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## **COORDINATING WORKING PARTY ON FISHERY STATISTICS**

**Report of the**

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**FIFTH MEETING OF THE AQUACULTURE SUBJECT GROUP AND  
THE TWENTY-SIXTH MEETING OF THE FISHERIES SUBJECT**

**Copenhagen, Denmark, 19–22 June 2017**



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## PREPARATION OF THIS DOCUMENT

This is the final version of the report of the Fifth Meeting of the Aquaculture Subject Group and the Twenty-Sixth Meeting of the Fisheries Subject of the Coordinating Working Party on Fishery Statistics, held in Copenhagen, Denmark, from 19 to 22 June 2017.

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### ABSTRACT

This document contains the report of the Fifth Meeting of the Aquaculture Subject Group and the Twenty-sixth meeting of the Fisheries Subject of CWP, held during the Intersessional Aquaculture and Fisheries Subject Group meeting of the Coordinating Working Party on Fishery Statistics (CWP-IS), which took place in Copenhagen, Denmark, from 19 to 22 June 2017. The work was organized between joint sessions to address issues of general interest, with the Subject Groups – Aquaculture (CWP-AS) and Fisheries (CWP-FS) –organized in concurrent sessions, to address matters related to the intersessional programme for each Subject Group. The meeting reviewed the progress made since the Twenty-fifth session of the CWP and agreed on actions for the second part of the intersessional period, prior to the upcoming Twenty-sixth session of the CWP to be held early in 2019. The main issues presented and discussed were the dissemination of the revised handbook on the CWP web page and the further enhancement of the socio-economic and GIS section of the handbook, the CWP ad hoc task group on “reference harmonization for capture fisheries and aquaculture statistics”, and the progress made by the Task Force in establishing the standard aquaculture questionnaire.



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## EXECUTIVE SUMMARY

1. The Intersessional Aquaculture and Fisheries Subject Group Meetings of the Coordinating Working Party on Fishery Statistics (CWP-IS) met in Denmark, Copenhagen from 19 to 22 June 2017 to hold the 5th Meeting of the Aquaculture Subject Group and the 26th Meeting of the Fisheries Subject of CWP. The meeting was attended by eleven CWP participating organizations and two organizations as observers, with two additional organizations partly attending remotely (participants in Appendix 2). The agenda was organized between joint sessions to address issues of general interest, with the Subject Groups – Aquaculture (CWP-AS) and Fisheries (CWP-FS) – taking place in concurrent sessions, to address matters related with the intersessional programme for each Subject Group.

2. During the joint sessions the groups discussed the dissemination of the revised handbook on the CWP web page, the further enhancement of the socio-economic section of the handbook and the CWP ad hoc task group on “reference harmonization for capture fisheries and aquaculture statistics”. Agreements were reached about the general organization of the CWP handbook contents and the website navigation, and regarding the need for a fast-track procedure to agree on minor issues to ensure the timely release of web version of the handbook contents. For the economic section, the groups decided that the contents should be split into core variables and additional variables, the latter to be moved to a specific section of the handbook and linked to particular policy objectives. The core economic variables should be further enhanced however, and the final draft section must be presented to the 26th CWP Session. With respect to the work of the task group on reference harmonization, the group provided feedback on the structural elements and conceptual schemes from an overall perspective, towards the validation of the SDS and related reference metadata, as well as the need to broaden the scope/data domain SDS by compiling essential dimensions/concepts for data collection widely employed by the CWP parties. Instructions for the work to be developed during the remaining intersessional period were given and are included in Appendix 4 of the report. Finally, the CWP participant organizations presented the progress on further streamlining of the reporting of national statistics and a review of activities by participating organizations since CWP-25; group discussion then helped to identify potential data sharing agreements between Eurostat, FAO and OECD and activities to streamline statistical activities. Agreement has been reached about the importance of developing a best practice document based on the current CWP organizations’ experience of data sharing agreements; this work is to be steered by FAO in close collaboration with the other organizations.

3. The Aquaculture Subject Group CWP-AS discussed: 1) the progress made by the Task Force in establishing standard aquaculture questionnaires; 2) the proposed revision of the ISSCAAP groupings; and 3) the contents of the aquaculture section of the CWP Handbook. Significant achievements have been reached by the CWP-AS. Regarding the standard questionnaire, agreement has been reached on the setting of minimum required data, medium-level required data and detailed data for "final aquaculture production by intended use", aquaculture hatchery and nursery production, and seed input for use in aquaculture by source of supply. For the ISSCAAP classification – and based on the preliminary needs assessment – a draft proposal has been prepared which included the creation of new ISSCAAP Groups and the revision of the names of several currently existing Groups. The CWP-AS recommended holding further technical consultation with experts and data users regarding the revisions. Finally, the group concluded that the current draft of the aquaculture statistics handbook is overly extensive, at nine chapters; revisions should therefore be made and a revised version put forward for discussion at the CWP session.

4. The main issues discussed by the Fisheries Subject Group CWP-FS were related to the further enhancement of the GIS task group, the International Standard Statistical Classification of Fishing Vessels (ISSCFV) and the role of Global and Regional fisheries nominal catch statistics in support of Sustainable Development Goal 14. Conclusions on the way forward for the GIS Task group and the work to be developed by the Reference Harmonization Task Group during the second part of the intersessional period have been recommended by the CWP-FS.

5. Finally, the groups agreed on the need to identify a venue for the upcoming 26th Session of the CWP. The secretariat will ensure the need to proceed with Members consultation in relation to the venue and the date is launched in due time.

## **OPENING OF THE MEETING**

### **(Agenda point 1)**

6. The Intersessional Aquaculture and Fisheries Subject Group Meetings of the Coordinating Working Party on Fishery Statistics (CWP-IS) were held from 19 to 22 June 2017 in Copenhagen, Denmark. The 5th Meeting of the Aquaculture Subject Group and the 26th Meeting of the Fisheries Subject were held in conjunction for the first time, as recommended by the 25th Session of CWP. This meeting format allowed for common sessions between the subject groups to discuss matters of common interest to both. The agenda was therefore organized to hold joint sessions, in which all the participants could come together, and two parallel sessions to secure the Aquaculture and Fisheries Subject Groups.

7. The meeting was attended by eleven CWP participating organizations (CCAMLR, Eurostat, FAO, GFCM, IATTC, ICES, NAFO, NACA, OECD, SEAFO and SEAFDEC) and two observer organizations (WECAFC and SWIOFC). In addition, two organizations partly attended remotely (IOTC and ICCAT) alongside additional FAO experts. The list of participants is in Appendix 2 of this report.

8. The joint session was chaired by Friderike Oehler, Eurostat, who was also chair of the Aquaculture Subject Group. The Fisheries Subject Group was chaired by Anna Osypchuk, ICES. The chairs of the subject groups are the coordinators of the subject groups appointed during the 25th Session of CWP (Rome, 2016).

## **ADOPTION OF THE AGENDA**

### **(Agenda point 2)**

9. The draft agenda was approved with the following two changes:

- Points 4 and 8, "Review of activities by participating organizations since CWP-25", originally meant to be discussed separately in each subgroup, were raised to the joint session and discussed together with point 3.4 of the agenda.
- Points 5 and 9.1, "CWP ad hoc task group on Reference harmonization for capture fisheries and aquaculture statistics", initially planned for separate discussion in each subject group, were discussed at the joint session at the beginning of the second day of the meeting.

10. The adopted agenda appears in Appendix 1 of this report.

## **DISSEMINATION OF THE REVISED HANDBOOK ON THE CWP WEB PAGE**

### **(Agenda point 3.1)**

11. The CWP Handbook has undergone a major revision, following a process that began in 2009. The process of revision was initially introduced and discussed at the 23rd Session of CWP (Hobart, Australia, 22–26 February 2010). The 24th Session of the CWP (Rome, 5–8 February 2013) acknowledged the progress of the work done during the intersessional period, agreed on a structure for the revised handbook and set a work plan for the finalization of the revision.

12. At the 25th Session the meeting accepted the concept and high-level structuring for the new proposed web version of the handbook. Subsequently, FAO developed a proposal for a new IT framework to support the dissemination of the CWP Handbook, with enhanced capacity of dynamic searching and an improved interface. The work presented to the CWP intersessional meeting is the result of the agreements reached over the relevant CWP sessions. Further detail and explanation is provided in the Meeting document (meeting document [CWP-IS/2017/Inf.1](#)).

## Feedback

13. The CWP-IS urged that the publication of the complete sections of the website for the CWP handbook proceed, with additional sections or amendments added later.
14. Group agreements and actions required:
- Create an additional, “general search” category, in addition to the four main existing ones. This would enable the user to visualize and explore all the contents without first navigating through one of the four main categories.
  - The icons of the four categories on the main page of the website should point to the handbook search webpage and retrieve the generic search for each category;
  - include the possibility of searching the glossary by alphabetic order;
  - replace the designation "Glossary" by “Concepts”;
  - organize the format of the search results either by including hashtags, or further refine the colouring code so that the meaning of the colours becomes intuitive.
  - With regard to the contents of the website, it was agreed that CWP parties should send their comments to improve and validate the contents and structure by the end of July 2017. The CWP secretariat will take charge of the minor modifications required to edit the website and publish it.
  - Include a notification banner at the top of any page on the website, where the content might need further development.
  - Regarding the inclusion or not of the processing industry in the handbook – a subject for which the past versions of the handbook do not provide clear guidelines – the group suggested that a study should be conducted to assess how much this inclusion would require in terms of handbook updating. This study should not hinder the swift publication of the handbook, however.
  - In general, the groups agreed to a fast-track procedure to ensure a timely release of the handbook’s contents. Minor changes may be agreed on through written consultation, but, this should not apply to major changes. New handbook contents deriving from major revisions must always be evaluated in the CWP sessions.

