Food and Agriculture Organization of the United Nations

FIAS/R1293 (En)

FAO
Fisheries and
Aquaculture Report

ISSN 2070-6987

Report of the

TWENTY-SIXTH SESSION OF THE COORDINATING WORKING PARTY ON FISHERY STATISTICS

Rome, 15–18 May 2019

Report of the

TWENTY-SIXTH SESSION OF THE COORDINATING WORKING PARTY ON FISHERY STATISTICS

Rome, 15−18 May 2019

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 2019

Required citation:
FAO. 2019. *Report of the Twenty-sixth Session of the Coordinating Working Party on Fishery Statistics, Rome, Italy, 15–18 May 2019.* FAO Fisheries and Aquaculture Report No. 1293. Rome.

ISBN 978-92-5-131886-7

PREPARATION OF THIS DOCUMENT

This document is the report of the twenty-sixth session of the Coordinating Working Party on Fishery Statistics (CWP), held in Rome, Italy, from 15 to18 May 2019.

ABSTRACT

This document contains the report of the twenty-sixth Session of the Coordinating Working party on Fisheries Statistics (CWP) and meetings of the Aquaculture Subject Group and Fishery Subject Group held in Rome, Italy, from 15-18 May 2019. The CWP provides a mechanism to coordinate the statistical programs conducted by intergovernmental organizations including regional fishery bodies with a remit for fishery statistics. Ten CWP Members, two observers' regional fishery bodies and three invited international and national organizations participated in the meetings.

The meeting considered best practices for streamlining data workflow among international and regional institutions in charge of statistical data collection. The Session reviewed and approved updated structure and sections of the CWP Handbook on statistics for aquaculture, capture fisheries, the socio-economic dimension, and a section on GIS, and it approved the extension of the CWP website to include Protocols and practices for data sharing. The Session reviewed progress in developing data structures under the CWP standard for reference harmonization for capture production and aquaculture production, which defines the structure of statistical concepts and the coding system to improve data exchange and reporting between national, regional and global organizations in an increasing digital context. The Session endorsed data structure for three domains: Capture production, Catch, Catch and Effort. The Session also discussed CWP membership and how to expand its geographical and domain coverage. In addition the Session discussed and then approved the proposed amendments to the CWP Rules of Procedure that will have then to be endorsed by also other CWP members in order to reach the two-thirds quorum.

The Session endorsed the International Standard Statistical Classification of Fishing Vessels (ISSCFV) and approved the International Standard Statistical Classification for Aquatic Animals and Plants (ISSCAAP) that will be refined. The Session also developed a classification for aquaculture farming systems.

For the next intersessional period 2019-2022, the CWP established five areas of work to be developed under Task Groups: best practices for streamlining statistical workflow with a focus on data confidentiality, fishing effort concepts, catch concepts, reference harmonization with focus on fishing activity, and updates to the aquaculture section of the Handbook. Furthermore, the Session elected two new Subject Group coordinators (from GFCM and IOTC), and the CWP Secretariat was handed over to the FAO Senior Fishery Officer in charge of fishery and aquaculture statistics.

CONTENTS

Preparation of the document iii
Abstract iii

Opening of the Session and welcome 1
Appointment of Meeting Chair 1
Adoption of the Agenda 1
Review of membership 1
Revision of the Rules of Procedure 2
Information items 2
Fishery subject group activities 3
Aquaculture subject group activities 5
Overarching matters and other joint activities 5
Other relevant issues and activities 7
Arrangement for CWP-27 session and intersessional meetings 7
Election of Chair and vice-Chair 7
CWP Secretariat 7
Adoption of report and close of Meeting 8

Appendixes

APPENDIX 1. List of participants 9
APPENDIX 2. Integrated Agenda of the 26th CWP Session 17–18 May 2019 15
APPENDIX 3. Proposal of amendment to the Rules of Procedure 19
APPENDIX 4. Report of the Joint Intersessional Meeting of the Aquaculture and Fishery Subject Groups 15–16 May 2019 22
APPENDIX 5. Report of the Intersessional Meeting of the Fishery Subject Group 30
APPENDIX 6. Report of the Intersessional Meeting of the Aquaculture Subject Group 41
APPENDIX 7. Report of the 2017 Intersessional Joint Meeting of the Aquaculture and Fishery Subject Groups 19–22 June 2017 51

OPENING OF THE SESSION AND WELCOME

(Agenda item 1)

1. The Twenty-Sixth Session of the Coordinating Working Party on Fishery Statistics (CWP-26) was held in Rome, Italy, on 17-18 May 2019 in conjunction with joint and separate meetings of the Aquaculture Subject Group (CWP-AS) and Fisheries Subject Group (CWP-FS). The list of participants is in Appendix 1 and the reports of the subject group meetings are in Appendixes 4–6.

2. Representatives from the following CWP member organizations participated in the meeting:
- Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)
- Food and Agriculture Organization of the United Nations (FAO)
- General Fisheries Commission for the Mediterranean (GFCM)
- Indian Ocean Tuna Commission (IOTC)
- International Council for the Exploration of the Sea (ICES)
- Northwest Atlantic Fisheries Organization (NAFO)
- Southeast Asia Fisheries Development Centre (SEAFDEC)
- Statistical Office of the European Communities (EUROSTAT)

3. Two other CWP members were not physically present at the session meeting (but attended the inter-sessional meetings) namely: International Commission for the Conservation of Atlantic Tunas (ICCAT) and North-East Atlantic Fisheries Commission (NEAFC). They gave their proxy for voting to IOTC and NAFO, where required for decision-making. Endorsements of CWP decisions were made by quorum (i.e. 10 votes). Two regional fisheries bodies attended as observers:
- South Pacific Regional Fisheries Management Organisation (SPRFMO)
- Western Central Atlantic Fishery Commission (WECAFC)

APPOINTMENT OF MEETING CHAIR

(Agenda item 2)

4. The CWP-FS coordinator, Ms Anna Osypchuk (ICES) was elected as the chairperson for CWP-26.

ADOPTION OF THE AGENDA

(Agenda item 3)

5. CWP-26 discussed the meeting agenda and agreed to bring forward the item on the revision of the Rules of Procedures and this would be considered in Agenda item 5. In addition, two information items, scheduled for the CWP-FS meeting (Agenda items FS.3.1 and FS.3.4) were moved to the Session Agenda items 6.1.1 and 6.1.2. With these changes, CWP-26 adopted the Agenda (Appendix 2).

REVIEW OF MEMBERSHIP

(Agenda item 4)

6. The CWP Acting Secretary, Mr Marc Taconet advised that there were currently 19 Members of the CWP, eight of which participating in CWP-26 plus two (ICCAT and NEAFC) through proxy votes. Seventeen Members were active during the inter-sessional period, while two Members (IWC and NASCO) have not been active in two or more consecutive meetings (refer to Rules of Procedure).

7. CWP-26 requested that the Secretariat refers IWC and NASCO to the CWP Rules of Procedure, seeking clarification on withdrawing their Membership status while encouraging active participation in CWP activities and meetings. The current situation can potentially impact on the CWP's decision-making process during meetings (see paragraph 3). If a quorum cannot be reached during a meeting, CWP Members may vote by correspondence, delaying decision-making by up to three months.

8. CWP-26 requested that the Secretariat extends an invitation to SPRFMO, present at the meeting as observer, to join the CWP, noting potential benefits of joining the membership as well as the observer's interest, valuable contribution and active participation in CWP-26 and the inter-sessional meetings.

9. CWP-26 considered other potential members and recognized that the following organizations, including inland fishery regional bodies, would contribute to expanding the geographic coverage of statistics provided through the CWP membership: Southern Indian Ocean Fisheries Agreement (SIOFA), Lake Victoria Fishery Organization (LVFO), Mekong River Commission, Committee on Inland Fisheries and Aquaculture of Africa, European Inland Fisheries and Aquaculture Advisory Commission (EIFAAC), North Pacific Fisheries Commission (NPFC) and Comisión Técnica Mixta del Frente Marítimo (CTMFM). CWP-26 requested that the Secretariat extends an invitation to these organizations to participate as observers to next CWP meetings or to join the CWP.

10. CWP-26 also noted the World Bank's support of capacity building in statistics including fisheries, and requested that the Secretariat continues investigating options for involving this organization in CWP activities.

REVISION OF THE RULES OF PROCEDURE

(Agenda item 5)

11. CWP-26 discussed revisions to the Rules of Procedure, which had been proposed by the Secretariat. The revisions reflected recent procedures in the way the CWP conducted its work. The following revisions to the Rules of Procedure were considered:

- Decision stages (new paragraph 8)
- Regional or subject group (revised paragraph 12)
- Ad-hoc task group (new paragraph 13)
- Additional supporting activities (new paragraph 14).

12. CWP-26 edited the proposed revised Rules of Procedure and the final version is in Appendix 3.

13. CWP-26 recalled that the adoption of amendments to the Rules of Procedure requires a two thirds majority (Rules of Procedure, paragraph 16), and further verification by the FAO Legal Office.

14. CWP-26 approved the revised Rules of Procedure and requested the Secretariat to forward Appendix 3 to Members for consideration and endorsement (i.e. vote by correspondence).

INFORMATION ITEMS

(Agenda item 6)

Towards statistical definition of Small Scale Fisheries (Agenda item 6.1)

15. Mr Simon Funge Smith (FAO) delivered a presentation for a proposed approach for the characterization of small-scale fisheries (SSF) to assist national management and enable inter-comparability of data and information on small-scale fisheries issues (CWP-IS/2019/11 and CWP-IS/2019/Pr11). The approach used matrix scores to address the multi-character complexity and inter-regional diversity of small-scale fishing operations. The matrix was primarily intended as a research tool and, with further testing and development, might be used more systematically for national or regional analytical or reporting purposes. CWP members were invited to provide feedback on the proposed methodology and on the potential applicability in their region, including whether the methodology could be linked to ongoing initiatives related to SSF.

16. CWP-26 discussed the methodological approach and noted that:

- While the approach had been tested by modelling, the application of the method to SSF was currently being evaluated;
- Inventories of available regional definitions could be used to evaluate the approach;
- Definitions used in the matrix were available on request.

17. EUROSTAT, GFCM, ICCAT, IOTC and SEAFDEC expressed interest in evaluating the application of this approach to their region of competence.

18. CWP-26 expressed its interest in being kept informed of results of application and further developments of the matrix.

FAO AIS-based Atlas of fishing footprint, and separation of catches within and outside EEZs (Agenda item 6.2)

19. Ms Jennifer Gee (FAO) presented the work that FAO has been coordinating since 2018 with partners Global Fishing Watch, AZTI and Seychelles Fishing Authority on the 'Atlas of AIS-based fishing footprint and effort, describing the potential, status and limitations regarding use of Automatic Identification System (AIS) data to track fishing vessels' activity and footprint (CWP/2019/Pr10). The Atlas includes chapters by FAO region and two case studies that access the use of AIS data for estimating fishing effort. The focus of the Atlas is on the fishing footprint based on presence/absence of fishing, and fishing intensity based on AIS data. The Atlas reviews each FAO Area, outlines apparent strengths and limitations of AIS data in different contexts and describes how AIS data can be used for estimating fishing effort.

20. CWP-26 noted that the underlying AIS data used in the Atlas were compiled by the Global Fish Watch, and FAO was investigating options to share these data with RFBs.

21. NAFO, SPRFMO and CCAMLR indicated interest in reviewing the chapters related to their respective FAO regions.

FISHERY SUBJECT GROUP ACTIVITIES

(Agenda item 7)

22. The CWP-FS coordinator reported on the activities and achievements of the Subject Group since CWP-25 (CWP-26/1) and presented matters that required consideration by CWP-26 including the work plan for the next inter-sessional period.

Report of inter-sessional activities (Agenda item 7.1)

23. The following items were discussed during the joint meeting of the subject group (CWP-AS-FS), which required consideration by CWP-26:

- Proposal for the further enhancement of the socio-economic section of the Handbook (Appendix 4, paragraphs 19 to 22)
- Proposal to establish an ad-hoc task group to review best practices and to address confidentiality matters (Appendix 4, paragraphs 27 to 32).

