exited SPRFMO Area
 - h) Landing date
 - i) Area catch taken (FAO area¹⁸)
 - j) Country of Landing (standard ISO 3-alpha country codes)
 - k) Port/ Point of Landing
 - l) Landed State¹⁹ by species (see footnote)
 - m) Landed (live) weight by species
 - n) Containers – Type by species (if applicable)
 - o) Containers – Number by species (if applicable)
 - p) Containers – Total Content weight for all containers by species (if applicable)

¹⁸ FAO statistical area codes

¹⁹ Landed state: This means the 'state' in which the fish was landed. States may include 'live' (fish has not been processed and no part of the fish has been removed), or other states for example headed and gutted, filleted, etc.

- q) Port of previous landing
- r) Date of arrival at previous port

Verification (if applicable):

- s) Name of observer
- t) Authority

With regard to reefer vessels flying their flag and transporting non-highly migratory fishery resources in the Area-

Participants are to:

1. Collect data on an individual unloading (landing) basis
2. Collect the following fields of data:

Vessel

- a. Current flag state.
- b. Name of vessel.
- c. Registration number of vessel
- d. Radio call sign (If any).
- e. IMO number/Lloyd number (if allocated).
- f. Name of charter party or owner.

General Information on the unloading (landing)

- g. Country of landing (using 3 alpha ISO codes).
- h. Port/point of landing.
- i. Landing date.
- j. Port of previous destination if in Convention Area.

Landing description split by species, for each species

- k. Landed state*.
- l. Containers - Type.
- m. Containers – Number.
- n. Containers – Total Content weight for all containers.

Transshipment (if within the Convention Area).

- o. Name(s) of fishing vessel(s) (delivering).
- p. IMO number/Lloyd number (if allocated).
- q. Total net weight(s) of product transshipped by species by vessel(s).
- r. Date(s) of transshipment activities by vessel(s).

Verification (if applicable)

- s. Name of observer.
- t. Port authority.

Annex 13

Standard for Transshipment Data

With regard to the fishing vessels flying their flag and fishing for non-highly migratory fishery resources in the Area-

Participants are to:

1. Collect data on an individual transshipment basis.
2. Collect the following fields of data:

Details of transshipping vessel (delivering)

- a. Name of vessel.
- b. Registration number.
- c. Radio call sign.
- d. Vessel flag state.
- e. IMO number/ Lloyd number (if allocated).
- f. Master of transshipping vessel.

Details of Reefer Vessel (receiving)

- g. Name of vessel.
- h. Registration number.
- i. Radio call sign.
- j. Vessel flag state.
- k. IMO number/ Lloyd number (if allocated).
- l. Master of reefer vessel.

Transshipment operation.

- m. Date and time of commencement of transshipment.
- n. Date and time of completion of transshipment.
- o. Position (nearest 1/10th degree) at commencement of transshipment.
- p. Position (nearest 1/10th degree) at completion of transshipment.
- q. Description of product type by species (e.g. whole, frozen fish in 20 kg cartons).
- r. Number of cartons, net weight (kg) of product, by species.
- s. Total net weight of product transshipped (kg).
- t. Hold numbers in reefer vessel in which product is stowed.
- u. Destination port of reefer vessel.
- v. Arrival date estimate.
- w. Landing date estimate.

Verification (if applicable)

- x. Name of observer
- y. Authority

Annex 14

Standard for Annual Catch Data

Annual catch summaries should list all species/groups caught in the SPRFMO Area during the Calendar year.

For a calendar year, and for each distinct combination of Sea Type, FAO statistical area, and FAO species/ group name (for that calendar year), provide the following data:

- a) Calendar year
- b) Sea Type (either 'HS' – High Seas - or 'EEZ' – Exclusive Economic Zone)
- c) FAO Statistical Area (e.g. FAO87)
- d) Species/ group name (e.g. orange roughy)
- e) Species/ group code (FAO 3-alpha code²⁰, e.g. ORY)
- f) Annual catch total – tonnes raised to 'live' weight

²⁰ www.fao.org/fi/statist/fisoft/asfis/asfis.asp