## FURTHER ENHANCEMENT OF THE SOCIO-ECONOMIC SECTION OF THE HANDBOOK

### (Agenda point 3.2)

15. Ms Cristina Ribeiro introduced the CWP-IS group to the work plan for the enhancement of the socio-economic sections of the CWP Handbook and explained the process undergone so far (see meeting document [CWP-IS/2017/Inf.2](#)).

16. During the 24th Session of the CWP (5–8 February 2013, Rome) a work plan for the finalization of the handbook revisions was established. Amongst other elements, this plan included further enhancements of the current sections along with the completion of the socio-economic section, as those revisions were not deemed satisfactory. Specifically, the CWP 24th Session identified the following needs in relation to the socio-economic section:

- the section on socio-economic statistics required quite substantive review and enhancement;
- Section K: Fishers should be redrafted to include aquaculture as a category under the title of “employment”;
- The group assigned to the socio-economic section agreed to focus this round of revisions on defining broadly accepted, basic concepts;

- Further work was required and it was agreed that the group would continue to elaborate the socio-economic statistics section in the intersessional period.
- The main aim was to provide more pragmatic guidance on how to apply the basic concepts relevant to socio-economic data in the context of fisheries and aquaculture.

17. Between CWP Sessions 24 and 25 no progress was made with the contents of the socio-economic section. The 25th session (23–26 February 2016, Rome) agreed that, among the different tasks to be performed during the intersessional period, the first priority should be those related to the CWP handbook. The group also encouraged the involvement of other organizations already collecting socio-economic data, such as SPC, SEAFDEC and GFCM, to reflect the standard practices in their respective regions (see meeting document [CWP-IS/2017/Inf.2](#)).

18. Subsequently, a task group to work on the further refinement of the socio-economic section was created. The first draft of the revised socio-economic section of the handbook has been presented to the group and feedback requested (see meeting document [CWP-IS/2017/1](#)).

### **Feedback**

19. After a discussion around the purpose of the handbook – whether it was only to give guidance to support the CWP questionnaires, or whether a broader scope was required in terms of the handbook contents extending what is requested in the questionnaires – the CWP-IS discussed core variables and reflected on the reality of data availability. Finally, it was decided that the contents should be split into core variables and additional variables, which may be linked to particular policy objectives. The core economic variables necessary to make an economic assessment are “Income” and “Cost of production”. However, at the moment, only “Production value” is available for aquaculture and data on the “Production value” from capture fisheries are not collected or consistently available.

20. Group agreements and actions:

- The group agreed that the core variables would be restricted to production value and employment for the social variable. The other variables required for a complete economic (and more in-depth social) evaluation would be moved to a section for a 'detailed questionnaire'.
- The group also proposed that a section on the website should be dedicated to detailing the policy requirements for socio-economic assessments. This section would include, and link to, a collection of potential methodologies, variables etc., developed by the CWP Members, which would host all of the non-core variables.
- It was agreed that FAO would prepare the next version of the socio-economic section of the handbook, reflecting the proposed reduced requirements for minimum data, and will circulate among CWP members for feedback.
- A final consolidated draft ought to be presented to the next CWP intersessional meeting: first to be discussed, then submitted to the following session for endorsement.

### **CWP AD HOC TASK GROUP ON “REFERENCE HARMONIZATION FOR CAPTURE FISHERIES AND AQUACULTURE STATISTICS” (Agenda point 3.3)**

21. The chairs of the two CWP task groups created in the 25th session introduced their mandates and working arrangements and plans. The detailed discussion took place under points 5, 9.1 and 9.2 of the agenda.

**REVIEW OF PROGRESS ON FURTHER STREAMLINING OF THE REPORTING OF NATIONAL STATISTICS AND REVIEW OF ACTIVITIES BY PARTICIPATING ORGANIZATIONS SINCE CWP-25**  
(Agenda points 4)

**CCAMLR**

22. Since 2007, the CCAMLR Secretariat has used fishery haul-by-haul data to generate Members' STATLANT questionnaires (preliminary STATLANT data). The preliminary STATLANT data are sent to Members for validation, and subsequently published in the CCAMLR Statistical Bulletin. In 2017, the format of the preliminary STATLANT data was revised to facilitate Members' validation of these data. Data from the CCAMLR Catch Documentation Scheme are also aggregated by the Secretariat to generate the trade statistics (landings and exports) of toothfish (*Dissostichus eleginoides* and *D. mawsoni*) published in the Statistical Bulletin. Information published in the Statistical Bulletin is available in various formats (refer to <https://www.ccamlr.org/en/data/statistical-bulletin>):

- MS Access database;
- fishery webpages for toothfish (*D. eleginoides* and *D. mawsoni*), icefish (*Champscephalus gunnari*) and krill (*Euphausia superba*);
- data files (.csv format) with metadata;
- selected tables from the Statistical Bulletin in pdf.

23. CCAMLR has revised the boundary between Subareas 58.6 and 58.7 (Indian Ocean) so that the boundary between the French and South African EEZs is in the high seas at 44°E longitude (CCAMLR-XXXV, paragraph 12.4). The revised subarea boundaries are as follows:

- 58.6: the waters bounded by a line commencing at 45°S 44°E; thence due east to 60°E longitude; thence due south to 50°S latitude; thence due west to 44°E longitude; thence due north to the starting point;
- 58.7: the waters bounded by a line commencing at 45°S 30°E; thence due east to 44°E longitude; thence due south to 50°S latitude; thence due west to 30°E longitude; thence due north to the starting point.

24. The revised boundaries were agreed in October 2016 and have been applied retrospectively to the entire time series of the STATLANT data and trade statistics published in the CCAMLR Statistical Bulletin. The shapefile and metadata are available from the CCAMLR GIS <https://gis.ccamlr.org/home>. A map of the revised subareas can be found in Appendix 3 of this report.

**EUROSTAT**

25. The Fisheries Team at Eurostat has been greatly reduced over the last two years with new colleagues only joining the team in April 2017. Activities therefore focused on Eurostat's core business of data collection and dissemination. Besides publishing recent data, the quality of catch, landings and aquaculture data was improved through multiple data revisions, additional validation checks and improved guidelines for data collection. Progress was also made in terms of the release date of the final national and EU fisheries data. In addition, the quality reports for aquaculture statistics were aligned with the European Statistical System's standard for quality reports. Quality reports for the reference year 2015 have been received by all European Economic Area (EEA) Member States except Bulgaria, Italy and Poland, and will be published on Eurostat's dissemination database by the end of 2017. Eurostat has drafted an evaluation report on aquaculture statistics for the European Parliament and the European Council which will be published, once approved, beginning of 2018. An evaluation report on landings statistics was adopted by the European Parliament and the Council, and published in May 2016. Further to this, Eurostat has started work on a modernization project aiming at a revision of the current legislation for catch, landings and aquaculture data collection in order to streamline and simplify the European Fisheries Statistics. This work will require the input of other stakeholders in this field, who will be contacted as the project evolves.

## **FAO**

26. FAO presented its report (see meeting document [CWP-IS/2017/Inf.3](#)) of ongoing activities which include, beyond the activities presented during this meeting agenda:

- ongoing maintenance of its global statistics database, innovative developments in the iMarine Tuna Atlas, as well as Global Fishing Watch research collaboration for producing fishing activity/effort based on AIS data source;
- methodologies and tools:
  - a. enhancement of FishStatJ, finalization of the new OpenArtfish software package,
  - b. development of Scalable Software Framework for integrated fishery statistics and management information system,
  - c. deployment of a FAO corporate Master Data Management system (eBX5) which will operationalize the outputs of the Reference harmonization group,
  - d. the involvement in a corporate FAO Quality Assurance framework development,
  - e. adoption of SDMX as a corporate FAO statistics dissemination format.

## **GFCM**

27. During the intersessional period, GFCM worked on the finalization of the Data Collection Reference Framework (DCRF), the first comprehensive GFCM framework for the collection and submission of fisheries data on fishing fleet, catch, incidental catch of vulnerable species, fishing effort, socio-economics and biological information in the GFCM area (Mediterranean and Black Sea). In defining the DCRF, GFCM paid particular attention to CWP and the adherence to international standards. More specifically, for countries, fishing gears and species the codifications used were ISO-alpha3 code, ISSCFG and ASFIS respectively. With reference to the GFCM fleet segments, although vessel groups mostly followed the ISSCFV standard, length classes were also considered – as has been done in the past – in order to better address the GFCM needs. Finally, in the field of aquaculture data collection, the GFCM pay attention to the use of standard codifications, particularly those used by other relevant international organizations such as FAO and Eurostat, although the detailed data collection of the GFCM requires specific codes for some of its data fields (e.g. “method of culture”, “farming structure”, “type of product”). Starting from the end of 2017, the GFCM aquaculture production statistics will be made available to the public for online consultation, in accordance with Resolution GFCM/35/2011/2 on data confidentiality policy and procedures.

## **ICES**

28. Since CWP-25 in 2016 in Rome, ICES has supported work by the ad hoc task groups on Reference harmonization for capture fisheries and aquaculture statistics, and on enhancement of the GIS section of the handbook.

29. Area changes, presented by ICES at CWP-25, were further implemented in ICES coding, referencing and documentation. Maps were developed for use within and outside of ICES. FAO was supported with additional information to update the area descriptions which it manages.