24. The following items were discussed during the CWP-FS meeting and required consideration by CWP-26 (FS report reference):

- Three data structures relevant to capture fisheries (Global Capture Production, Catch, Catch and Effort) (Appendix 5, paragraphs 1 to 12)
- A new ad-hoc Task Group on Reference Harmonization (TG-RH2) to develop, *inter alia*, the implementation guidelines of the above mentioned three data structures and the CWP catalogue (Appendix 5, paragraph 12)

- Further work needed regarding four statistical concepts (fishing effort, fishing mode, catch type and fishing area) in the Catch and Effort data structure (Appendix 5, paragraphs 5, 6 and 9)
- The proposed 'fishing activity information' (presented as logbook data structure) required further consideration, and aspects of these guidelines were referred to TG-RH2 to consider together with the related data domain (Appendix 5, paragraphs 7, 8 and 25)
- Revision of the GIS data and geospatial section of the CWP Handbook (Appendix 5, paragraphs 13 to 17)
- Revision of the International Standard Statistical Classification of Fishing Vessels (ISSCFV), subject to various amendments and a footnote agreed by CWP-FS (Appendix 5, paragraphs 18 to 21)
- Revision of the other handbook sections discussed under agenda item FS.2.1, subject various modifications agreed by CWP-FS (Appendix 5, paragraphs 22 to 29)
- Revision of the CWP website and the Handbook structure (Appendix 5, paragraphs 30 to 33).

25. CWP-26 noted that Mr. Fabio Fiorellato (IOTC) was the incoming Coordinator and Ms Jennifer Gee (FAO) continued as the Co-coordinator of the CWP-FS.

Points requiring endorsement by the CWP Session (Agenda item 7.2)

26. CWP-26 endorsed the following items related to the development of the CWP website and Handbook, subject to the points discussed in Agenda item 7.1 above:

- Enhancements of the socio-economic section of the Handbook
- Finalization of GIS data and geospatial section of the CWP Handbook
- Revision of the other Handbook sections discussed under Agenda item FS.2.1 with the exception of the proposed 'fishing activity information' guidelines
- Revision of the CWP website and the Handbook structure.

27. CWP-26 also endorsed the following items, subject to the points discussed in Agenda item 7.1 above:

- The three data structures of the TG-RH: Global Capture Production, Catch, and the concepts for Catch and Effort data structure
- Revision of the International Standard Statistical Classification of Fishing Vessels (ISSCFV).

Work plan for the next inter-sessional period (Agenda item 7.3)

28. The CWP-FS Coordinator presented the work plan for the CWP-FS inter-sessional activities 2019–2022 that included the main objectives of the three ad-hoc Task Groups (ad-hoc TG) proposed for establishment in Agenda item 9.1 (ref. Appendix 5, FS.4.1 on proposed TGs):

- Ad-hoc TG on Fishing concepts
- Ad-hoc TG on Catch concepts
- Ad-hoc TG on Reference Harmonization (TG-RH2)

29. CWP-26 discussed the use of the Handbook section on FAO Major Fishing Areas by the aquaculture sector, and requested the Secretariat to review this matter and consider how this information could be revised to better suit the needs of the aquaculture sector.

30. The work plan was further discussed under Agenda item 9.1.

AQUACULTURE SUBJECT GROUP ACTIVITIES

(Agenda item 8)

31. The CWP-AS Coordinator reported on the activities and achievements of the Subject Group since CWP-25 (CWP-26/1) and presented matters that required consideration by CWP-26 including the work plan for the next inter-sessional period.

Report of inter-sessional activities (Agenda item 8.1)

32. The following items were discussed during the CWP-AS meeting and required consideration by CWP-26:

- Preparation of the final proposal for an updated ISSCAAP classification to better suit the needs of aquaculture
- Information on progress towards an update of aquaculture farming methods classifications:
  - Review of farming methods classification in current use
  - Compilation of an exhaustive list of farming methods in use
  - Criteria for structuring a farming methods classification with hierarchy
  - Zero draft update of farming methods classifications
- Proposal for revision of the aquaculture section in the Handbook: Content agreement and plan the work ahead.

32. CWP-26 noted that Mr Fabio Massa (GFCM) was the incoming Coordinator and Mr Xiaowei Zhou (FAO) continued as the Co-coordinator of the CWP-AS.

Points requiring endorsement by the CWP Session (Agenda item 8.2)

33. CWP-26 approved the concept and revision of ISSCAAP Groups with new species composition in the proposed new ISSCAAP (Appendix 6, Annex 1). Further work was deemed necessary in order to assess the impact of the revisions including use of a revised coding system. The CWP Secretariat was requested to work with FAO, as the custodian of the classification, to develop a revised proposal including a revised coding and version control, and further consideration of terminologies relating to the name of the groups. CWP-26 requested that the Secretariat forward the final revision to Members for consideration and endorsement (i.e. vote by correspondence).

Work plan for the next inter-sessional period (Agenda item 8.3)

34. The CWP-AS Coordinator proposed a work plan for the CWP-AS inter-sessional activities 2019–2022 that included a proposal to establish an ad-hoc TG to further develop the Aquaculture section of the CWP Handbook including the aquaculture farming method classification (refer Agenda item 9.1).

OVERARCHING MATTERS AND OTHER JOINT ACTIVITIES

(Agenda item 9)

Establishment of ad-hoc Task Groups (Agenda item 9.1)

35. CWP-26 endorsed the establishment of the five proposed ad-hoc TGs listed below together with the organizations that expressed an initial interest in contributing to work (the lead organization for each ad-hoc TG is indicated in bold).

36. CWP-26 noted that the membership to the ad-hoc TGs is open to all CWP Parties and is not limited to those listed below.

37. The following ad-hoc TGs were endorsed:

- Ad-hoc TG on best practices for streamlining statistical data workflow, with a focus on confidentiality issues
  FAO, EUROSTAT, IOTC, ICCAT

- Ad-hoc TG on fishing effort concepts
  FAO/WECAFC, GFCM, NAFO, IOTC, ICCAT, ICES, SEAFDEC, noting that WECAFC is a FAO Body and that a co-lead will be sought inter-sessionally

- Ad-hoc TG-RH2 on reference harmonization standard (which includes fishing activity information)
  FAO, IOTC, ICCAT, EUROSTAT, GFCM, WECAFC

- Ad-hoc TG on catch concepts
  FAO, ICES, NAFO, IOTC, ICCAT, SEAFDEC, GFCM, WECAFC

- Ad-hoc TG on the revision of the aquaculture section of the Handbook including farming systems classification
  GFCM, FAO, SEAFDEC, EUROSTAT

38. CWP-26 requested that each lead organization draft ToRs of the ad-hoc TG in consultation with the parties that indicated their interest and to circulate the ToRs inter-sessionally through the Secretariat to all CWP Parties for identification or confirmation of interest in participating in the work of each ad-hoc TG.

CWP website (Agenda item 9.2)

39. CWP-26 noted that the CWP website will be updated taking into account the decisions in Agenda item 7.2 above. The revised Rules of Procedure (Appendix 3), when endorsed (refer paragraph 14), will be included in this update.

Visibility of CWP and progress on past CWP recommendations (Agenda item 9.3)

40. CWP-26 encouraged all Members to continue their efforts to augment the visibility of CWP through broadcasting, social media, posters, collaborations and other communication mechanisms. This could be achieved, *inter alia*, by:

- Promoting CWP standards at meetings
- Referencing CWP material such as the Handbook
- Contributing news items to the CWP website
- Collaborating in global initiatives (e.g. the Global Record of Fishing Vessels, Research Data Alliance, UN/FLUX).

41. The CWP Secretariat encouraged Members to actively use the website and provide updates for the new website 'Highlights'. The Secretariat also proposed to provide updates on recent CWP-related activities including publication of the latest ASFIS version and information on the outcomes of the CWP-26 meeting.

42. CWP-26 also suggested translation of the CWP Handbook into official languages at the later stages of the revision.

43. CWP-26 noted that several previous CWP recommendations required further input, and these included:

- Review of STATLANT data collection to determine the extent, to which capture statistics, as globally collected, respond to the current societal needs (CWP-IS 2017)

- Work required to publish the Aquaculture standard questionnaire (CWP-IS 2017)
- Development of standard concepts for measuring capacity and fishing effort (CWP-IS 2015)
- Revision of guidelines on conversion factors (CWP-IS 2015)
- Development of metadata standards for scientific data (CWP-IS 2015)
- Development of metadata standards for catch documentation schemes (CWP-IS 2015).

44. CWP-26 noted that some work on these issues has already been done and will further progress as planned under the various ad-hoc TG that were established during this meeting (Agenda item 9.1). In addition, the CWP Secretariat indicated that had started to address the item on conversion factors and this work will continue into the next inter-sessional period, including potential updates to Annex I.1 of the CWP Handbook.

OTHER RELEVANT ISSUES AND ACTIVITIES

(Agenda item 10)

45. No other relevant issues and activities were considered.

ARRANGEMENT FOR CWP-27 SESSION AND INTERSESSIONAL MEETINGS

(Agenda item 11)

46. CWP-26 considered options available for hosting the next inter-sessional meeting and the 27th Session and was unable to reach a conclusion during the meeting. CWP-26 requested that the Secretariat pursue the identification of potential hosts and suitable dates as soon as possible. CWP-26 noted that the CWP-AS inter-sessional meeting could be tentatively held back-to-back with the FAO Global Aquaculture Conference to be held in Shanghai, China, in 2020.

ELECTION OF CHAIR AND VICE-CHAIR

(Agenda item 12)

47. Ms Osypchuk indicated her unavailability to continue as the Chair. CWP-26 also noted that the role of Vice-Chair was vacant.

48. Ms Osypchuk nominated Mr. Fiorellato and Mr. Massa for the positions of CWP Chair and Vice-Chair. CWP-26 unanimously endorsed these nominations and agreed that their roles as either Chair or Vice-Chair may be decided inter-sessionally and by the start of the next IS-CWP meeting.

49. Mr Taconet, on behalf of the CWP, thanked Ms Osypchuk for the contributions she provided during her term as Coordinator and Chair. Her technical expertise, precision and leadership allowed her to provide strong guidance for the CWP-FS meetings and CWP Session, and the accomplishment of many work objectives during the inter-sessional period.

CWP SECRETARIAT

(Agenda item 13)

50. Mr Taconet, handed over the role of CWP Secretary to Ms Stefania Vannuccini, effective at the close of the CWP-26 session.

51. Mr Ricardo Federizon (NAFO), on behalf of Members, thanked Mr Taconet for taking a leading role, as Acting Secretary, in guiding and developing the work of the CWP since 2016. He welcomed Ms Vannuccini to her new role and looked forward to continued collaboration and cooperation into the future.

52. The Secretariat was requested to address the following specific tasks during the inter-sessional period:

- Forward the revised Rules of Procedure to Members for consideration and endorsement (paragraph 14)
- Review the use of the Handbook section 'FAO Major Fishing Areas by the aquaculture sector' and consider how this information can be revised to better suit the needs of the aquaculture sector (paragraph 29)
- Conduct further work in order to assess the impact of the proposed changes to ISSCAAP and to forward the final revision to Members for consideration and endorsement (paragraph 33)
- Facilitate the drafting of ad-hoc TG by the lead organizations, and circulate ToRs inter-sessionally to all CWP Parties for confirmation of interest in participating in the ad-hoc TGs (paragraph 38)
- Update the CWP website (paragraphs 39 and 41)
- Consider translation of the CWP Handbook into official languages at the later stages of the revision (paragraph 42)
- Continue the work on conversion factors (paragraph 44)
- Identify potential hosts and suitable dates for the next inter-sessional meeting and the 27th Session (paragraph 46).

ADOPTION OF REPORT AND CLOSE OF MEETING

(Agenda item 14)

53. In closing the meeting, the Chair and Acting Secretary thanked all participants for their expert contributions to the work of the CWP that had led to significant developments since CWP-25. They also thanked the CWP Secretariat for their dedication in supporting the inter-sessional work and CWP-26, and FAO for hosting the meetings. The meeting was closed on 18 May 2019 at 12.00 hours.