30. Fisheries data collected by ICES in this period covered the usual harvesting of data on annual nominal catches collected by EUROSTAT and FAO for area 27, as well as processing of the STATLANT27A submissions. The final product of this data collection is the annually updated dataset on nominal catches per species, country and area reference in the FAO area 27. In addition, to cover ICES advisory process, data calls were issued to ICES Member Countries for detailed information on target species for data types like landings, discards, biological sample and effort data, as well as

VMS/log-book data. The data submissions are used in the work of ICES Expert Groups, and results are published in group reports, supported by the entries to the Stock Assessment Database.

### **NAFO**

31. In 2016, the Catch Data Advisory Group (CDAG) of the Joint Fisheries Commission-Scientific Council Working Group on Catch Reporting conducted a review of the various NAFO fisheries and catch data sources and developed the Catch Estimation Strategy. Catch estimates in the NAFO Regulatory Area are used by the Scientific Council in its fish stock assessment work. The strategy is based mainly on the use of Port Inspection data. They are considered accurate as they are verified by an inspector during fish landings.

32. Daily catch reports,<sup>1</sup> in addition to haul-by-haul data,<sup>2</sup> are considered primary sources in catch estimation because of their completeness. It has been noted, however, that these are more prone to error/and or misreporting than the entries on nominal catch information from the Port Inspection Reports. Through the Catch Estimation Strategy, the nominal catch information (product form × conversion factor) from port inspection reports is now used as a verification tool when evaluating the veracity of the primary data sources. Catch estimates are made on a fishing trip basis.<sup>3</sup>

33. The Scientific Council made use of catch estimates calculated using this approach for the first time in 2017, estimating catch for three priority stocks of Greenland halibut, cod and redfish in the NAFO Regulatory Area. This approach will be eventually used for all stocks that are managed by NAFO.

### **OECD**

34. The OECD data collection of fisheries and aquaculture statistics was suspended in 2016 and restarted in March 2017. This allowed for the revision of the OECD statistical collection process, with the objectives of reducing the workload, harmonising reporting formats, adopting international standards and improving coordination with international organizations. All questionnaires have been completely redesigned using a more user-friendly template that also includes methodological definitions, instructions on how they should be compiled, and a metadata spreadsheet; the data on landings, inland fisheries and aquaculture production are now collected by species, and not by the OECD group of species as was the case previously. The data call was launched in March 2017 and the data are currently being processed.

### **SEAFDEC**

35. The compilation of fishery statistic in Southeast Asia has been conducted regularly by SEAFDEC since 1978, however the need to strengthen and improve the countries' national fishery statistics has been continually highlighted. SEAFDEC therefore considered it necessary to improve the reporting of fishery statistics by ASEAN Member States. Since 2008 SEAFDEC, in collaboration with FAO, has recognized the substantial overlaps in data items collated by both organizations. The Streamlining of Reporting system, which used questionnaires shared by SEAFDEC and FAO, was developed with the aim of reducing the burden of work while meeting the requirements of both organizations. Based on the integrated questionnaires, the submission of quality data has been better and faster.

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<sup>1</sup> Article 28.6.c of the NAFO Conservation and Enforcement Measures (NCEM) stipulates: every fishing vessel shall transmit electronically the quantity of catch retained and quantity discarded by species for the day, by Division, including nil catch returns, sent daily before 12:00 UTC. The daily catch report of the fishing vessel is identified as "CAT" in the NAFO Vessel Monitoring System.

<sup>2</sup> Article 28.8.b of the NCEM stipulates the recording and submission requirements of catches on a haul by haul (or tow or set) basis, or logbook information, of each fishing vessel.

<sup>3</sup> Per Article 1.7 of the NAFO Conservation and Enforcement Measures, "fishing trip" for a fishing vessel includes the time from its entry into until its departure from the Regulatory Area and continues until all catch on board from the regulatory Area has been landed or transhipped.

36. To continue improving the reporting of statistics in Southeast Asia, SEAFDEC will organize the Regional Technical Consultation on Fishery Statistics and Information in Southeast Asia on 15–18 August 2017, Bangkok, Thailand. This consultation will aim to update the progress and areas of difficulty with statistical reporting, as well as providing a forum for discussion of the means to improve reporting of fishery statistics in the Southeast Asian region. In this context, SEAFDEC also invites FAO to attend this consultation in order to provide technical support and present the new global framework related to fishery statistics.

### ***SEAFO***

37. SEAFO continues to refine and improve its reporting requirements for scientific and fisheries management purposes. The SEAFO Scientific Committee recently developed gear-specific reporting templates for the submission of fishing logbook data.<sup>4</sup> The fishing logbook data serves to augment and allow for the cross-verification of VMS catch reporting, port inspection, as well as scientific observer catch reporting already in place within SEAFO. Subsequently, the Commission included the compulsory requirement for vessels to submit fishing logbook data (tow-by-tow/set-by-set) to the Secretariat within 30 days following a trip in the SEAFO Convention Area.<sup>5</sup>

38. The SEAFO Commission agreed to increase the detail for reporting of retained and discarded catches. The catches were previously reported in tonnes, vessels are now expected to report catches in kilograms for catch-on-entry (COE), 5-Day catch, and catch-on-exit (COX) reports.<sup>6</sup> The increased detail is intended to allow for a more precise data collection of VME taxa bycatch and discards information.

### ***WECAFC (Observer)***

39. Fisheries data collection in the WECAFC region has been described as generally weak throughout the region, contributing to the lack of management. Recently, initiatives have been created through the WECAFC-FIRMS “Partnership” (WECAFC14, 2014) to strengthen the basic fisheries information. Specific initiatives include developing FIRMS inventories for several important shared resource groups, defining minimum data requirements for a regional pilot database (e.g. through developing inventories and fact sheets), developing a draft data collection framework, and developing consensus for regional data-sharing policies. The project(s) chief aims include: 1) defining minimum data needs that feed into management and stock status determinations, prioritizing shared resources initially (flying fish, conch, lobster, recreational billfish, shrimp and Groundfish) and including the development of logbooks for data collection of relevant catch, CPUE, biological data and socio-economic information; and 2) follow agreed principles relating to fisheries standards for collecting and reporting statistics.

### ***SWIOFC (Observer)***

40. The SWIOFC participant (observer) did not feel in a position to report on SWIOFC progress regarding fishery statistics. Fisheries data collection at the SWIOFC is still at an early stage, but progress is being made and meeting reports of the SWIOFC Fishery Statistics working group should be consulted for accurate reference.<sup>7</sup> The SWIOFC participant was primarily invited to the FIRMS SC10 meeting held back-to-back with this one, and welcomed the opportunity to attend the CWP-IS meeting and interact with the CWP, in light of the added value it represents for the activities currently being carried out.

<sup>4</sup> SEAFO Scientific Committee (2015). Fishing Logbook Forms. Retrieved from [www.seafo.org/Management/Reporting-Forms](http://www.seafo.org/Management/Reporting-Forms) [Accessed 09 September 2017].

<sup>5</sup> SEAFO Commission (Dec, 2016), System of Observation, Inspection, Compliance and Enforcement, Art. 10.2. Retrieved from [www.seafo.org/Documents/SEAFO-System](http://www.seafo.org/Documents/SEAFO-System) [Accessed 09 September 2017].

<sup>6</sup> SEAFO Commission (Dec, 2016), System of Observation, Inspection, Compliance and Enforcement, Art. 11. Retrieved from [www.seafo.org/Documents/SEAFO-System](http://www.seafo.org/Documents/SEAFO-System) [Accessed 09 September 2017]

<sup>7</sup> SWIOFC held a Fishery Statistics Working Party in mid-2016 and another is planned in the week following this CWP meeting.



41. Group agreements and actions required:

- Group discussion for the possible revision of Statlant 21B. NAFO and Eurostat have agreed to work closely on this revision.
- The group discussion allowed the identification of further room to streamline data sharing agreements between Eurostat, FAO and OECD. The three organizations have agreed to explore this possibility and report back to the next CWP session.
- Lastly, in order to give more visibility and provide general guidance on how collaborative arrangements can be reached, the group agreed to develop a best practice document based on the current experience. FAO was tasked to lead the development of this document with inputs from the CWP Members.

**CWP AD HOC TASK GROUP ON “REFERENCE HARMONIZATION FOR CAPTURE FISHERIES AND AQUACULTURE STATISTICS”  
(Agenda point 5)**

42. Mr Aymen Charef presented the progress and the activities of the ad hoc task group on reference harmonization for capture fisheries and aquaculture statistics that was established during the CWP 25th Session held at FAO headquarters (Rome, 2016); the presentation is available at [CWP-IS/2017/Pr.4](#). The meeting document [CWP-IS/2017/2](#) provides details of the terminology used and summarizes the outcomes of discussion with CWP parties since the ad hoc TG kick-off on 23 March 2017.

43. The overall aim of the work was to put forward a set of concepts presented in a global Standard for Data Structure Definition (SDSD), or simply global DSD (name still to be further discussed and decided), one which accommodates the data and metadata used across the CWP parties to improve the data dissemination and provide an important service to any user across fisheries data sources. Twelve CWP parties contributed to an inventory with their metadata, data code lists and structure to produce the SDSD proposal.

44. The SDSD proposal was composed of structural elements (concepts and dimensions) that represent the minimum data requirements, but it was also flexible enough to enable the inclusion of modular elements to cover different data domains and cater to the needs of CWP parties at the regional level. The data domain represented the type of data collection and the objectives for which the SDSD was formulated (e.g. capture for economic purpose).