APPENDIX 1

List of participants

Participants	Intersessional Meeting	Session Meeting
CWP members		
CCAMLR - Commission for the Conservation of Antarctic Marine Living Resources Mr Tim JONES Data and Information Systems Manager 181 Macquarie Street, Hobart, 7000 Tasmania, Australia (CCAMLR Nominee)	✓	✓
EUROSTAT - Statistical Office of the European Communities Mr Oscar GOMEZ PRIETO Fisheries Statistics, European Commission-Eurostat E1 BECH-C3/616, 5, A. Wiecker, L-2721, Luxembourg, Grand Duchy (EUROSTAT Nominee)	✓	✓
DG-MARE – Directorate General for Maritime Affairs and Fisheries of the European Commission Ms Veronique ANGOT Acting Head of Unit Data Management Unit C.4 1049 Brussel, Belgium (EUROSTAT Nominee)	✓	
FAO - Food and Agriculture Organization of the United Nations Ms Stefania VANNUCCINI Senior Fishery Officer Fisheries and Aquaculture Statistics and Information Branch (FIAS) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy (FAO Nominee)	✓	✓
FAO - Food and Agriculture Organization of the United Nations Ms Jennifer GEE Fishery Officer Fisheries and Aquaculture Statistics and Information Branch (FIAS) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy (FAO Nominee as CWP-FS co-coordinator)	✓	✓

FAO - Food and Agriculture Organization of the United Nations Mr Xiaowei ZHOU Fishery Officer Fisheries and Aquaculture Statistics and Information Branch (FIAS) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy (FAO Nominee as CWP-AS coordinator)	✓	✓
GFCM - General Fisheries Commission for the Mediterranean Mr Federico DE ROSSI GFCM Data compliance Officer Palazzo Blumenstihl, Via Vittoria Colonna 1, 00193, Rome, Italy (GFCM Nominee)	✓	✓
GFCM - General Fisheries Commission for the Mediterranean Ms Selvaggia COGNETTI DE MARTIIS GFCM Fisheries data management specialist Palazzo Blumenstihl, Via Vittoria Colonna 1, 00193, Rome, Italy	✓	✓
GFCM - General Fisheries Commission for the Mediterranean Mr Fabio MASSA GFCM Senior aquaculture Officer Palazzo Blumenstihl, Via Vittoria Colonna 1, 00193, Rome, Italy	✓	
GFCM - General Fisheries Commission for the Mediterranean Mr Houssam HAMZA GFCM Aquaculture Officer Palazzo Blumenstihl, Via Vittoria Colonna 1, 00193, Rome, Italy	✓	✓
GFCM - General Fisheries Commission for the Mediterranean Ms Linda FOURDAIN GFCM Marine aquaculture expert Palazzo Blumenstihl, Via Vittoria Colonna 1, 00193, Rome, Italy	✓	
ICCAT - International Commission for the Conservation of Atlantic Tunas Mr Carlos PALMA Biostatistician Corazón de María, 8 , 28002 Madrid, Spain (ICCAT Nominee)	✓	

ICES - International Council for the Exploration of the Sea (ICES) Ms Anna OSYPCHUK Data Officer H. C. Andersens Boulevard 44-46 Copenhagen V DK-1553, Denmark (ICES Nominee, CWP FS coordinator)	✓	✓
IOTC - Indian Ocean Tuna Commission Mr Fabio FIORELLATO IOTC Data Coordinator IOTC Secretariat, Le Chantier Mall (2nd floor) PO Box 1011 Victoria Mahé – SEYCHELLES (IOTC Nominee)	✓	✓
NAFO - Northwest Atlantic Fisheries Organization Mr Ricardo FEDERIZON Senior Fisheries Commission Coordinator 2 Morris Drive, PO Box 638, Dartmouth, Nova Scotia, Canada B2Y 3Y9 (NAFO Nominee)	✓	✓
NEAFC - North-East Atlantic Fisheries Commission Mr Darius CAMPBELL Executive Secretary 44 Baker Street London, W1U 7AL UK (NEAFC Nominee)	✓	
SEAFDEC - Southeast Asian Fisheries Development Center Ms Saivason KLINSUKHON Senior Information Officer SEAFDEC Secretariat 50 Ladyao, Chatuchak, Bangkok 10900, Thailand (SEAFDEC Nominee)	✓	✓
SEAFDEC - Southeast Asian Fisheries Development Center Mr Isara CHANRACHKIJ Researcher (Fishing Technology) Research and Development Division, SEAFDEC/Training Department Samutprakarn, Thailand	✓	✓

Observers		
SPRFMO - South Pacific Regional Fisheries Management Organization (SPRFMO) Mr Craig LOVERIDGE Data Manager South Pacific Regional Fisheries Management Organization PO Box 3797 Wellington 6140, New Zealand	✓	✓
WECAFC - Western Central Atlantic Fishery Commission Ms Nancie CUMMINGS National Oceanic and Atmospheric Administration (NOAA) U.S. Department of Commerce National Marine Fisheries Service Southeast Fisheries Science Center 75 Virginia Beach Drive, Miami, Florida 33149, USA	✓	✓
CWP Secretariat **E-mail:** CWP-Secretariat@fao.org		
Mr Marc TACONET Head, Fisheries and Aquaculture Statistics and Information Branch (FIAS) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy (CWP Acting Secretary)	✓	✓
Mr Aymen CHAREF Fisheries data expert - Consultant Fisheries and Aquaculture Statistics and Information Branch (FIAS) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy	✓	✓
FAO - Food and Agriculture Organization of the United Nations Mr Emmanuel BLONDEL Fisheries GIS expert - Consultant Fisheries and Aquaculture Statistics and Information Branch (FIAS) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy	✓	✓
FAO – Food and Agriculture Organization of the United Nations Mr Aureliano Gentile Information Manager Officer Fisheries and Aquaculture Statistics and Information Branch (FIAS) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy	✓	✓

Mr David RAMM Fisheries data expert - Consultant P.O. Box 39, Battery Point Tasmania 7004, Australia Tel : (+61) 403802280	✓	✓
Guests and attendees		
FAO – Food and Agriculture Organization of the United Nations Mr Manuel BARANGE Director Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla 00153 Rome, Italy		
FAO – Food and Agriculture Organization of the United Nations Mr Simon FungeSmith Senior Fishery Resources Officer Marine and Inland Fisheries Branch (FIAF) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy		
FAO – Food and Agriculture Organization of the United Nations Mr Davide FEZZARDI Senior Aquaculture Consultant Products, Trade and Marketing Branch (FIAM) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla 00153 Rome, Italy		
FAO – Food and Agriculture Organization of the United Nations Mr Anton ELLENBROEK Fishery data expert - Consultant Fisheries and Aquaculture Statistics and Information Branch (FIAS) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy		
FAO – Food and Agriculture Organization of the United Nations Ms Paula ANTON Fishery Officer Fisheries and Aquaculture Statistics and Information Branch (FIAS) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy		

FAO – Food and Agriculture Organization of the United Nations Mr Pierre MAUDOUX Economist/Statistician - Consultant Fisheries and Aquaculture Statistics and Information Branch (FIAS) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy		
FAO – Food and Agriculture Organization of the United Nations Ms Stefania SAVORE Fisheries Officer Fisheries and Aquaculture Statistics and Information Branch (FIAS) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy		
FAO – Food and Agriculture Organization of the United Nations Ms Bracken VAN NIEKERK Information Manager – Consultant Fisheries and Aquaculture Statistics and Information Branch (FIAS) Fisheries and Aquaculture Policy and Resources Division Via delle Terme di Caracalla, 00153 Rome, Italy		
IRD – Innovation Research Development Mr Julien BARDE UMR Marbec Sète Avenue Jean Monnet CS 30171 34203 Sète cedex, France		
UNECE - United Nations Economic Commission for Europe Mr Frans VAN DIEPEN Chair of the Team of Specialists of Sustainable fisheries		

APPENDIX 2

Integrated Agenda of the 26th CWP Session 17–18 May 2019

1- Opening and Welcome, practical arrangements
2- Appointment of the meeting chairs
3- Adoption of the agenda
4- Review of Membership

The Secretariat will report the changes in memberships since the CWP-25 session and perspectives of new members.

5- Revision of the Rules of Procedure
6- Information Items

6.1 Towards statistical definition of Small Scale Fisheries (Agenda item 6.1)
6.2 FAO AIS-based Atlas of fishing footprint, and separation of catches within and outside EEZs

7- Report of the Fishery Subject Group inter-sessional activities

The Fishery Group coordinator will report the activities and achievement made since the CWP-25, together with the matters that require endorsement by the CWP session and work plan for the next inter-sessional period. The meeting should also review and discuss on the work plan proposed.

7.1 Information points from the intersessional meeting:
7.1.1 Towards statistical definition of Small Scale Fisheries (from FS.3.1)
FAO/ Simon Funge-Smith, Nicole Franz, Giulia Gorelli, Stefania Vannuccini and Stefania Savorè **20 min**
7.1.2 FAO AIS-based Atlas of fishing footprint and separation of catches within and outside EEZs (from FS.3.4)
FAO/Marc Taconet, Jennifer Gee **15 min**
7.2 Report of inter-sessional activities
7.3 Points required endorsement by the CWP Session
7.4 Work plan for the next inter-sessional period

8- Report of the Aquaculture Subject Group inter-sessional activities

The Aquaculture Group coordinator will report the activities and achievement made since the CWP-25, together with the matters, which require endorsement by the CWP session and work plan for the next inter-sessional period. The meeting should also review and discuss on the work plan proposed

8.1 Report of inter-sessional activities
8.2 Points required endorsement by the CWP Session
8.3 Work plan for the next inter-sessional period

9- Overarching matters and other joint activities

9.1 Establishment of ad-hoc Task Groups
9.2 CWP website
9.3 Visibility of CWP and progress on past CWP recommendations

10- Other relevant issues and activities
11- Arrangement for CWP-27 Session and intersessional meetings and activities: Time and venue
12- Election of coordinator and co-coordinator for the AS and FS
13- CWP secretariat serving officers
14- Adoption of the report and closure of the meeting (on 18th May 2019 10:00 to 12:00)

Agenda of the Intersessional Meetings 15 –16 May 2019

Sixth Meeting of the Aquaculture Subject Group (AS) and Twenty-seventh meeting of the Fisheries Subject Group (FS)

Joint Session of CWP-FS and CWP-AS (India room A.327)

Opening of the meeting and welcome message

1. **Appointment of the meeting chairs**
2. **Adoption of the agenda**
3. **SDGs and SDG 14 under FAO Custodianship**

   Overview of monitoring and reporting of SDGs relevant to fisheries and aquaculture statistics.
   FAO/ Aymen Charef **20 min**
4. **Report of activities progress relevant to CWP by participating organizations since CWP-25 in 2016**

   Agencies will present their report, flagging those Statistical activities that support SDG 14 (with ref. to CWP-FS26 agenda item 10).
   CWP Parties **1.5 hour**
5. **Review of progress on work plan agreed at the last intersessional meeting**

5.1. **The revised Handbook and the CWP web page** (http://www.fao.org/cwp-on-fishery-statistics/en/)

   Presentation of the CWP website and the available handbook sections. Expected feedback from the group on the structure and organization of the contents arrangement.
   FAO/Aureliano Gentile **30 min**

5.2. **Further enhancement of the socio-economic section of the Handbook**

   The final consolidated draft document of the section is to be discussed at the meeting, from which a final version is expected to be submitted for endorsement by following session. Important to consider an integrated approach between the two subsectors (fisheries and aquaculture).
   FAO/Jennifer Gee; collaboration: Eurostat, OECD, GFCM **30 min**

5.3. **Progress report of the CWP ad-hoc Task Group on "Reference harmonization for capture fisheries and aquaculture statistics"**

   An overview of the Task Group endeavors will be presented and a detailed discussion will take place in the CWP-FS meeting (agenda items FS.1.1).
   FAO/Aymen Charef **15 min**

5.4. **Progress report of GIS Technical Working Group for the CWP handbook**

   An overview of the finalized work will be presented and a detailed discussion will take place in the CWP-FS meeting (agenda item FS.1.2).
   FAO/Emmanuel Blondel **10 min**

5.5. **Review of progress on further streamlining of the reporting of national statistics**

   A focus on mutual data sharing agreements among international and regional statistical data collecting institutions and organizations in order to minimize discrepancies and duplication, as well as to reduce countries' reporting burden. Inputs are requested from all participant parties based on a core set of best practices. (CWP-FS26 agenda point 4).
   FAO/Marc Taconet **1 hour**

***

Fisheries Subject Group Meeting (Parallel session) (India room A.327)

FS.1 Review of progress of CWP-FS activities for endorsement, namely:

FS.1.1 CWP ad-hoc Task Group on "Reference harmonization for capture fisheries and aquaculture statistics"

The advanced proposal of the CWP standard for reference harmonization is to be presented. This proposal stems from rounds of feedback and outputs of the CWP Workshop on tuna fisheries statistics. The Reference harmonization framework and the structures of capture production, nominal catch, catch and effort and logbook will be presented for endorsement. A group discussion is sought on the first draft of implementation guidelines of data structures.

FAO/Aymen Charef; in Collaboration with tuna RFMOs and other members of the ad-hoc Task Group **1.5 hour**

FS.1.2 Finalization of GIS data and geospatial section of the CWP handbook

The proposal for structuring GIS data in the CWP website will also be reviewed, as well as the contents, for endorsement. Plans ahead will be discussed. Contribution of relevant parties is required.