45. The concepts used in the proposed SDSD refer to CWP concepts, based on CWP standard classifications systems; they also encompass hierarchies (sub-classifications) at the lower level of granularity. Each dimension was linked to a list of codes (code list) used within the classification system.

46. Besides the SDSD proposal, the development of a unified and collaborative CWP registry was suggested in order to host the SDSD’s reference data catalogue and the specific regional reference classifications used by the CWP parties, including when they cannot be mapped with CWP classifications. The CWP registry would be the index of data and metadata hosted in the CWP repository, and two alternatives of CWP repository were presented. Formats of information exchange were also presented and the choice criteria explained.

47. With regard to repository maintenance, the role of maintaining the mapping between regional code lists with CWP standards (which would not be a frequent requirement) should rest with the CWP party. In the event of any change in the mapping code lists, updates should be made available to the CWP repository for broader dissemination.

## Feedback

48. There was general support from participants for the ongoing work on reference harmonization. The group provided feedback on the structural elements and conceptual schemes in relation to the validation of the SDSD and related reference metadata. Directions provided by the group are presented in the Appendix 5.

49. While the draft SDSD presented at the meeting gave shape to the minimum requirements on the structure of datasets for dissemination, the feedback led to a call for an increased focus on the minimum data requirements used in the data collection process.

50. Group agreements and actions required:

- To broaden the scope/data domain of SDSD by compiling the essential dimensions/concepts broadly used by the CWP parties for data collection.
- To use the catch defined in the CWP Annex B1 – together with landings, catch and effort – as building blocks, instead of spread between the data domain and the primary measure/observation structures.
- To further elaborate the SDSD that could accommodate other domains of data collection (e.g. logbooks) to address the requirements of CWP Members.
- CWP Members that participate in the task group will provide feedback on the document and presentation within one month, following the end of the meeting. This should not prevent other CWP Members providing feedback and joining the task group if they wish to.
- FAO will revise the document accordingly within two months of receiving the feedback.
- The group recommended that FAO proceed with CWP registry development, to be accessed through the CWP website.
- Eurostat advised that care should be taken to avoid duplication with the existing global SDMX registry.

## **PROGRESS FROM THE TASK FORCE ESTABLISHING THE STANDARD AQUACULTURE QUESTIONNAIRES (Agenda point 6.1)**

51. Inaccurate and missing definitions in the draft standard aquaculture statistics questionnaires were reviewed by the Aquaculture Subject Group (CWP-AS). Notable progress was achieved by the CWP-AS in the establishment of minimum required data, medium-level required data and detailed data for "final aquaculture production by intended use", aquaculture hatchery and nursery production, and seed input for use in aquaculture by source of supply.

52. Group agreements and actions required:

- Without going into details of farming systems and culture methods for aquaculture production data collection, CWP-AS agreed that a cross reference to the relevant section in the aquaculture statistics handbook should be created.
- In view of the latest advances and innovations in aquaculture production technology, CWP-AS recommended a technical consultation involving selected countries with diverse aquaculture farming systems, in order to capture new farming systems for inclusion in the handbook corresponding to the standard questionnaires.
- The standard questionnaires as revised by CWP-AS and the agreed definitions are included as Appendix 4.

## **REVIEW PROGRESS FROM THE TASK GROUP FOR REVIEWING AND DEVELOPING A PROPOSED REVISION OF THE ISSCAAP GROUPINGS**

### **(Agenda point 6.2)**

53. The required assessment for update/revision, and the proposed draft of ISSCAAP classification prepared by FAO from the aquaculture perspective was tabled and reviewed by CWP-AS (meeting document [CWP-IS/2017/4](#)). CWP-AS appreciated the rationale for the revision of the current ISSCAAP classification to better suit the analytical use of aquaculture data with the desirable level of detail.

54. Based on the preliminary needs assessment, the draft proposal includes: (1) the creation of new ISSCAAP groups under six divisions, and (2) the revision of names of several currently existing groups. Out of the nine divisions in current use, no revision of groups was proposed for Division 3 (marine fishes), Division 5 (molluscs) and Division 6 (aquatic mammals).

55. Group agreements and actions required:

- While the proposed revisions were generally agreed upon, CWP-AS recommended holding further technical consultation with experts and data users with regarding the revisions. In particular, the proposed restructuring of Division 9 (aquatic plants) need to be checked by experts, including aquaculturists as well as algae taxonomy experts. In this regard, opportunities presented by the EU meeting in October, as well as the Asia meetings, were identified.
- The fisheries subject group will also address this point and provide inputs regarding the requested revisions from the aquaculture subject group. These inputs are intended for the intersessional meeting.
- As the custodian of the ISCAAP and ASFIS classifications, FAO will take the lead on this discussion and invite the active participation and involvement of other CWP Members.

## **THE AQUACULTURE SECTION IN THE REVISED HANDBOOK: CONTENT AGREEMENT AND FURTHER DIRECTIONS FOR THE WORK, INCLUDING CONSIDERATION OF THE SOCIO-ECONOMIC SECTION**

### **(Agenda point 7)**

56. The CWP-AS members discussed the draft of the aquaculture statistics handbook and generally agreed that the content of the current draft, at 9 chapters long, is overly broad, resulting in a lack of clear focus on aquaculture statistics (meeting document, [CWP-IS/2017/5](#)).

57. Some subjects are closely related to aquaculture production, but less relevant or irrelevant to aquaculture statistics, and content of this kind needs to be removed. As such, the CWP-AS unanimously agreed that the intensity of aquaculture production operations needed to be excluded because of the lack of a widely accepted definition of the three categories of intensity – namely, extensive, semi-intensive and intensive farming systems – as well as not being relevant for the production statistics.

58. A revised version of the handbook has been put forward with a new, six-chapter structure. The socio-economic data on aquaculture, particularly employment, should be dealt with in the socio-economic section, and the aquaculture handbook should maintain a cross-referenced link to this section.

59. Group agreements and actions required:

- Develop the proposal further during the intersession, moving towards an advanced draft for presentation at CWP26.
- Eurostat will take the lead and ensure progress, including through video conferences, starting with the proposed structure.

## **FURTHER ELABORATION OF GIS DATA AND GEOSPATIAL PRESENTATION SECTION OF THE HANDBOOK**

### **(Agenda point 8.1)**

60. Mr Emmanuel Blondel presented the activities, progress and proposed recommendation proposals of the CWP ad hoc task group on GIS (meeting document [CWP-IS/2017/6](#) and presentation [CWP-IS/2017/Pr.7](#)).

61. Some background information was presented together with the main objective of designing GIS sections for a CWP handbook, and the three main areas covered by this work, namely: 1) spatial gridded systems for fishery data reporting; 2) strengthening promotion and implementation of geographic information standards and best practices; and 3) establish a list of GIS datasets and layers relevant to fishery.

62. The outputs of a GIS data survey performed among CWP members were presented in order to infer tentative recommendation for the three working areas. These proposed recommendations included key definitions, the adoption of standards and guidelines, and suggestions on how to design a GIS section for the CWP handbook and feed in a CWP glossary of basic definitions.

63. For gridded systems, the presentation highlighted the limited implementation of the currently adopted CWP areal grid system, and suggested encouraging its adoption by RFMOs where possible. To strengthen the promotion and implementation of geographic information standards, the suggested recommendation was to adopt internationally recognized, well-established and widely used standards such as ISO/TC211 and OGC progressively, particularly with regard to formats and data access & discovery services in support of fishery data harmonization and interoperability.

64. Finally, it was suggested that a catalogue of geo-referenced data be developed, with a primary focus on geographic reference datasets based on the abovementioned standards, as well as to strengthen collaboration between CWP and the Research Data Alliance (RDA) Fishery Data Interoperability (FDI) working group. A tentative structure of the GIS section for the CWP handbook was presented.

65. The group discussed the relevance of including the “projection coordinate system” and the description of hexagonal cells as an existing grid type

66. Group agreements and actions required:

- The group recommended that GIS catalogues should not be included in the handbook but rather be available from a dedicated ‘best practices’ area of the CWP webpage.
- Notwithstanding the above, and considering that the CWP handbook includes references to ‘Classifications and Metadata standards’, further discussions will be required to agree on how to refer to Metadata standards for data exchange (OGC and ISO) in the CWP handbook.
- The group noted that so far the work has focused on the tuna RFMOs. Therefore, there is a need for more feedback from other international organizations to broaden the scope of the work done to date. ICES and GFCM, the latter already involved, agreed to provide additional feedback to the task group. Other CWP Members are also encouraged to join the task group.
- The group has agreed to allow one month for the gathering of feedback so that the task group can then develop the remaining work during the second part of the intersessional period, and base these developments on a broader set of feedback and interactions with CWP members.

## **THE STATUS OF THE REVISION OF THE INTERNATIONAL STANDARD STATISTICAL CLASSIFICATION OF FISHING VESSELS (ISSCFV)**

### **(Agenda point 9)**

67. The presentation on the revised ISSCFV by vessel types (2005) delivered by Ms Jennifer Gee (meeting document [CWP-IS/2017/7](#)) summarised the history of the revision process and the endorsement of the revised classification by CWP-21 in 2005. Following on from this, the subsequent proposed steps from CWP-21 were: the release of the new classification in the “CWP handbook of fishery statistical standards” and a parallel revision and reprint of the FAO Fisheries Technical Paper 267 "Definition and Classification of fishery vessel types".

68. Currently, the latter two steps have not been implemented; during the 24th CWP Session it was suggested that the revised ISSCFV vessel type list undergo further refinement. A summary of how the revised ISSCFV by vessel types are currently used was provided, based on the experience of various FAO projects and databases. The CWP was informed of the use of the ISSCFV by vessel types (1984) in the Global Record database, the Fishing Vessel Finder and the High Seas Vessels Authorization Record, in addition to the development of worldwide standards for national-level, semantic identifier development work. Opinions and examples of usage were requested from CWP members, and the possibility of a group survey, to be conducted in the next intersessional period, was mentioned.

69. Eurostat had requested feedback on several points:

- Requests for additional codes to be added, in the event of a revision: 1) that a code for “bait boat” be developed in addition to LP; 2) allow for the differentiation of Purse Seiners; and 3) Include a category for auxiliary support vessels.
- The need for a vessel category for trap setters.

### **Feedback**

70. CWP participants remarked that other CWP members use the current code list for external reporting, but then have more detailed and organization-specific codes mapped with the ISSCFV for their regional use. Trap setters are already included (as 06.0.0 TRAP SETTERS WO) with further distinction between pots and traps available under the full ISSCFV by vessel type classification.

71. CWP members were also invited to provide feedback to the Pew/IHS Markit group on their work developing an expanded listing for vessel types. The general comment provided was that fishing technique, target species and vessel type should not be mixed. Further comment was reserved for the time being.

72. The final point raised was whether to propose a further revision of the ISSCFV by vessel types, or to simply proceed with the last two final steps proposed in the CWP-21 document, i.e. 1) the release of the new classification in the “CWP Handbook of fishery statistical standards”, and 2) a parallel revision and reprint of the FAO Fisheries Technical Paper 267 "Definition and Classification of fishery vessel types". Progress on the website update would facilitate these updates.

73. Group agreements and actions required:

- A mapping table comparing the 1984 and the 2005 versions of the ISSCFV by Vessel Types full code listings will be circulated. Feedback from CWP members will be requested via email.
- The group agreed that the 2005 classification be published as soon as possible following consultation with the Members if no major problems were highlighted. In the event that major problems arise, the 2005 revision can be brought forward to the session by a single member, and further discussed.

## **FOOD FOR THOUGHT: GLOBAL AND REGIONAL FISHERIES' NOMINAL CATCH STATISTICS AND THEIR USE IN SUPPORT OF SDG 14**

### **(Agenda point 10)**

74. The presentation on capture statistics and their use in support of SDG 14 was presented by Ms Cristina Ribeiro (presentation at [CWP-IS/2017/8](#)). The presentation was intended to raise awareness and enable a discussion on the relevance of the capture statistics in light of the most important drivers to the FAO global capture statistics, which may justify the need to revisit and potentially rethink how the overall framework of capture statistics is being dealt with globally and regionally. These main drivers are:

- The 2015 Agenda on the Sustainable Development Goals (SDG), and in particular Goal 14. SDG 14 goes beyond conservation to focus on the people and coastal communities, providing a particular focus on small-scale fisheries, and the fisheries and populations reliant on this subsector. This goal makes achieving food security and ending malnutrition a global priority;
- The role of FAO as a Custodian UN agency of four out of ten of the SDG 14 indicators;
- As a custodian FAO has also to facilitate the process, provide technical support, and build capacity (e.g. by supporting the required statistics which help the country in progress towards the target). Regarding the issue of ensuring that national data are comparable and aggregated at the subregional, regional and global levels, we need to understand that this directly concerns the indicators and how they are compiled.
- The implementation of a Quality Assurance framework (QAF) for the FAO statistics. In the FAO QAF quality is defined as the degree to which statistical outputs fulfil requirements; but the statistics also adhere to the following quality dimensions: relevance; accuracy and reliability; timeliness and punctuality; coherence; accessibility and clarity.

### **Feedback**

75. FAO indicated that it is important to demonstrate to the global community that fishery statistics datasets produced by international organizations aim for the highest quality. This is where initiatives such as adopting a Quality Assurance framework and publishing quality scoring levels would be relevant to CWP agencies. Moreover, reducing discrepancies and aiming for consistency among published global and regional datasets will benefit from collaboration between CWP agencies for streamlining data workflow. The present meeting's action point to elaborate best practices on streamlining statistical data workflow will be instrumental to achieving these objectives.

76. Furthermore, CWP's work on Reference harmonization will contribute to such streamlining by promoting the use of international classifications, improving mapping capacities, and making explicit to all users the mapping rules which apply among classifications used in different datasets.

77. Regarding small-scale fisheries, a number of RFBs do collect statistics distinguishing small-scale from large-scale fisheries. All of the following will contribute to SDG effort here: efforts on streamlining data workflow, further development of definitions on fishers, employment categories and inclusion of gender, guidelines for collecting statistics on engagement or participation of people through agriculture or population census, and finally an effort to define what subsistence, small-scale commercial and large-scale fisheries and aquaculture are at the global level.

78. The inclusion of recreational vessels could be considered as part of ISSCFV. Finally, while CWP should strongly encourage RFBs who have not yet done so to revise their statistical geographic divisions to enable distinguishing catch within and outside EEZs, new methodologies based on vessels' transmitted data (VMS, AIS) raise the credible prospect of estimating the geographic distribution of fishing effort and catch statistics.

## 79. Group agreements and actions required:

- The group agreed that the STATLANT data collection could benefit from a review to determine the extent to which capture statistics, as globally collected, respond to the current societal needs. The group also noted that no formal plan for the periodical revision of the CWP-endorsed questionnaires is in place.
- To support possible future discussion, the secretariat will circulate a template to gather inputs from the agencies. The results of this questionnaire should be presented at the intersessional meeting that precedes the 26th CWP session.
- This subject should be further discussed at the next CWP intersessional meeting.

**REVISION OF THE INTERNATIONAL STANDARD STATISTICAL CLASSIFICATION OF FISHING GEARS (ISSCFG)**  
(Agenda point 11.1)

80. The 2010 revision of the ISSCFG – ISSCFG Rev.1 – was endorsed by the CWP in writing in 2016, following the 25th Session of the CWP. Members have been informed of the revision to the fishing gear section of the CWP Handbook. In order to address this revision ICES agreed to raise the matter of support being offered to FAO for the work of updating the relevant section of the handbook. Additionally, the group was informed of the work FAO is developing to update the fishing gears manual so as to reflect the revised classification.

81. Finally, and in response to the questions put to the group by Eurostat, the group has agreed to include a reference regarding the deletion of the following codes in an appendix to the handbook: HMX – Harvesting machines (not specified), and RG - RECREATIONAL FISHING GEAR. This is in order to avoid any uncertainty around the changes implemented between versions. It should be noted that recreational gears were a reflection of fishing practice, not a gear type, and this was the motivation for removing this particular classification.

82. Furthermore, to ensure a wide implementation of the endorsed ISSCFG Rev. 1 the Secretariat has requested that CWP members support the dissemination of the revised classification. FAO, in its role as the CWP Secretariat, will also take actions to promote the revised classification.

**PROPOSED STANDARDS FOR UNIQUE IDENTIFIERS OF STOCKS AND FISHERIES (GLOBAL RECORD OF STOCKS AND FISHERIES, BLUEBRIDGE PROJECT)**  
(Agenda point 11.2)

83. Mr Aureliano Gentile delivered a presentation on the Global Record of Stocks and Fisheries (GRSF) (presentation at [CWP-IS/2017/Pr.4](#)). The GRSF activity is a part of the BlueBRIDGE project funded under the EU Horizon 2020 Programme.

84. The GRSF aims to provide an innovative environment supporting the collaborative production and maintenance of a comprehensive and transparent inventory of stocks and fisheries records. This work will boost regional and global stocks, fisheries status and trend monitoring, as well as supporting responsible consumer practices. A global record of stocks and fisheries does not yet exist and the current effort aims to create a critical mass of information with widespread coverage from three major sources; this should position it as a key instrument of global fish stocks status, monitoring and traceability. The three database sources used are: Fisheries and Resource Monitoring System (FIRMS), the RAM Legacy Stock Assessment Database and FishSource.

85. The main technical challenge in the setting up of the GRSF is the harmonization of the different existing standards (international, regional and national) from different data sources, with the aim to build unique identifiers for stocks and fisheries. To address this, the presentation focused on a proposed

global standard for Unique Identifiers of stocks and fisheries, which was developed to distinguish/aggregate stocks and fisheries records extracted from the three source databases. Two type of identifiers were conceived: the Universally Unique Identifier (UUID), a machine-readable code for the unique identification of GRSF records; and the GRSF Semantic Identifier, a human-readable code and label for the GRSF records metadata. A GRSF “Short Title” with specific naming conventions further describes the stocks and fisheries.

86. The UUID aims to respond to the required global IT standards: it is made of two URL components, the resolver, and the UUID *per se*. The Semantic Identifier is made of codes and labels designed to uniquely identify stocks and fisheries through specific information, as components of such types of identifiers. <Species> + <Assessment Area(s)> are the two key pieces of information needed to identify a stock; for fishery the following information is required: <Species> + <Fishing Area(s)> + <Jurisdiction area(s)> + <Management Entity(ies)> + <Geartype> + <Flag State>.

87. Unique stocks or fisheries are therefore validated against the above fields. It should be noted that fishery records are identified from the point of view of fishing activity (1 species, 1 gear, 1 flag state). In terms of geographical information, this could raise some issues, in the event of inadequate geospatial codes which are unable to identify the proper assessment/fishing areas as a result of a lack of proper granularity.