FAO/Emmanuel Blondel **30 min**

FS1.3 The revised International Standard Statistical Classification of Fishing Vessels (ISSCFV)

Current ISSCFV version dates back from 1984 CWP-12. A first revision was discussed and approved by CWP-21, 2005, but has never been published. The revision process was resumed by the CWP-24, and the final proposal will be reviewed for final endorsement.

FAO/Jennifer Gee **1.5 hour**

FS.2 CWP handbook

FS.2.1 Revised section on logbook guidelines

A revised section on Logbook guidelines will be presented and considered for endorsement.

FAO/Marc Taconet, David Ramm **2 hours**

FS.2.2 Review of other revised sections of CWP handbook

A synthesis of revised sections reviewed in prior agenda items, a document proposing an integrated view of changes to the current handbook will be reviewed for endorsement.

FAO/Marc Taconet, Aureliano Gentile **1 hour**

FS.3 For information – CWP relevant activities with a focus on SDGs and in particular SDG14

FS.3.1 Global Record of Stocks and Fisheries (GRSF)

Update on progress made. The status of the GRSF standard will be presented towards approval by CWP as a metadata standard to be referenced and disseminated through the CWP website.

FAO/Aureliano Gentile **15 min**

FS.3.2 UN/FLUX Fisheries Language for Universal Exchange. An overview, use cases and operational implementation

UNECE secretariat/Frans Van Diepen **15 min**

FS.4 Extension of existing or establishment of new Task Groups

FS.4.1 Proposal of Task Group on CWP statistical concepts and definitions

Discussion during the last intersessional period emphasized the need to address the definitions of catch diagram and the classifications of effort and gears, in order to increase terminology harmonization and data interoperability.

FS.5 Any other business

FS.6 Selection of Capture Fishery Group Coordinators

FS.7 Draft and Report adoption

The report to be presented to the CWP session will highlight the recommendations and include a work plan including TORs for any Task Group

***

Aquaculture Subject Group Meeting (Parallel session) (Espace Gabon A.025)

AS.1 Selection of Aquaculture Group Coordinator(s) and Appointment of Meeting Chair
AS.2 Review of progress of CWP-AS activities since CWP-25, namely:

AS.2.1 Finalize the proposal for an updated ISSCAAP classification to better suit the needs of aquaculture

The final proposal for an updated ISSCAAP classification, improved based on the 2017 version of proposal to the CWP meeting in Copenhagen in 2017, is presented for review and suggestions for finalization.

FAO/Xiaowei Zhou **2 hours**

AS.3 Towards an updated international aquaculture farming systems classification for use in aquaculture statistics

A preliminary structured list of aquaculture farming systems (culture methods) with hierarchy levels under 15 categories based on a set of criteria and consideration is presented for review, suggestions for improvement. The structure list and the criteria are intended for use as reference to update the international aquaculture farming systems classification in use since the 1980s.

FAO/Xiaowei Zhou **2 hours**

AS.4 The aquaculture section in the revised handbook

Content agreement and plan the work ahead.

FAO/Xiaowei Zhou **1 hour**

AS.5 Any other business
AS.6 Draft and Report adoption

AS.6.1 Work plan for 2019-2022

The report to be presented to the CWP session will highlight the recommendations and include a work plan including TORs for any Task Group.

APPENDIX 3

Proposal of amendment to the Rules of Procedure

(The current version of the Rules of Procedures were endorsed at the CWP 23rd session in 2010 and entered into force from CWP 25th session in 2016)

Note: Insertions and deletions agreed by CWP-26 are indicated as text and ~~text~~, respectively

1. SESSIONS. Unless contrary to the views of the majority or participating organizations, the interval between successive sessions of the Coordinating Working Party on Fishery Statistics (CWP) shall not exceed three years. The Working Party shall meet on announcement by the CWP Secretary who shall respect the wishes of the majority of participating organizations. The announcement shall generally be made at least six months before the session starts.

2. AGENDA. A provisional agenda for each session shall be prepared by the CWP Secretary in collaboration with the secretariats of the participating organizations. The first item on the provisional agenda should be the adoption of the agenda. The provisional agenda shall be distributed with the announcement of the session.

3. NOMINATION OF EXPERTS. Participating organizations should notify the CWP Secretary of the names and affiliations of their nominated experts before the session.

4. DOCUMENTATION. Documents for each session should be made available to all participating organizations and nominated experts at least two weeks before the session. Each participating organization shall be responsible for the timely distribution of its documents in accordance with the mailing list supplied by the CWP Secretary.

5. OFFICERS. At the start of the session, the Chair or Vice- Chair appointed at the previous session shall call the session to order. In their absence, the CWP Secretary will call the session to order. Following adoption of the agenda, the Working Party shall elect a Chair and Vice-Chair from among its members; they shall remain in office until the election of the new Chair and new Vice-Chair at the next session. The outgoing Chair and Vice-Chair shall be eligible for re-election.

6. EXPENSES. The expenses incurred by experts attending session of the Working Party shall be borne by the nominating organization or as otherwise arranged between the experts and the respective nominating organization.

7. WORKING LANGUAGE. English shall be the working language of the Working Party.

8. DECISION STAGES. In making decisions on documents such as Standards, Rules of Procedure and Meeting Reports, the Working Party may ‘approve’, or ‘endorse’. ‘Approval’ qualifies a mature stage of the concerned document, which might still require some finalization or for which no quorum in voting could be reached; ‘endorsement’ qualifies a final stage of the concerned document.

9. VOTING. A majority of the participating organization shall constitute a quorum at any session. Each participating organization is entitled to one vote. Decision of the Working Party shall be taken by a simple majority of votes cast by those present at the session, or by a simple majority of votes of all the participating organizations by correspondence, if it selects to do so. When necessary, the Chair may exercise a casting vote.

10. REPORTS. At each session the Working Party shall adopt a report of the session which will include *inter alia* all decisions and recommendations. The report shall be made available by the CWP Secretary to the participating organization and nominated experts, and to other individuals or organizations as requested by the Working Party. FAO should make the report available as widely as possible.

11. MONITORING OF RECOMMENDATIONS AND DECISIONS. Although recommendations and decisions of the Working Party are not binding on participating organizations, the Working Party shall monitor and report on the implementation of recommendations and decisions.

12. REGIONAL OR SUBJECT GROUP. The Working Party may establish regional or subject groups as are required for its effective functioning and for standing duration until the Working Party deems necessary to abolish it. The Working Party should determine purpose, ~~and~~ composition and a leader of each group ~~with the term terminating no later than at the end of following session~~. Groups shall deliver report of activities and recommendations, and the proposal of terms of reference and work plans for the next term if necessary, to the session for its consideration, decision and adoption

13. AD-HOC TASK GROUP. The Working Party may establish during the session ad-hoc Task Group to study and recommend on specific technical matters pertaining to the purpose and mission of the CWP activities. The Working Party should determine terms and composition of each ad-hoc Task Group with its term terminating no later than the end of following session.

14. ADDITIONAL SUPPORTING ACTIVITIES. During the inter-sessional period, the Working Party may arrange activities including *inter alia* holding informal preparatory meetings, holding meetings of regional or subject groups, preparation of working papers, and communication by correspondence. Upon proposal of a Member or on its own initiative, the CWP secretary may propose a specific activity with the goal to advance the on-going CWP agenda. The CWP Secretary in consultation with the Chair shall notify the Members of the objectives of the activity and mobilize their participation on a voluntary basis. The activity shall be deemed established based on a majority vote by correspondence, and reported to the session for consideration.

15. INTERSESSIONAL ACTIVITIES. The Working Party may arrange intersessional activities including *inter alia* holding informal preparatory meeting, holding meetings of regional or subject groups, preparation of working papers, and communication by correspondence.

16. SUSPENSION OF THE RULES OF PROCEDURE. Suspension of the Rules of Procedure may be adopted by the Working Party by a two thirds majority of the votes cast, provided that 24 hours' notice of the proposal for the suspension had been delivered to the Working Party.

17. AMENDMENT TO THE RULES OF PROCEDURE. Amendments to the Rules of Procedure may be adopted by the Working Party by a two thirds majority of the participating organizations provided that three months notice of the proposal for the suspension had been delivered to all participating organizations. An amendment shall come into force unless any objection is received by the CWP Secretary from any participating organization within three months of being adopted.

18. NEW PARTICIPATING ORGANIZATIONS. An intergovernmental organization having competence in fishery or aquaculture statistics may become a participating organization of the Working Party if it is so decided by a two thirds majority of the participating organizations provided that three months' notice of the proposed admission had been delivered to all participating organizations.

19. WITHDRAWAL OF PARTICIPATING ORGANIZATIONS. Any participating organization may withdraw from the Working Party by notifying its intention to the CWP Secretary who will inform other participating organizations. If a participating organization does not provide any experts for two consecutive sessions without notification, it will be deemed to have withdrawn. The CWP Secretary shall communicate with such organization and shall announce its withdrawal upon the receipt of the confirmation from the withdrawing organization or absence of response up to the designated date.

APPENDIX 4

Report of the Joint Intersessional Meeting of the Aquaculture and Fishery Subject Groups 15–16 May 2019

Opening of the meeting and welcome (Agenda item 1)

1. In advance of the Twenty-Sixth Session of the Coordinating Working Party on Fishery Statistics (CWP-26), held in Rome, Italy, 17–18 May 2019, the Aquaculture Subject Group (CWP-AS) and the Fisheries Subject Group (CWP-FS) held a joint inter-sessional meeting (CWP-AS-FS) on 15 May 2019.

2. Representatives from the following organizations participated in the meeting, including CWP members, observers, and invited by FAO:

- Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR, Member)
- DG-MARE (nominated by EUROSTAT)
- Food and Agriculture Organization of the United Nations (FAO, Member)
- General Fisheries Commission for the Mediterranean (GFCM, Member)
- Indian Ocean Tuna Commission (IOTC, Member)
- French Research Institute for Development (IRD, observer invited by FAO)
- International Commission for the Conservation of Atlantic Tunas (ICCAT, Member)
- International Council for the Exploration of the Sea (ICES, Member)
- Network of Aquaculture Centers in Asia-Pacific (NACA, Member)
- North-East Atlantic Fisheries Commission (NEAFC, Member)
- Northwest Atlantic Fisheries Organization (NAFO, Member)
- Southeast Asian Fisheries Development Center (SEAFDEC, Member)
- Statistical Office of the European Communities (EUROSTAT, Member)
- South Pacific Regional Fisheries Management Organization (SPRFMO, Observer)
- UN Economic Commission for Europe (UNECE, invited by FAO)
- Western Central Atlantic Fishery Commission (WECAFC, Observer).

Participants are listed in Appendix 1.

3. Mr Manuel Barange (Director, Fisheries and Aquaculture Policy and Resources Division, FAO) opened the Session and welcomed participants. He reflected on the work of the CWP, noting that statistics were essential for informing responsible policies and decision making in sector management. This is true at national, regional and global levels. The global agenda is strongly oriented on sustainability matters – the Sustainable Development Goals (SDGs) – and FAO is the custodian of 21 SDG indicators including SDG 14 (life below water). He stressed the importance of standards for statistics in fisheries and aquaculture. The importance of data and statistics for capture fisheries is well understood, however with the rapid development of the aquaculture industry, there is a specific need for good quality aquaculture statistics. Mr. Barange also noted the FAO international symposium on fisheries sustainability that will be held in 18-21 November 2019.

4. Mr Marc Taconet, Acting CWP Secretary, thanked Mr Barange, welcomed participants to CWP-26, and reflected on the role of the CWP and Mr. Barange's opening remarks. We are all here around the table with important, key responsibilities in our respective agencies to produce fisheries and aquaculture statistics, which inform decision making – for policy makers and fisheries management. There are often questions and debate when it comes to the quality of the statistics and how such statistics relate to the real world. Our individual and collective responsibilities are to keep improving the quality of the statistics, for which we are responsible, and this requires development of methodologies, workflows, collaboration, standards and tools. CWP is the place for international standards and collaboration amongst the international agencies responsible for fisheries and aquaculture statistics. High on our agenda at this meeting, we will strive to further develop standards to our evolving

environment, best practices for streamlining of workflow, and tools to facilitate the reporting burden. The agenda of CWP-26 focuses on the International Standard Statistical Classification of Fishing Vessels (ISSCFV), revision of the CWP Handbook, reference harmonization standards, aquaculture farming systems and revised International Standard Statistical Classification for Aquatic Animals and Plants (ISSCAAP).