88. Each field is based on global standards (e.g. ASFIS, WoRMS, ISSCFG, ISO3 country), but “local” standards can be adopted if they are maintained. Full details on standards can be found in Annex 3, of the “Recommendations by the EAB TWG2 on GRSF”.<sup>8</sup>

## Feedback

89. The group noted the proposed global standard for Unique Identifiers of stocks and fisheries, and supported the use of the existing CWP definitions and standards in the project. No requests were made by this project to revise any CWP definitions or standards.

## REGIONAL LOGBOOK STANDARDS (Agenda point 12.3)

90. The Western Central Atlantic Fisheries Commission (WECAFC) Modular Approach to Logbook was presented by Mrs Nancie Cummings (NOAA) and Mr Yann Laurent (FAO) (presentation at [CWP-IS/2017/Pr.3](#)).

91. This approach was developed to address the WECAFC Member Countries’ need to implement paper logbook or reporting systems when this provision featured in regulation or in Fisheries Management Plans (FMP). This approach aims to provide guidelines to create a logbook depending on its target (fisheries monitoring, collection of data for stock assessment, FAD, etc.). The role of logbooks in Monitoring, Control and Surveillance (MCS) was not considered in this first version.

92. The development of the modular approach included the review of: FMPs for Conch, lobster and flying fish; existing national logbooks in the region; regional logbooks for FAD, ICCAT recommendations, as well as material from outside the region (West Africa log sheet, IOTC recommendations and Contracting Parties’ logbooks, etc.).

93. Common patterns were identified across these different reporting systems, commonalities for all logbooks and for logbook for the same type of fisheries (longlines, purse seiners etc.) and specific information for other types of fisheries (recreational fisheries). A gradation in the complexity (from

<sup>8</sup> Available at [http://www.fao.org/fi/static-media/MeetingDocuments/BlueBRIDGE/EAB-TWG2-GRSF/EAB-TWG2-GRSF\\_REPORT.pdf](http://www.fao.org/fi/static-media/MeetingDocuments/BlueBRIDGE/EAB-TWG2-GRSF/EAB-TWG2-GRSF_REPORT.pdf)



summary to detailed and very detailed information) was identified and reflected in the proposed guidelines.

94. The result was a three-tier modular approach starting with a core module containing the mandatory elements common to all logbooks: administrative information, vessel information, trip description (trip general information, gear description with summary of effort, summary of catches). 'No activity' information is also collected at that level in order to refine effort.

95. A second module captures daily information on catch and effort. It enables the collection of detailed information depending on the type of fisheries and the target of the logbook: catch and effort modules are suggested either to collect daily summary information (typically for artisanal fleet) or detailed daily information (catch/discard and effort per set, the module on effort varying from one type of gear to another). Specific modules are defined to collect information on FAD use or recreational fisheries.

96. A third tier proposes modules to collect biological data: length distribution and bycatch. Discussions are underway on whether or not length distribution should be part of a logbook module (typically this information is collected by observers).

97. Additional modules could be developed to collect socio-economic data. Some examples of proposed implementation per type of fisheries in the region were then presented and discussed. This activity is an ongoing process and detailed guidelines will be built for each module with contributions from experts in the region.

## **Feedback**

98. SEAFO and CCAMLR referred to their joint effort to develop logbook standards for deep sea fisheries, with a quality assurance part of data workflow, and offered to review the ongoing WECAFC work. This was welcomed by WECAFC. These organizations reiterated their expectation that CWP will work towards a global standard for logbooks.

99. With respect to whether the logbook was considering fishers without vessels, WECAFC responded that the present work had not considered this.

100. It was concluded that this work can serve as a useful reference for the Reference harmonization group.

101. Group agreements and actions required:

- Progress on regional logbook standards will be reported to the next CWP-IS meeting and CWP26 could consider developing a global-standard-based modular approach to building logbooks.

## **LIAISON WITH GLOBAL RECORD AND HOW THEIR WORK ON DEVELOPING POLICIES AND STANDARDS DEVELOPS AND MATURES. STATUS OF UN-CEFACT STANDARD ADOPTION. UPDATE REGARDING DEVELOPMENT OF STANDARDS ON THE GLOBAL RECORD OF FISHING VESSELS (Agenda point 11.4)**

102. Ms Alicia Mosteiro delivered a presentation on the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record) (Presentation at [CWP-IS/2017/Pr.1](#)). The Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record) is a tool specifically built to fight illegal, unreported and unregulated (IUU) fishing through increased transparency and traceability of vessels and vessel-related information. The

Global Record development was requested by the FAO Committee on Fisheries,<sup>9</sup> which has voiced strong support for its continued development, recognizing that it could play an important role as a tool in combatting IUU fishing and supporting the implementation of the Port State Measures Agreement (PSMA), as well as other related international instruments.

103. The Global Record is therefore not a statistical tool but an operational tool; as such, it has adopted the data requirements and standards in use for other international instruments to fight IUU fishing – such as the ISO-3166 3-alpha Country Code for countries/territories, the ASFIS 3-alpha code for species, the ISSCFV code (1984 version) for vessel types and the ISSCFG code for gear types – that are required under ANNEX D of the PSMA, the list of serious violations from the UN Fish Stocks Agreements, and others.

104. The Global Record Informal Open-Ended Technical and Advisory Working Group (Global Record Working Group) is guided by FAO Members and Observers, and experts in each relevant field to pursue the development and implementation of the Global Record. The next meeting is scheduled for 26–28 June 2017.

105. The Global Record has recently launched its first working version, accessible for the uploading of data only to FAO Members. As a result, it is currently not in a position to provide feedback with regards to user needs with reference to vessel types. However, it is important to highlight that although the ISSCFV code list is the reference for vessel types, the Global Record deals with three major (supra) categories of vessels: fishing vessels, refrigerated transport vessels and supply vessels. The 1984 classification did not offer clear and defined options for the transport and supply categories, and a revision considering these could be beneficial.

### **Feedback**

106. The CWP acting Secretary reported to the group that, as per decisions taken at CWP25, he had presented the collaboration opportunities with CWP to the March 2016 GR OpenEnded working group, whereby Metadata standards endorsed by thematic groups such as GR could, following review by CWP, be referred to on the CWP website as, “Metadata standards relevant to global fisheries and aquaculture”. This was welcomed by the GR participants considering that with the adoption by the GR-WG of UN-CEFACT for Vessels as a metadata standard for data exchange, this data domain has now reached a mature level of metadata standardization at the global level.

107. Another potentially relevant issue for the CWP that emerged from the Global Record presentation and discussion, is the lack of an international classification for the Fishing Vessel Hull Material. The EU classification is currently being used to fill the gap of an international standard classification. This classification could be brought to CWP.

### **THE FAO RDA (RESEARCH DATA ALLIANCE) WORKING GROUP AS PART OF THE BLUEBRIDGE PROJECT ACTIVITIES (Agenda point 11.5)**

108. Mr Anton Ellenbroek introduced the progress made on the Research Data Alliance (RDA) since CWP25 (presentation at [CWP-IS/2017/Pr.2](#)). RDA builds social and technical bridges that enable the open sharing of data. It promotes data sharing across barriers through focused Working Groups and Interest Groups. Participation in the RDA is open to anyone; it has over 5 700 members from 128 countries (June 2017). It was launched in 2013 by the European Commission, the United States National Science Foundation and National Institute of Standards and Technology, and the Australian Government’s Department of Innovation. FAO and IRD lead the Fisheries Data Interoperability WG (RDA-FDI WG), which will submit recommendations and proposals to further improve interoperability

<sup>9</sup> Available at [www.fao.org/3/a-mr484e.pdf](http://www.fao.org/3/a-mr484e.pdf)

by March 2018, in line with CWP and FIRMS activities. The alliance has two objectives: the first is to foster better interoperability of statistical data; the second to better represent fisheries data in geospatial data formats. This will improve the discovery, access and analysis of fisheries data based on open data services.

## **Feedback**

109. The CWP acting Secretary highlighted the difference between CWP and the RDA: while CWP focuses on conceptual aspects of fishery and aquaculture statistical standards, the RDA focusses on the operationalization of metadata standards – specifically, it addresses how to make these interoperable, with potential feedback on the setup of the metadata standards concerned.

110. IATTC suggested that CWP could use the opportunity of this exercise to evaluate the reporting requirements from CWP members and affiliated projects, with the aim of harmonizing standard reporting requirements.

111. Group agreements and needed actions:

- the RDA-FDI WG should continue to raise the visibility of CWP.
- CWP members are invited to participate in this RDA-FDI working group with the aim of harmonizing reporting requirements and interoperability among agencies and data domains.

## **ANY OTHER BUSINESS (Agenda point 13)**

112. Acknowledging the many items covered and the insufficient time to handle the core objectives of this CWP intersession in the required detail, the CWP Secretariat asked for feedback on the format of this CWP-IS meeting.

113. ICES expressed the opinion that the number of topics and presentations for the fisheries group at the intersessional meetings could be reduced so as to concentrate more effectively on the work of the task groups instituted. Eurostat expressed satisfaction at the way fewer topics were handled in the aquaculture group. SEAFO noted the positive fact of improved attendance, in terms of the number of participants, active contributions and the many topics bringing an improved set of global perspectives to the group. IATTC supported this point, while cautioning that the diversity of topics may actually be what is driving the increased engagement. Eurostat further supported the sentiments around wide and active participation.

114. GFCM put forward a positive statement for ongoing engagement with the group and for the opportunity this provides to act as a bridge and raise issues around standards with their member countries.

115. The group agreed that more active engagement in the task groups during inter-sessional periods may help relieve the pressure of limited time during the IS face-to-face meetings. The group was reminded of the opportunity to improve work efficiency by conducting e-meetings as required.

116. The group was reminded that comments and feedback can be directed to the specific aquaculture or fisheries chairs, or to specific authors, copying the CWP Secretariat in to correspondence.

117. Group agreements and actions required:

- Use a doodle poll to identify suitable dates and a venue for the next session of CWP, noting that CWP25 requested that subject groups be held back-to-back in order to facilitate the discussion of issues of common interest to both groups.

- Eurostat and NACA might be able to host the next meeting at their premises, subject to approval from headquarters, i.e. either in Europe/Luxembourg or in Asia/China. These two possibilities will be included in the poll to be circulated so as to identify preferred dates and potential venues.

#### **DRAFT AND REPORT ADOPTION (Agenda point 14)**

118. A draft report was circulated to participants early on Thursday morning prior to the report being adopted.

119. The group had sufficient time during the joint session on Thursday morning to discuss and adopt the draft report up to agenda point 10 (inclusive). The group agreed to adopt the remainder of the document by email, with feedback expected up to two weeks after the closure of the meeting. The possibility of holding videoconference calls to discuss particular issues related to report finalization has been agreed with the Secretariat. If needed, these calls should happen during the first quarter of July, so as to allow for the report to be finalised before the end of July.

#### **CLOSURE OF THE MEETING (Agenda point 15)**

120. The meeting concluded on Thursday 22 June 2017 at 11.00 hours.

121. The report was finalized after written feedback received from members during the period from 25 June to 6 August, and finally endorsed by email on 21 August 2017.

## Agenda

### **Joint CWP-FS and CWP-AQ Session (19 June 09:00 – 19 June 15:45)**

1. Opening of the meeting
2. Adoption of the Agenda (**CWP-IS/2017/A**)
3. Review of progress on the intersessional work plan agreed at the CWP-25
  - 3.1. Dissemination of the revised handbook on the CWP web page. (**CWP-IS/2017/Inf.1**)
  - 3.2. Further enhancement of the socio-economic section of the handbook (**CWP-IS/2017/1**)
  - 3.3. CWP ad hoc task group on “Reference harmonization for capture fisheries and aquaculture statistics”
4. Progress report on further streamlining of national statistics reporting and review of activities by participating organizations since CWP 25th Session
5. The Reference harmonization group: guidance for forthcoming intersessional work. (**CWP-IS/2017/2 and CWP-IS/2017/Pr.6**).

### **Aquaculture Group Meeting (19 June 15:45 – 21 June 10:45)**

6. Review of progress of CWP-AS activities since CWP-25, namely:
  - 6.1. Progress from the task force establishing the standard aquaculture questionnaires (**CWP-IS/2017/3**)
  - 6.2. Review progress from the task group for reviewing and developing a proposed revision of the ISSCAAP groupings. (**CWP-IS/2017/4**)
7. The aquaculture section in the revised handbook: content agreement and further directions for the work, including consideration of the socio-economic section (if needed). (**CWP-IS/2017/5 and CWP-IS/2017/Pr.5**)

### **Fishery Group Meeting (19 June 15:45 – 21 June 10:45)**

8. Review of progress of CWP-FS activities CWP-25, namely:
  - 8.1. Further elaboration of GIS data and geospatial presentation section of the handbook. (**CWP-IS/2017/6 and CWP-IS/2017/Pr.7**)
9. The status of the revision of the International Standard Statistical Classification of Fishing Vessels (ISSCFV). (**CWP-IS/2017/7**)
10. Food for thought: Global and regional fisheries’ nominal catch statistics and their use in support of SDG14. (**CWP-IS/2017/8**)
11. For information:
  - 11.1. Revision of the International Standard Statistical Classification of Fishing Gears (ISSCFG).
  - 11.2. Proposed standards for unique identifiers of stocks and fisheries (Global Record of Stocks and Fisheries, BlueBRIDGE project). (**CWP-IS/2017/Pr.4**)
  - 11.3. Regional logbook standards. (**CWP-IS/2017/Pr.3**)
  - 11.4. Liaison with Global Record and how their work on developing policies and standards develops and matures. Status of UN-CEFACT standard adoption. Update regarding development of standards on the Global Record of fishing vessels. (**CWP-IS/2017/Pr.1**)
  - 11.5. The FAO RDA (Research Data Alliance) working group as part of the BlueBRIDGE project activities. (**CWP-IS/2017/Pr.2**)

**Joint CWP-FS and CWP-AQ Session (21 June 11:15–13:00)**

12. Consolidation of the Subject Group Discussions
13. Any other business

**Joint CWP-FS and CWP-AQ Session (22 June 9:00–10:45)**

14. Draft and Report adoption
15. Close of the meeting

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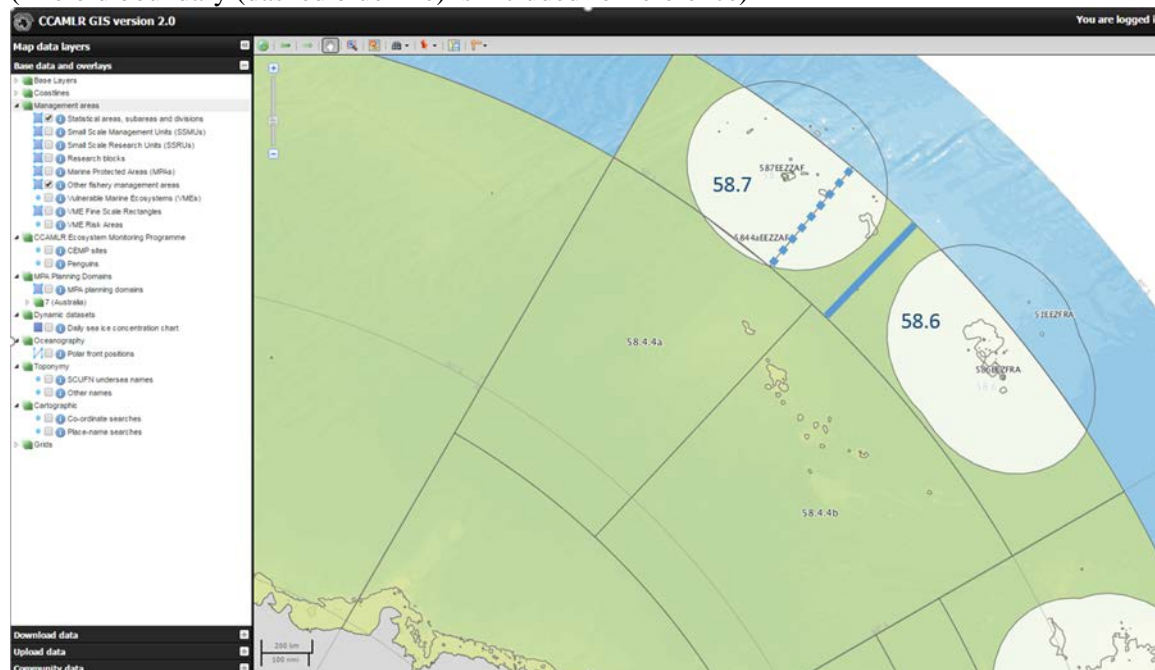
### CCAMLR revision of the boundary between Subareas 58.6 and 58.7 (Indian Ocean)

CCAMLR has revised the boundary between Subareas 58.6 and 58.7 (Indian Ocean) so that the boundary between the French and South African EEZs is in the high seas at 44°E longitude (CCAMLR-XXXV, paragraph 12.4; see also Figure1). The revised subarea boundaries are as follows:

- 58.6: the waters bounded by a line commencing at 45°S 44°E; thence due east to 60°E longitude; thence due south to 50°S latitude; thence due west to 44°E longitude; thence due north to the starting point;
- 58.7: the waters bounded by a line commencing at 45°S 30°E; thence due east to 44°E longitude; thence due south to 50°S latitude; thence due west to 30°E longitude; thence due north to the starting point.

The revised boundaries were agreed in October 2016 and have been applied retrospectively to the entire time series of STATLANT data and trade statistics published in the CCAMLR Statistical Bulletin. The shapefile and metadata is available from the CCAMLR GIS <https://gis.ccamlr.org/home>

**Figure 1: Revised boundary between Subareas 58.6 and 58.7 (solid blue line at 44°E). (The old boundary (dashed blue line) is included for reference)**



Source: CCAMLR GIS <https://gis.ccamlr.org/home>

**The standard aquaculture questionnaire – discussion result**  
**[Author: CWP Aquaculture Subject Group (CWP-AS)]**

## **Background**

In 2013 a Task Force was established to create a Zero Standard Aquaculture Questionnaire under the CWP Aquaculture Subject Group. The primary objective of this questionnaire was the harmonized collection of aquaculture production data between different regions and organisations.

- to enable global comparability of aquaculture statistics,
- to collect meaningful data without duplication and unnecessary burden of work,
- to support new aquaculture data collections in their endeavour to produce useful, high quality statistics.

Over the following three years, the Task Force compared aquaculture questionnaires from FAO, GFCM and Eurostat, and developed a draft zero standard aquaculture questionnaire with minimum data reporting requirements based on current practices and the experience of the participating institutions. The Zero Standard Aquaculture Questionnaire was then presented to the CWP at CWP-25 in February 2016 in Rome. However, some concepts and definitions needed further discussion and refinement, which was provided by the CWP Aquaculture Group during the intersessional meeting in Copenhagen, Denmark on 20 June 2017. Consequently, the concepts and definitions provided below are suggestions for inclusion in the revised CWP Handbook on Aquaculture Statistics.