5. CWP-AS-FS welcomed Ms. Stefania Vannuccini who will become the new CWP Secretary at the close of CWP-26 session.

Appointment of the meeting chair (Agenda item 2)

6. The CWP-FS coordinator, Ms. Anna Osypchuk was elected as chairperson for the joint inter-sessional meeting and the Fisheries Subject Group meeting.

Adoption of the agenda (Agenda item 3)

7. CWP-AS-FS discussed the agenda and agreed to bring forward consideration of 'SDGs and SDG 14 under FAO Custodianship' to Agenda item 4.

8. In response to a query from EUROSTAT about the statistical mandates of the CWP and the Committee on Fisheries (COFI), the Acting CWP Secretary noted that COFI is a subsidiary body of the FAO Council that reviews the program of work of FAO in the field of fisheries and aquaculture and their implementation, and conducts periodic general reviews of fishery and aquaculture issues of an international character.

9. The Acting CWP Secretary also noted that the CWP provides a mechanism to coordinate the statistical programs conducted by regional fishery bodies (RFBs) and other intergovernmental organizations with a remit for fishery statistics. The CWP's main function is to: continually review fishery statistics requirements for research, policy-making and management; agree on standard concepts, definitions, classifications and methodologies for the collection and collation of fishery statistics; and submit proposals for the coordination and streamlining of statistical activities among the relevant intergovernmental organizations.

10. CWP-AS-FS noted that the subject groups would discuss proposed revisions to the CWP Handbook, including the capture fisheries' catch concepts (CWP-FS, Agenda item FS.2).

11. With the repositioning of the Agenda item on SDG, and the possibility to move some information items (Agenda items FS.3.1 and FS.3.4) to the CWP-26 Session, the agenda was adopted (Appendix 2).

SDGs and SDG 14 under FAO Custodianship (Agenda item 4)

12. CWP-AS-FS noted the overview of monitoring and reporting of SDGs relevant to fisheries statistics presented by Mr Aymen Charef for FAO (CWP-IS/2019/Pr5). In 2015, the world community reaffirmed its commitment to sustainable development. The 2030 Agenda is universal, transformative and rights-based with a focus on the most vulnerable and a commitment that "no one will be left behind". It is an ambitious plan of action for countries, the UN system, and all other actors. The UN General Assembly adopted 17 SDGs as a new impetus to global efforts for achieving sustainable development. SDGs are a shared responsibility between countries, the UN system and the international community at large, and the SDG monitoring needs to reach far beyond each UN agency's current capacity to deliver. There is a need to coordinate efforts and use resources efficiently, and the CWP, in partnerships with the UN and other international agencies, can play an important role by improving the transparency on data availability and data provision, which will allow an increased understanding and knowledge in fish stocks and resources, socio-economics and ultimately support sound fishery policy-making.

Report of activities progress relevant to CWP by participating organizations since CWP-25 (Agenda item 5)

13. The participating organizations members of CWP reported on progress made since CWP-25 in the areas relevant to information and statistics including those statistical activities that support SDG 14[1]. Presentation and discussion on those issues relevant to the listed Agenda items and including SGDs were deferred to appropriate Agenda items.

14. During the discussion, ICCAT informed CWP-AS-FS that its Scientific Committee had endorsed the ICCAT Secretariat to use EUROSTAT statistics to validate and, as required, complement the ICCAT Task I statistics, focusing on shark species. This validation is on-going and will require increased cooperation between ICCAT and EUROSTAT in the future, similar to the long-term cooperation between ICCAT and GFCM on statistical aspects. CWP-AS-FS welcomed this proposed, expanded bilateral/multilateral cooperation among CWP Parties.

Review of progress on work plan agreed at 2017 inter-sessional meeting (Agenda item 6)

The revised Handbook and the CWP webpage (Agenda item 6.1)

15. Mr Aureliano Gentile, for the CWP Secretariat, introduced the proposed revision and development of the CWP website and Handbook, which included:

- a new website section on sharing protocols and practices that would cover reference harmonization, CWP catalogue, GIS recommended standards and data exchange formats
- a new Handbook section including regional references for socio-economic data from the EU, FAO, GFCM, OECD and SPC
- a "General search" and "Categories" shortcuts available from the website home page with pre-selected options
- Improved "Concepts" category lists of search results including alphabetical order
- Search result associated with # hashtags with improved color codes to distinguish categories from tags
- A new print facility for the Handbook (see also paragraph 17).

16. CWP-AS-FS noted that the proposed revised structure of the Handbook was based on proposals that will be discussed by CWP-AS and CWP-FS during the meeting, and new sections were proposed, which would require development in the future.

17. CWP-AS-FS also noted the proposed print facility would allow users to download (in pdf format) and print the entire content of the Handbook.

18. CWP-AS-FS agreed to refer this proposal for endorsement, subject to further consideration by the subject groups.

Further enhancement of the socio-economic section of the Handbook (Agenda item 6.2)

19. Ms Jennifer Gee, co-Coordinator of CWP-FS, presented the proposed additions and amendments to the CWP Handbook Section on socio-economic variables, which address the needs for this type of data and definitions at national and regional levels (CWP-IS/2019/1). The first proposed change is that the section of the handbook be renamed "Socio-Economic Dimension" from the current title "Socio-economic data". It is proposed that the material covered in this section be titled 'Socio-economic data' under the general heading of 'Socio-Economic Dimension'. Currently, the Handbook contains an item on 'Fishers', which is proposed to be moved to the section 'Capture fisheries statistics' while a related item 'Fish Farmers' is proposed to be created in the section 'Aquaculture statistics' for

[1]Individual report on activity progress are available here: http://www.fao.org/fi/static-media/MeetingDocuments/cwp/cwp_26/default.htm

tailored description of these concepts in each relevant sub-sector. 'Employment' is also a core variable for aquaculture and fisheries, and revised specific definitions are included under each section. The section 'Socio-economic data' has been extensively revised and should be considered an entirely new proposed addition along with the core and additional variable section. In the current version of this section 'Food balance sheets on apparent consumption' and 'Fishery commodities classification' do not contain any proposed changes and they will remain as published in the current version of the Handbook.

20. In discussing this proposal, CWP-AS-FS noted that:

- There is a growing interest from users and countries for the development of standard methods for collecting socio-economic data and reporting socio-economic statistics
- Very few RFBs collect or report on socio-economic data
- Some CWP existing Members (e.g. SEAFDEC) or potential new Members (e.g. FCWC, World Bank) could be added to the group of five agencies listed above
- The secondary sector is currently not covered and CWP should work to develop similar standards.

21. DG Mare welcomed this value-adding proposal and invited FAO and the CWP Secretariat to further discuss DG Mare's experience in characterizing the socio-economic status of the fishery sector including through its annual economic report.

22. CWP-AS-FS agreed to refer this proposal for the socio-economic section of the CWP handbook for endorsement by CWP-26.

Progress report of the CWP ad-hoc Task Group on reference harmonization for capture fisheries and aquaculture statistics (Agenda item 6.3)

23. Mr Aymen Charef, CWP Secretariat and lead of the ad-hoc Task Group on reference data harmonization for capture fisheries and aquaculture statistics (TG-RH), presented the background and TG objectives (CWP-IS/2019/5 and CWP-IS/2019/Pr2). The overall aim of ad-hoc TG-RH was to develop a CWP standard for reference harmonization, and define the structure of statistical concepts that accommodate the coding system used by CWP Parties to improve data reporting and exchange between national, regional and global organizations. This CWP standard will define the set of minimum global requirements that are based on other CWP standards and international classifications (e.g. ISSCFG, Areal Grid System) to minimize where possible time and costs of mapping data elements to standard terminology. A draft standard for reference harmonization was presented at the CWP inter-sessional meeting in 2017 and that meeting's recommendations included revising terminology and expanding the scope of data structures to data collection and dissemination and to cover nominal catch, catch and effort, logbook. Since then, ad-hoc TG-RH conducted further rounds of remote feedback, and held a workshop with t-RFMOs to i) review previous proposals of CWP standard of reference harmonization, ii) review the updated FAO atlas for tuna and billfishes, and iii) discuss other subjects of common interest to the t-RFMOs. Version 5.0 the background technical document and data structure (excel sheet) were presented.

24. CWP-AS-FS referred the relevant parts of the revised proposal to CWP-FS and CWP-AS for consideration (Agenda items FS.1.1 and AS.4).

Progress report of the GIS Technical Working Group for the CWP handbook (Agenda item 6.4)

25. Mr Emmanuel Blondel, CWP Secretariat and lead of the GIS Technical Working Group (GIS-TWG), introduced progress and final outputs of this TWG (CWP-IS/2019/Pr3). The terms of reference and activities of GIS-TWG, developed by CWP-25 and CWP-FS in 2017, identified the need to distinguish candidate concepts for a GIS section of the Handbook as well as concepts and standards that should be dedicated to a technical section of the CWP website on data sharing and protocol standards. GIS-TWG proposed some reworking on information already published in the Handbook and new content that covered the main levels of geographic information that are required for dealing with geo-

referenced fisheries reference and detailed data, as well as harmonization among georeferenced statistical datasets. The required levels of geographic information are:

1. Spatial reference systems
2. Geographic coordinates
3. Geographic systems (including classification and coding systems)
4. Geographic information formats and protocols.

26. CWP-AS-FS noted the progress report for the CWP Handbook (CWP-IS/2019/6), and this matter was referred to CWP-FS for further consideration (Agenda item FS.1.2).

Review of progress on further streamlining of the reporting of national statistics (Agenda item 6.5)

27. Mr Taconet introduced a review on progress on further streamlining of the reporting of national statistics (CWP-IS/2019/Pr4). This work focuses on mutual data sharing agreements among international and regional statistical data collecting institutions and organizations in order to minimize discrepancies and duplication, as well as to reduce Member Countries' reporting burden. Items that may assist to streamline the reporting mechanism for fishery statistics include:

- Alignment of calendars (for data sharing)
- Consistency in concepts, standards and definitions
- Mainstreamed data provision serving multiple reporting requirements for Member Countries
- Improved accessibility through harmonized published formats
- Active collaboration for analysis of data gaps and discrepancies
- Transparency through systematic processing and documentation of data sources.

28. CWP-AS-FS agreed that further streamlining would benefit from:

- Improved collaboration and exchange of data among CWP Parties through the harmonization of formats and the use of CWP international standard classifications as promoted through the Reference Harmonization standard
- Development of comprehensive data validation, metadata and documentation (e.g. EUROSTAT Handbook)
- Transparent and effective communication of data validation rules, metadata and documents to data users
- Dialog with Member States regarding issues they face such as proper interpretation of standard concepts
- Use of clear and published Data Collection Reference Frameworks
- Use where possible joint questionnaires to reduce the number of different focal points and thus the reporting burden for the national statistical offices
- Application of FAIR data principles (i.e. guiding principles that make data findable, accessible, interoperable and reusable).

29. CWP-AS-FS noted that the alignment of calendars may result in a synchronous submission of large amounts of data that may result in pressure points within an organization, thus not necessarily improving the workflow.

30. CWP-AS-FS discussed data confidentiality issues that could hamper data dissemination and data exchange (e.g. between FAO and EUROSTAT). To be distinguished from GDRP (personal protection), statistical data confidentiality requirements seek to protect individual identities, and in particular aquaculture producers in the context of the CWP. CWP Parties use various rules to deal with data confidentiality, and two CWP members (ICCAT and IOTC) presented an excerpt of their rules in Appendix 4-Annex 1. Some points were highlighted as the ones deserving further attention by CWP for the future development of methodologies on confidentiality issues:

- Responsibility for decisions on what can be disseminated are well defined in RFMOs (ICCAT, SPRFMO)
- How to mask data while flagging that data exist (e.g. by points of contact so users can go to the concerned actors)
- Temporal limitation for data confidentiality
- Clear rules on aggregation levels, whereby individual entities can be no longer identified (SPRFMO, ICCAT, IOTC)
- Clear rules of use for each dataset through published Data access and sharing policies (WECAFC).

31. CWP-AS-FS noted that exceptions to data confidentiality rules may need to be considered in future if, for example, the dissemination of data from endangered species is limited by requirements for confidentiality.

32. The Chairperson referred this matter to CWP-26 for further consideration, including the possibility to establish an ad-hoc task group to address confidentiality matters (including lessons learned) and review best practices.

APPENDIX 4 - Annex 1

Information on data confidentiality rules from CWP Members

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

ICCAT has in place a data dissemination policy, which must have priority over any other confidentiality rules. Under this policy, data with aggregation levels such as required for the FIRMS Tuna Atlas is publicly available.

Indian Ocean Tuna Commission (IOTC)

Excerpts from IOTC Resolution 12/02:
https://iotc.org/sites/default/files/documents/compliance/cmm/iotc_cmm_12-02_en.pdf

The following policy and procedures on confidentiality of data will apply:

DATA SUBMITTED TO THE IOTC SECRETARIAT

The policy for releasing catch-and-effort, length-frequency and observer data will be as follows:

Standard stratification

a. Catch-and-effort and length-frequency data grouped by 5° longitude by 5° latitude by month for longline and 1° longitude by 1° latitude by month for surface fisheries stratified by fishing nation are considered to be in the public domain, provided that the catch of no individual vessel can be identified within a time/area stratum. In cases when an individual vessel can be identified, the data will be aggregated by time, area or flag to preclude such identification, and will then be in the public domain.

Finer level stratification

b. Catch-and-effort and length-frequency data grouped at a finer level of time-area stratification will only be released with written authorization from the sources of the data. Each data release will require the specific permission of the IOTC Executive Secretary;

c. Observer data grouped by 1° longitude by 1° latitude for surface fisheries and by 5° longitude by 5° latitude for longline, stratified by month and by fishing nation are considered to be in the public domain, provided that the activities /catch of no individual vessel can be identified within a time/area stratum;

d. A Working Party will specify the reasons, for which the data are required;

e. Individuals requesting the data are required to provide a description of the research project, including the objectives, methodology and intentions for publication. Prior to publication, the manuscript should be cleared by the IOTC Executive Secretary. The data are released only for use in the specified research project and the data must be destroyed upon completion of the project. However, with authorization from the sources of the data, catch-and-effort and length-frequency data may be released for long-term usage for research purposes, and in such cases the data need not be destroyed;

f. The identity of individual vessels will be hidden in fine-level data unless the individual requesting this information can justify its necessity;

g. Both IOTC Working Parties and individuals requesting data shall provide a report of the results of the research project to the IOTC for subsequent forwarding to the sources of the data.

The policy for releasing tagging data will be as follows:
a. Detailed tagging and recovery data are considered to be in the public domain, with the exception of any vessel names or identifiers and detailed information about the person who recovered the tag (name and address), however, requests for tagging data should be made to the IOTC Executive Secretary through the application form provided at Annex I.

APPENDIX 5

Report of the Intersessional Meeting of the Fishery Subject Group 15–16 May 2019

Review of progress of CWP-FS activities for endorsement (Agenda item FS.1)

CWP ad-hoc Task Group on reference harmonization for capture fisheries and aquaculture statistics (Agenda item FS.1.1)

1. The Fishery Subject Group (CWP-FS) discussed the revised proposal on reference harmonization for capture fisheries and aquaculture statistics (CWP-IS/2019/5 and CWP-IS/2019/Pr2). An overview of this proposal was presented to CWP-AS-FS (Paragraph 23).

2. Mr Aymen explained that the proposal was developed by the ad-hoc Task Group on reference harmonization for capture fisheries and aquaculture statistics (TG-RH) in consultation with CWP Parties over the last intersessional period and the initial proposal global Data Structure Definition (DSD) was compliant with SDMX. The proposal was renamed 'standard for reference harmonization' and the associated terminology was related to defined statistical concepts and international standards published in the CWP Handbook. Several rounds of feedback and the CWP TG-RH workshop on tuna fisheries statistics established four data structures that satisfied the different domains of CWP parties, and a standard for fishing effort. Another data structure 'Global aquaculture production' was designed to cover the aquaculture production and its value for economic purposes (this data structure was referred to CWP-AS for further consideration under agenda point AS.4). The progress made by CWP-FS as of this session focused on capture fisheries.

3. The four data structures relevant to fisheries statistics are:
   - 'Global capture production' that was initially developed to cover the capture production in volume and value from an economic perspective. Volume and value of catch are compiled according to dimensions represented by the concepts flag entity, fishing area, aquatic species and time unit.
   - 'Catch' that was developed to cover the concepts (e.g. gross catch, discards, nominal catch) for management purposes, to which was added the concept "Coverage" to indicate level of coverage of data collected. This data structure is commonly referred to as "Nominal catch" by the tuna RFMOs.
   - 'Catch and effort' that was developed for assessment and management purposes and includes several modules (e.g. catch module, effort module, fishing capacity module) to associate fishing gear and its fishing mode.
   - 'Logbook' that was developed to address management purposes and in particular a data collection scheme for monitoring fishing activity. The data structure contains vessel information, catch and effort for each operation (e.g. haul). Information on start and end of time and location of fishing information are also included.

4. CWP-FS discussed the proposed standard for reporting fishing effort in combination with gear, and agreed that this proposal required further development by the broader CWP membership.

5. CWP-FS reviewed each of the four data structures and suggested improvements, including transposing the data structure in the matrix layout. CWP-FS noted that:
   - Data structures provide a conceptual framework, which will need implementation guidelines for their practical implementation (e.g. codelists, values constraints, questionnaire)
   - Data structure concepts are either mandatory, recommended or optional, and concepts may be removed from a data structure to suit the requirements of CWP parties, noting that some concepts are dependent on other (e.g. observed quantity and unit of measurement)
   - 'Global capture production' can also be used to report annual "Nominal" catch

- Codelists may be mapped as required to lists defined by CWP parties (i.e. regional reference lists)
- Stock area definitions can be at a geographic granularity level other than that used in the parent area definitions
- The concept 'target species' requires further consideration for use in the catch and effort data structure, given that other terms (e.g. 'directed species', intended species') may be used in some fisheries.

6. CWP-FS also noted that the geographic concepts of UNCLOS (Territorial Sea, EEZ, International Waters) were further discussed in the proposal of GIS section definitions (Water main areas) (refer agenda item FS.1.2).

7. In discussing the logbook data structure, DG Mare advised that the implementation of logbook requirements for fishing vessels is the responsibility of a Flag state, and RFBs cannot impose such requirements on its members. Any implementation of logbooks requires consultation with contracting parties, and it was premature to discuss the logbook data structure at this meeting.

8. CWP-FS noted that the CWP Secretariat was requested by the inter-session meeting in 2017 to work on logbooks in order to help harmonize and mainstream statistical reporting from data collection. Logbooks in the context of CWP would provide a high-level conceptual scheme, consistent with other data domains and using common concepts. As such, the logbook data structure was not intended as a specification for operationalization and implementation.

9. The detailed discussion on these three data structures (global capture production, catch, catch and effort) led to consideration of qualifiers on the concepts (e.g. mandatory, recommended, conditional, optional). In the CWP context, three qualifiers were considered appropriate: mandatory, recommended and optional:

- Global capture production: flag entity, fishing area, time, aquatic species, catch type and obs_measure with unit are mandatory, while other concepts are recommended obs_status, obs_value with currency and confidentiality is optional.
- Catch: in the geographic area concept: Countries EEZ, territorial seas and inland waters. Optional concepts are: fishing mode, obs_status, coverage, and confidentiality.
- Catch and effort: adding the term target or targeted species. Optional concepts are: fishing mode, fishing vessel, length classes.
- Further elaborate the definition of fishing effort and its units in combination with gears.

10. CWP-FS agreed to refer the three data structures to CWP-26 for endorsement (i.e. capture production, catch, catch and effort, Appendix 5 - Annex 1). Catch and effort data structure is to be endorsed module-based. The logbook data structure was referred back to ad-hoc TG-RH for further consideration in light of discussions under Agenda items FS.2.1 and FS.5.

11. CWP-FS agreed to develop implementation guidelines of CWP standard for reference harmonization (CWP-IS/2019/7) for the data structures (1- Capture production, 2- Catch and 3- Catch and effort) through use cases (e.g. Tuna Atlas).

12. CWP-FS suggested extending work on reference harmonization through the development of the proposed concept of the CWP catalogue that will disseminate various CWP global data structures, CWP classifications and codelists, and the reference data made available by CWP parties (with codelists mappings).

Finalization of GIS data and geospatial section of the CWP handbook (Agenda item FS.1.2)

13. Mr Emmanuel Blondel presented the proposed structure and content of the GIS sections for the CWP Handbook and data sharing and protocols for a CWP webpage (CWP-IS/2019/6).

14. The following sections were proposed for the Handbook:

- Spatial reference systems - with definitions of reference systems (SRS/CRS), their identification (SRID) with respect to existing registries (EPSG, ESRI) and different reference systems recommended depending on their purpose (data exchange and dissemination, area calculation, visualization).
- Geographic coordinates - with recommended standards including the use of Decimal Degrees, Degrees-Minutes-Seconds notation, the use of OGC Well-Known-Text (WKT) standard format and its extended form (EWKT) to ensure reporting of Spatial Reference System.
- Geographic classification systems - with definitions and a list of types of geographic classification systems (irregular areas, grids, linear systems, locations). A proposed definition of grid classification systems, retaining the CWP areal grid system, complemented with the CSIRO C-Squares coding system for flexibility purpose and higher resolution data handling.
- Water main areas - which includes reworked handbook part on FAO Major Areas for Fishing purpose, Areal Grid System and Countries. A proposed new part includes definitions on Water Jurisdiction Areas including definitions provided through the UNCLOS: Internal and Archipelagic waters, Territorial Seas, Contiguous Zone, Exclusive Economic Zones and International Waters (referred in other contexts as high seas or Areas Beyond National Jurisdiction).

15. A section on geographic Information formats and protocols was proposed for the webpage, with proposed recommended standards in i) formats, for data: CSV in combination with OGC WKT, any other OGC data format; and for metadata: Dublin Core, ISO/OGC 19115/19139 geographic metadata, Ecological Metadata Language (EML) for taxonomic emphasis; and ii) standard OGC protocols, for data: OGC Web Feature Service, and for metadata: OGC Catalogue Service for the Web (CSW).

16. In discussing this proposal, CWP-FS noted that:

- Decimal degree is a common format for describing geographic locations in electronic data exchange, while degrees and decimal minutes is a common format for manual reporting
- ISO 6709 is an alternative standard for representing locations by coordinates
- Equal area projection systems are recommended for use as these system preserve areal proportions worldwide
- The format of ESRI shapefiles may not be considered strictly ‘proprietary’ as the definition of the format was made public in the 1990s
- The Grid C-Square system is compatible with CWP areal grid coding system, and both are nested systems
- The centroids used in grid systems are cartesian centroids
- Further consideration be given to compatibility of Marine Regions Geographic IDentifier (MRGID, http://www.marineregions.org/mrgid.php) with current UN practices (e.g. overseas territories, disputed areas) and UNCLOS (e.g. EEZ)
- The list of usable formats (e.g. OGC) avoiding complex data structure (such as 3D shapes).

17. CWP-FS thanked the Technical Working Group on GIS for its work and agreed to refer this proposal to CWP-26 for endorsement, noting that minor editorial changes in the Handbook do not need CWP endorsement.

Revised International Standard Statistical Classification of Fishing Vessels (ISSCFV) (Agenda item FS.1.3)

18. Ms Jennifer Gee introduced the proposed version of the 2005 ISSCFV revision, put forward for endorsement at CWP-26 (CWP-IS/2019/8). During the inter-sessional meeting in 2017, CWP-FS agreed that FAO would prepare a mapping table together with a questionnaire for circulation with members for feedback towards eventual endorsement. As part of this process and specifically

concerning the non-fishing vessels, a second round of feedback was requested in September 2018 through the Global Record Open-Ended Working Group.

19. CWP-FS discussed the possible removal of the sub-category 'Otter Trawler' from the classification due to overlaps with other sub-categories. However, CWP-FS agreed to retain the sub-category with a footnote explaining the desire to remove any confusion. CWP-26 requested that the Secretariat formulate the footnote for approval by CWP Parties.

20. In further discussion, CWP-FS agreed to:
- Accept the latest proposed items from the fifth meeting of the Global Record Open-Ended Working Group (see the meeting report)
- Replace existing codes OV and OVX with new codes FX and FXX, respectively
- Move "Multipurpose vessels supporting fishing related activities" to a sub-category of the category "Vessels supporting fishing related activities" to avoid repetition.