Guidelines to the Zero Standard Aquaculture Questionnaire:

**(1) The Zero Standard Aquaculture Questionnaire provides for the collection of four core datasets:**

- A1 – Off-farm aquaculture production (quantity and unit price)
- A2 – Input of seeds (quantity and unit price)
- A3 – Artificial seed production (quantity and unit price)
- A4 - Size of aquaculture facilities (surface area and optionally water volume).

An additional dataset was deemed useful:

- A5 – Employment (number)

**(2) Definitions/ classification provided by the CWP Aquaculture Group on 20 June 2017**

(a) The questionnaires refer to the production of all aquatic organisms farmed and harvested regardless of their final use, including: fin fish, crustaceans, molluscs, amphibians, aquatic reptiles, other aquatic vertebrates and invertebrates, macroalgae (seaweeds), microalgae and cyanobacteria, aquatic macrophytes (incl. aquatic ferns for ornamental use, and seagrasses). Materials produced by, and used within, the aquaculture production sector such as life larval food, are excluded.

Currently, statistics on aquaculture production – whether based on the final output of the cultivation system or on production from hatcheries and nurseries – should be measured by the production volumes at first sale at farm gate, as a proxy of real production volumes. This means that data on unsold production, e.g. damage and losses, production for own consumption (subsistence farming) or the production of artificial seed for further on-growing by the same facility, are not accounted for. Adult fish being traded between several on-growing companies are only counted when first sold for final use.

If the first sale entails a product processed by the farm processor or catered by a farm caterer, the original off-farm weight and price should be estimated. However, if it becomes feasible to collect real production data without unduly increasing the cost and burden of the data collection, this definition may be revised.

(b) Final use (optional information):

- Food use (human consumption)
- Non-food uses:
  - live ornamental aquatic animals and aquatic plants
  - commodities (e.g. skins, pearls, sponges)
  - live species with functional uses within aquaculture (e.g. parasite control, control of overpopulation or self-reproduction of cultured species)
  - release into the wild (restocking, ranching, stock enhancement)
  - raw materials for industrial uses, animal feed, and others
  - bait, live or dead, for fishing
  - pharmaceutical/ medical uses (e.g. leech)
  - other.
- Unknown

(c) Life stages for seed production (hatchery production):

- fertilised eggs
- hatchlings or post-larvae
- fingerlings (for fin fish)
- yearlings (including +0, +1, +2, +3 year-olds)
- brooders/spawners for natural or artificial propagation for a hatchery operation
- seedlings (for aquatic plants).

(d) Source of seed for aquaculture production:

- Artificially-produced seed
  - Complete domestic source (hatchery and nursery located within the country);
  - Partial domestic source (using brooders, fertilized eggs, hatchlings or juveniles imported from the foreign hatchery/nursery for larval rearing or for nursing within the country for use as seeds for aquaculture).
- Wild seed
  - wild seed through capture fishery within the country's waters;
  - wild seed imported from foreign countries of capture fishery origin.

(e) Farming systems/culture methods: as defined in the CWP Handbook on Aquaculture Statistics.

**(3) The final use of the production** should refer to either human food consumption or non-food use. Further breakdown of non-food uses, such as live ornamental, functional (e.g. cleaners, police fish, leech), industrial, feed, and others is optional supplementary data. When one species has multiple final uses, the quantity for human food consumption and the quantity for non-food use should be recorded separately. When the production includes commodities with relatively minor live-weight equivalents but high commercial value, e.g. fish roes or caviar and pearls, it is recommended that the production of such commodities be recorded separately.

**(4) Size of active aquaculture facilities during a reference period:** a production unit is considered "active" if stocked with a target species anytime during the reference year.

**(5) Reference period: all measures** should be referred to events occurred during a given calendar year.

**(6) Measurement unit:** aquaculture production volume is expressed in tonnes live weight [TLW]. This weight includes all shells and bones. When utilizing the number of individuals as the original unit of measurement, the average weight shall be estimated. It is imperative to indicate the unit of measurement. Data for the economic value of the production are reported as unit price (in national currency) per tonne [NAC\_T]. The production of artificial seed is reported in numbers of seeds, as is the input of seeds. The size of facilities refers to a surface area covered by aquaculture production units and is measured in hectares; the water volume in cubic metres may also be indicated. Employment data are to be given in numbers.

The organisations participating in the CWP Aquaculture Group at the Intersessional meeting in Copenhagen on 20 June 2017 were: Eurostat, FAO, OECD, NACA, SEAFDEC.

## APPENDIX 5

### Reference harmonization for capture fisheries and aquaculture statistics: Direction provided by the CWP-IS to the ad hoc task group

This appendix provides details of the feedback and discussion of the ad hoc task group on reference harmonization for capture fisheries and aquaculture statistics. The comments and recommendations presented would facilitate the keeping track of the evolution and further elaboration of the draft proposal of the global Standard for Data Structure Definition and the related aspects of its implementation.

#### Concepts and terminology

- There was general support from participants for the ongoing work on reference harmonization. It was suggested that the proposed high-level 'data domain' structure of the global DSD was not appropriate, and that the reporting schemes/requirements commonly encountered in fisheries and aquaculture should be used as structuring components of the Global DSD instead; the question remained: What is the common structure of datasets for each of these main reporting formats? What is the core?
- Catch as a 'generic' reference data will refer to the catch concept defined in the CWP handbook, including the list of sub-concepts such as landings, nominal catch, discard, retained catch; these details will be dealt with at the end-user level.
- A large amount of the terminology used in the proposal is compliant with SDMX, but it was noted that the document is not fully aligned with what SDMX does, and that SDMX definitions (an ISO standard) should be used as much as possible and where applicable.

#### Data structure

- Flexibility should be addressed and the Global SDSD should accommodate all possible forms of reporting schemes – such as Global fishery statistics, logbook, Port Inspection, VMS, on-board Scientific Observers, reporting on stocks state and trends. It should accommodate both reporting and dissemination. It should avoid being too prescriptive, cater for flexibility and be accompanied by guidelines for extension. End users should be able to derive their specific DSDs from the core, minimum data requirements structure.
- The observed or measured variables such as Catch or Effort should be considered building blocks among the other reference data. At the higher level, the global SDSD will be structured with minimal requirements for temporal geo-reference, observation/measure, and other dimensions. Sub-concepts hosting more specific classifications can then be derived from these, e.g. Country, Flag State, Fishing area, Production area can be derived from geo-reference.
- The global SDSD will have to cater for concepts such as Fleet or Metier which mix two or three base concepts.
- Ports should be added as dimension to the list of reference data.
- A large amount of terminology used in the proposal is compliant with SDMX, but it was noted that the document is not fully aligned with what SDMX does, and that definitions of SDMX (an ISO standard) should be used as much as possible and where applicable.
- The concept of frequency is missing. There should be one time reference to the triplet Measure/Obs\_Status/Unit.
- The group advised that there should be no overlap with the existing global SDMX registry.
- The confidentiality flag should be added, and there may be a need for two flag values. A SDMX code list for the flags exists.

#### CWP registry

- FAO was mandated to move forward on the registry and repository.

- The CWP registry should be a ‘conceptual’ registry situated one layer above implementation formats for data exchange, and should therefore be kept distinct from implementation formats such as the SDMX registry, where the physical implementation of specific DSDs will be registered.
- This conceptual registry will primarily refer to the concepts described in the CWP handbook, and materialize them as Reference Data or ‘Building blocks’. The CWP registry will focus on enumerating these ‘building blocks’ and identifying, for each reporting scheme, which ones among them constitute the minimum requirements. The registry will link to codelists and mappings in the repository, and to DSD implementations (if any) in the SDMX registry.
- Participants expressed openness with respect to the two options of either a centralized or decentralized repository. It was generally understood that a centralized repository would meet the objectives of serving code list and code list mappings services more easily, and would obviously grant institutions with no capacity such services; should a decentralized option co-exist with the preceding, it could work on the condition that interoperable web-services can be easily implemented with the central one. As an example of decentralized implementation, a number of external code lists already available in the SDMX registry will be accessible through web services.

### **Governance and maintenance**

- Each organization will be responsible for their own DSD and implementation.
- At the implementation level, the regional variations in code lists will be dealt with through mappings.
- The DSD registry should be a CWP registry, with CWP providing maintenance and acting as controller. There would also be the need for a forum to which contributors could bring new code lists. In all cases, the data owners will maintain and update capacity online.

**CWP-IS Group Photograph**





**This document contains the report of the Fifth Meeting of the Aquaculture Subject Group and the Twenty-sixth meeting of the Fisheries Subject of CWP held during the Intersessional Aquaculture and Fisheries Subject Group meeting of the Coordinating Working Party on Fishery Statistics (CWP-IS) which took place in Copenhagen, Denmark, from 19 to 22 June 2017. The works were organized between joint sessions to address issues of general interest, and the Subject Groups – Aquaculture (CWP-AS) and Fisheries (CWP-FS), in concurrent sessions, to address matters related with the intersessional program for each Subject Group. The meeting reviewed the progress made since the Twenty-fifth session of the CWP and agreed on the actions for the second part of the intersessional period prior to the upcoming Twenty-sixth session of the CWP to be held prior to February 2019.**

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