21. CWP-FS agreed to refer this proposal to CWP-26 for endorsement, subject to the points above.

CWP Handbook (Agenda item FS.2)

Revised section on logbook guidelines (Agenda item FS.2.1)

22. Mr David Ramm, for the FAO Secretariat, introduced the proposed revisions to the Handbook focused on capture fishery statistics, including upgraded global guidelines for capture fisheries logbooks (CWP-IS/2019/9). These revisions aimed to improve: 1) the harmonization of common datasets structures and metadata, facilitate data reporting and data exchange among national, regional and international fishery organizations, for use in fishery statistics, 2) promote the integration of data across all types of capture fisheries (e.g. small-scale, large-scale, artisanal, industrial), and 3) Align the Handbook with relevant regional and global initiatives involving fishery data and statistics (e.g. FIRMS, GRSF, FLUX). The development of logbook guidelines followed earlier CWP recommendations that work on logbook was needed to help harmonize and mainstream statistical reporting from data collection. Elements of the revision draw on recent regional and global initiatives involving fisheries, data and statistics (e.g. FIRMS, GRSF, PSMA, FLUX, WECAFC). A draft document was circulated to CWP Members for comment, and CWP-IS/2019/9 incorporates the feedback received.

23. In discussing this proposal, CWP-FS noted that some discrepancies had arisen between the fishing activity concept and the catch and effort data structure (refer Agenda item FS.1.1), and with the nomenclature of ISSCFV (refer Agenda item FS.1.3).

24. CWP-FS also noted that:
- The purpose of the logbook guidelines needs further consideration and development
- The proposed capture fishery concept (CWP-IS/2019/9, Fig.1) was both ambitious and confusing, and required further consideration
- Fishing activity was defined as both a concept and an entity in UN/FLUX and this has caused some confusion in relating the proposed concept (CWP-IS/2019/9, Fig.3) to FLUX
- The term 'logbook' in the context of statistics should be replaced with 'fishing activity information'
- COFI has a definition for a fishery in the context of eco-labelling and that definition can be hosted on the CWP website.

25. CWP-FS agreed that the proposed logbook guidelines required further consideration and referred aspects of these guidelines to an ad-hoc Task Group, in hand with the related data domain of the reference harmonization (refer Agenda item FS.4).

26. CWP-FS suggested using the term "fishing activity information" instead of "logbook" because logbooks belong to the vessel and the Flag state. Instead, the information transmitted from the vessel to the Fisheries Monitoring Centre (FMC) is a subset of the information recorded in the logbook. That subset is called "Fishing Activity Information" in the EU implementation of Fishery Activities in FLUX.

27. CWP-FS agreed that the revisions of the other sections of the Handbook can proceed, subject to the following modifications:

- Combine the sections on 'time units' and 'date and time standard' into a single section on date and time definitions (refer Agenda item FS.2.2)
- Replace 'logbook' with 'fishing activity information'
- Forward the capture fishery concept (Fig.1) and text referring to that figure (i.e. paragraph in the section on capture fisheries statistics) for revision
- Replace 'non-fishing vessels' by the ISSCFV terminology for vessels supporting fishing related activities
- Revise the definitions of fish, live weight and retained catch (paragraph 28).

28. CWP-FS requested further consideration of the definition of 'fish' inter-sessionally. CWP-FS agreed to the following definitions, which were revised during the meeting (revisions indicated in **bold**):

> Live weight: **Total** weight of fish when captured **estimated as if it was** alive and prior to processing.
>
> Retained catch: **Estimated** component of the catch that is retained **onboard** during a fishing trip (refer to the catch concept, Fig. 2). **An estimate of** the retained catch is reported as total live weight of fish retained and in some fisheries the number of individuals retained is also required to be reported. If a retained catch is intended **for aquaculture**, then for the purpose of fishery and **aquaculture** statistics that retained catch is required to be recorded as 'unrecorded, rejected or dumped landings' and any post-release mortality of that catch is required to be recorded as 'discarded catch'
>
> Discarded catch: **Estimated** component of catch ... (refer CWP/2019/9 for the remaining part of this definition).

29. CWP-FS agreed to refer this proposal with changes as indicated above to CWP-26 for endorsement.

Review of other revised sections of CWP Handbook (Agenda item FS.2.2)

30. CWP-FS reviewed the proposal to revise other sections of the Handbook and add two sections to the CWP website. This proposal was introduced at CWP-AS-FS and consisted of: 1) new website sections on **i. sharing protocols and practices** and on **ii. regional references** and 2) a revised layout for the Handbook as follows:

- Introduction
  - Methodology for data collection
- General concepts
  - Conversion factors (moved from the section 'capture fishery statistics')
  - Time units
  - Date and time standard
  - Geographic dimension
  - Spatial reference systems
  - Geographic coordinates
  - Geographic systems
  - Country or areas

  - Main water areas (landing page only)
    - FAO Major Fishing Areas for Statistical Purpose
    - Areal Grid System
    - Water Jurisdictional Areas
- Capture fisheries statistics
  - Catch and landings
  - Nationality of catch and landings
  - Fishery Fleet
  - Fishers (moved from socio-economic)
  - Fishing Gear Classification
  - Fishing effort
  - Integrated environmental and economic accounting for fisheries
  - Fisheries statistics for an ecosystem approach
- Aquaculture statistics
  - Culture Environments (to be singled out as one page for higher visibility)
  - Farming systems (to be developed)
  - Fish farmers
- Socio-economic dimension
  - Core variables (minimum global data requirements)
    - Fisheries – Gross Value of Landings, Employment
    - Aquaculture – Gross Value of Production, Employment
  - Additional variables
    - Fisheries - Revenue; Costs; Capital value; Remuneration
    - Aquaculture – Revenue; Costs; Capital value; Remuneration

31. CWP-FS agreed to forward the website proposal to CWP-26 for endorsement, noting that FAO would implement updates to website and inform CWP Parties accordingly.

32. CWP-FS discussed the Handbook structure and agreed to the proposal taking into account the following changes:

- FAO web policy requires no more than 3 levels of headings (i.e. 2 levels in the Handbook) and as a result the level 3 headings above will be brought to level 2
- Combine the sections ‘time units’ and ‘date and time standard’ into a single section named ‘Date and time’
- Rename the section ‘Geographic dimension’ to ‘Geography’
- Delete the heading ‘Waters areas’ and bring sub-items to level 2
- Rearrange the ordering of sections in accordance to usage (e.g. move up ‘FAO Major Fishing Areas for Statistical Purpose’)
- Consider the use of quick links to increase prominence of frequently visited sections
- Transpose the layout of the socio-economic section (i.e. level 2: Fisheries and Aquaculture, level 3: core and additional variable)
- Include the aquaculture context in the section on conversion factors

33. CWP-FS agreed to refer this proposal with changes as indicated above to CWP-26 for endorsement.

For information – CWP relevant activities with a focus on SDGs and in particular SDG14 (Agenda item FS.3)

Towards statistical definition of Small Scale Fisheries (Agenda item FS.3.1)

34. This item was moved to CWP-26 (refer Agenda item 6.1).

Global Record of Stocks and Fisheries (Agenda item FS.3.2)

35. Mr Aureliano Gentile (FIRMS Secretariat) presented the development in FIRMS of a Global Record of Stocks and Fisheries (GRSF) as a collaborative instrument to support the global monitoring of fish stocks and fisheries status (CWP-IS/2019/Pr8). The GRSF can be tailored for use inter alia by countries, regional organizations and fishery-related institutions to support the dissemination and monitoring of their information. GRSF is a global repository of uniquely identified stocks and fisheries resulting from collation and merging of records across multiple data sources:

- Fisheries and Resource Monitoring System (FIRMS)
- RAM Legacy Stock Assessment Database (University of Washington)
- FishSource (program of Sustainable Fisheries Partnership).

36. In a growing data-dependent world, with communities seeking for the best available scientific evidence to apply the most effective management measures, the GRSF is the digital answer offering key services in support of: 1) stakeholders involved in global/regional/national state of stocks indicators and particularly for SDGs 14.4.1 and 14.2.2) public and private actors involved in seafood traceability and certification including catch documentation schemes, ecolabelling schemes, food safety, sustainable fisheries. The GRSF aims to provide a global repository of uniquely identified stocks and fisheries with standard codifications, thus enabling the formalization, collation, standardization, and sharing of marine resource and fisheries information. The unique stocks and fishery identifiers are the pillars of this initiative, which is aiming to boost connected knowledge on stocks and fisheries.

37. CWP-FS noted that the GRSF is being developed for capture fisheries. However, the system could be modified and extended to include aquaculture products.

UN/FLUX Fisheries Language for Universal Exchange. An overview, use cases and operational implementation (Agenda item FS.3.3)

38. Mr Frans Van Diepen (UNECE Secretariat) presented an overview, use cases and operational implementation of the UN/CEFACT Fisheries Language for Universal Exchange (FLUX, refer https://www.unece.org/uncefact/unflux) (CWP-IS/2019/Pr9). FLUX provides an harmonized message standard allowing Fishery Management Organizations (FMO) to automatically access the electronic data needed for stock management, fishing operation, fishing data, landing and sales information. FLUX is a messenger that offers a protocol to create a secure and configurable network between different parties. FLUX offers several advantages, including free, open and global standard to automate the collection and dissemination of the fishery catch data. It provides a common approach towards electronic logbooks for fishing vessels, interoperability between IT systems, and relatively easy exchange of data between parties. FLUX is strongly tied to XML as a data format. UNECE established a Team of Specialists on Sustainable Fisheries to promote, facilitate and support the implementation of sustainable fisheries standards on a global scale and particularly the UN/FLUX. The project started as a small group initiative of EU member states and later developed into a UN/CEFACT project that engaged experts from all regions of the world, and made it a global standard. The use of FLUX is mandatory for World Trade Organization (WTO) member states, and has been adopted inter alia by the EU and NEAFC.

39. DG Mare informed CWP-FS that the EU uses for all exchanges of fisheries activity information including VMS, vessel movements, and catch. The system is designed for communication between FMOs and there is no communication with fishing vessels. The system works well, and there are ongoing developments to extend system for inspection reports. DG Mare offered to share further information with CWP parties.

FAO AIS-based Atlas of fishing footprint and separation of catches within and outside EEZs (Agenda item FS.3.4)

40. This item was moved to CWP-26 (refer Agenda item 6.2).

Extension or Establishment of new Task Groups (Agenda item FS.4)

Proposal of Task Group on CWP statistical concepts and definitions (Agenda item FS.4.1)

41. CWP-FS considered the requirements for the extension of existing Task Groups (TGs) or establishment of new TGs in order to develop its work during the inter-sessional period.

42. CWP-FS agreed to address the following topics as terms of reference of ad-hoc TGs in the next inter-sessional period. A tentative plan is to have four ad-hoc TGs:

Ad-hoc TG on fishing concepts
- Fishing effort: potential standard (including consideration of STATLANT B)
- Fishing activity information section of the handbook

Ad-hoc TG on catch concepts
- To elaborate and review CWP Catch Concept Diagram Annex B1
- Retained catch, Bycatch, Intended catch
- Consider the broader context of recreational, small-scale, artisanal, commercial, semi-industrial and industrial fisheries

Ad-hoc TG on reference harmonization (TG-RH)
- CWP catalogue, Implementation guidelines
- CWP coding system for water jurisdiction areas, territorial Seas and inland waters
- Fishing activity (presented as logbook) data structure

43. CWP-FS agreed to extend the work of TG-RH through a new TG (TG-RH 2):
- Continue developing the data structures in particular the logbook data structure
- Develop implementation guidelines for the practical implementation of the data structures
- Develop a CWP catalogue
- Develop a coding system for waters in jurisdictional areas

44. This proposal of work through the incoming inter-session is referred to CWP-26 for endorsement.

Selection of Capture Fishery Group Coordinators (Agenda item FS.5)

45. Ms Osypchuk indicated her unavailability to continue as CWP-FS Coordinator and CWP-FS sought nominations for a new Coordinator. Ms Osypchuk nominated Mr Fabio Fiorellato (IOTC) who was unanimously endorsed as CWP-FS Coordinator from the start of the forthcoming inter-sessional period.

Draft and Report adoption (Agenda item FS.6)

46. The report to be presented to the CWP session will highlight the recommendations and include a work plan and topic outline for the ad-hoc Task Groups.

APPENDIX 5 – Annex 1

Data structures relevant to capture fishery statistics

1- Data structure "Global Capture Production"

MODULE/CONCEPT		CLASSIFICATION SYSTEM	CODELIST	CODELIST ID	DESCRIPTION	**M**andatory /**R**ecommended /**O**ptional
ADMINISTRATIVE/ POLITICAL ENTITY	**FLAG ENTITY**	UN Standard country or area codes for statistical use (M49)	M49 codelist	M49_CODE	The M49 is presented in the CWP handbook where it is mapped to ISO Alpha2 and ISO Alpha3 list of countries and areas	M
GEOGRAPHIC AREA	**FISHING AREA**	FAO Major Fishing Areas for statistical purposes	FAO Fishing Areas	FAO_WATERAREA_GROUPS	FAO Major Fishing Areas for statistical purposes and their breakdown http://www.fao.org/3/bt979e/bt979e.pdf	M
	TIME	Gregorian civil calendar according to ISO 8601	Time units	TIME_UNIT	The ISO 8601 provides coding conventions of these time resolution units e.g. 2019, Q1, 05/2019, days, …	M
CATCH	**AQUATIC SPECIES**	ASFIS List of Species for Fishery Statistics Purposes	Inter-agency 3-alpha code (3A_CODE)	3A_CODE	Species reference	M
	CATCH_TYPE	CWP Catch type concepts (defined in the CWP handbook)	Catch type	CATCH_TYPE	In this structure: Catch type corresponds to the Nominal Catch defined as the live weigh equivalent of the landings (NOMINAL CATCHES = LANDINGS * CONVERSION FACTORS) http://www.fao.org/3/bt981t/bt981t.pdf	M
	OBS_ MEASURE				Amount or quantity of the observation measure (a positive integer number)	M
	UNIT	Unified Code for Units of Measure (UCUM)	Units of measure	UNIT	Unit of measure (e.g. tonnes or number of individuals)	M
	OBS_STATUS	FAO statistical standard for Observation status flags	Observation Status Flag	FAO_FLAG_STATUS	FAO Observation status flagging codes (e.g. "E"Estimated value, "R"Revised, "U" unknown, "…" negligible, Official)	M
	OBS_VALUE				Monetary value of production	R
	CURRENCY	The International Standard for currency codes ISO 4217	ALPHABETIC CODE of ISO 4217:2015	ALPHABETIC_CODE	Unit of measure (e.g. USD for US dollar)	R
	CONFIDENTIALITY	SDMX cross-domain codelists	Confidentiality status	CONF_STATUS	The information about the sensitivity and confidentiality status of the data. (e.g. F: free for publication, N: Not for publication, restricted for internal use only) (not mandatory)	O

2- Data structure “Catch”

MODULE/CONCEPT		CLASSIFICATION SYSTEM	CODE LIST	CODE LIST ID	DESCRIPTION	**M**andatory /**R**ecommended /**O**ptional
ADMINISTRATIVE/ POLITICAL ENTITY	**FLAG ENTITY**	UN Standard country or area codes for statistical use (M49)	M49 codelist	M49_CODE	The M49 is presented in the CWP handbook where it is mapped to ISO Alpha2 and ISO Alpha3 list of countries and areas	M
GEOGRAPHIC AREA	**FISHING AREA**	FAO Major Fishing Areas for statistical purposes	FAO Fishing Areas	FAO_WATERAREA_GROUPS;	FAO Major Fishing Areas for statistical purposes and their breakdown http://www.fao.org/3/bt979e/bt979e.pdf	M
		Countries EEZ, continental seas and inland waters	Marine Regions	EEZ_MARINEREGIONS	Marine Regions list of maritime boundaries and marine areas and locations. This register classification is managed by VLIZ Belgium Marine Institute http://www.marineregions.org/eez.php	M
		RFB competence area	FAO RFB competence area	RFB_COMPAREAS	RFB competence area codes are based on the RFB acronym (in English)	M
	TIME	Gregorian civil calendar according to ISO 8601	Time units	TIME_UNIT	The ISO 8601 provides coding conventions of these time resolution units e.g. 2019, Q1, 05/2019, days, …	M
FISHING PRACTICE	**FISHING GEAR**	The International Standard Statistical Classification of Fishing Gear (ISSCFG)	Gear Type Code (standard abbrevation)	GEAR_A_CODE	Gear type code corresponding to the standard abbreviation of gear category http://www.fao.org/3/a-bt988e.pdf	M
	FISHING MODE	Gear Practice Qualifier	Free school/associated schools	FISH_MODE	Fishing mode utilized for catching tuna	O
CATCH	**AQUATIC SPECIES**	ASFIS List of Species for Fishery Statistics Purposes	Inter-agency 3-alpha code	3A_CODE	Species reference	M
	CATCH TYPE	CWP Catch type concepts (defined in the CWP handbook)	Catch type	CATCH_TYPE	Catch types presented in the catch diagram of the CWP handbook (gross catch, retained catch, landings, discards) http://www.fao.org/3/bt981t/bt981t.pdf	M
	OBS_MEASURE				Amount or quantity of the observation measure (a positive integer number)	M
	UNIT	Unified Code for Units of Measure (UCUM)	Units of measure	UNIT	Unit of measure (e.g. tonnes or number of individuals)	M
	OBS_STATUS	FAO statistical standard for Observation status flags	Observation Status Flag	FAO_FLAG_STATUS	FAO Observation status flagging codes (e.g. "E"Estimated value, "R"Revised, "U" unknown, "…" negligible, Official)	M
	COVERAGE		Coverage status	COVERAGE_STATUS	The degree of coverage of catch data for the fishing operations (not mandatory)	O
	CONFIDENTIALITY	SDMX cross-domain codelists	Confidentiality status	CONF_STATUS	The information about the sensitivity and confidentiality status of the data. (eG6:G16.g. F: free for publication, N: Not for publication, restricted for internal use only) (not mandatory)	O

Note: The regional level is not represented in this structure and will be part of the implementation guidelines

3- Data structure “Catch and Effort”

MODULE/CONCEPT		CLASSIFICATION SYSTEM	CODELIST	CODELIST ID	DESCRIPTION	**M**andatory /**R**ecommended /**O**ptional
ADMINISTRATIVE/ POLITICAL ENTITY	**FLAG ENTITY**	UN Standard country or area codes for statistical use (M49)	M49 codelist	M49_CODE	The M49 is presented in the CWP handbook where it is mapped to ISO Alpha2 and ISO Alpha3 list of countries and areas	M
GEOGRAPHIC AREA	**FISHING AREA**	FAO Major Fishing Areas for statistical purposes	FAO Fishing Areas	FAO_WATERAREA_GROUPS	FAO Major Fishing Areas for statistical purposes and their breakdown http://www.fao.org/3/bt979e/bt979e.pdf	M
		CWP Areal Grid System	CWP Areal Grid System	SQUARE_ID	CWP areal Grid system http://www.fao.org/cwp-on-fishery-statistics/handbook/general-concepts/major-fishing-areas-general/en/	M
		Countries EEZ	Marine Regions	EEZ_MARINEREGIONS	Marine Regions list of maritime boundaries and marine areas and locations. This register classification is managed by VLIZ Belgium Marine Institute http://www.marineregions.org/eez.php	M
		RFB competence area	FAO RFB competence area	RFB_COMPAREAS	RFB competence area codes are based on the RFB acronym	M
	TIME	Gregorian civil calendar according to ISO 8601	Time units	TIME_UNIT	The ISO 8601 provides coding conventions of these time resolution units e.g. 2019, Q1, 05/2019, days, …	R
FISHING PRACTICE	**FISHING GEAR**	The International Standard Statistical Classification of Fishing Gear (ISSCFG)	Gear Type Code (standard abbreviation)	GEAR_A_CODE	Gear type code corresponding to the standard abbreviation of gear category http://www.fao.org/3/a-bt988e.pdf	M
	FISHING MODE	Gear Practice Qualifier	Free school /associated schools	FISH_MODE	Fishing mode (e.g. utilized for catching tuna) details in Annex 2	O
FLEET SEGMENT	**FISHING VESSEL**	International Standard Statistical Classification of Fishery Vessels by Vessel Types (ISSCFV-Vessel Type)	Code of Vessel Type (standard abbreviation)	FISH_VESSEL	The standard abbreviation of vessel type http://www.fao.org/3/a-bt983e.pdf	O
	LENGTH CLASSES	International Standard Statistical Classification of Vessels (ISSCFV - Length Classes) by Length Classes	Code Length Overall Classes	L_O_A_CLASS	Vessel Size by L.o.A. Classes (meters) http://www.fao.org/3/a-bt985e.pdf	O
EFFORT	**OBS_MEASURE**				The amount of fishing effort of a specific a gear type over a certain period of time	M
	FISHING EFFORT UNIT	CWP Effort concepts definitions (For Fishing effort measures)	Effort measure descriptor	EFFORT_DESCRIPTOR	Measures of effort for each fishing gear (e.g. nb of sets, nb of hours fished, …) http://www.fao.org/3/BS245E/bs245e.pdf. For t-RFMOS please refer to the proposal of recommended and alternative effort units for each gear. Annex 3	O
CATCH	**AQUATIC SPECIES**	ASFIS List of Species for Fishery Statistics Purposes	Inter-agency 3-alpha code	3A_CODE	Species reference	M
	CATCH TYPE	CWP Catch type concepts (defined in the CWP handbook)	Catch type	CATCH_TYPE	Catch types presented in the catch diagram of the CWP handbook (gross catch, retained catch, landings, discards) http://www.fao.org/3/bt981t/bt981t.pdf	R
	OBS_MEASURE				Amount or quantity of the observation measure (a positive integer number)	M
	UNIT	Unified Code for Units of Measure (UCUM)	Units of measure	UNIT	Unit of measure (e.g. tonnes or number of individuals)	R
	OBS_STATUS	FAO statistical standard for Observation status flags	Observation Status Flag	FAO_FLAG_STATUS	FAO observation status flagging codes (e.g. "E"Estimated value, "R"Revised, "U" unknown, "…" negligible, Official)	R
	COVERAGE		Coverage status	COVERAGE_STATUS	The degree of coverage of catch data for the fishing operations (not mandatory)	O
	CONFIDENTIALITY	SDMX cross-domain codelists	Confidentiality status	CONF_STATUS	The information about the sensitivity and confidentiality status of the data. (e.g. F: free for publication, N: Not for publication, restricted for internal use only) (not mandatory)	O

APPENDIX 6

Report of the Intersessional Meeting of the Aquaculture Subject Group 15–16 May 2019

Selection of Aquaculture Group Coordinator(s) and Appointment of Meeting Chair (Agenda item AS.1)

1. Mr Fabio Massa (GFCM) was unanimously endorsed as the CWP-AS coordinator from the start of the forthcoming inter-sessional period. Mr Xiaowei Zhou, co-coordinator of the CWP-AS, acted as chairperson.

Review of progress of CWP-AS activities since CWP-25 (Agenda item AS.2)

2. The activities carried out since CWP-25 reviewed at the sixth meeting of CWP-AS cover (1) ISSCAAP update, (2) farming system classification update, and (3) CWP Aquaculture Handbook.

Finalize the proposal for an updated ISSCAAP classification to better suit the needs of aquaculture (Agenda item AS.2.1)

3. Mr Xiaowei Zhou recalled the background for an updated ISSCAAP classification. A draft proposal for an updated ISSCAAP to better suit the needs of aquaculture was tabled for review and comments at the CWP meeting in Copenhagen in 2017. Following the recommendations made at the Copenhagen meeting, the draft proposal was circulated beyond CWP partner organizations to reach selected aquaculture professionals and data users to collect comments and suggestions for further improvement of the proposed revisions of the ISSCAAP (CWP-IS/2019/2).

4. Additional comments and suggestions from the aquaculture professionals and data users were assessed and consolidated to the usable and applicable extent, and have been incorporated in the final proposal for an updated ISSCAAP classification presented for review and finalization by the CWP-AS.

5. CWP-AS reviewed the improved proposal for ISSCAAP update thoroughly and agreed on its finalization, with the following change to be included in the list: Group 94 Miscellaneous aquatic plants to be kept in Division 9 and be renumbered as Group 99.

6. CWP-AS agreed to refer this proposal (Annex 1) with changes as indicated above to CWP-26 for endorsement.

Towards an updated international aquaculture farming systems classification for use in aquaculture statistics (Agenda item AS.3)

7. Mr Xiaowei Zhou presented a preliminary structured list of aquaculture farming systems (culture methods) to CWP-AS as baseline information and reference to update the international aquaculture farming systems classification in use since the 1980s. The list is structured with hierarchy levels under 15 categories based on a set of criteria and consideration (CWP/IS/2019/3).

8. CWP-AS carefully reviewed the list. For the set of criteria, CWP-AS did not suggest any amendment and recommended to use them for further use as guiding principles to enrich the current exhaustive list of farming systems and to consolidate the categorization for an updated aquaculture farming systems classification. For the categorization, the CWP-AS proposed the following modifications:

- Move categories 7 (close containment culture system) and 8 (fish culture vessels) to category 15 (other culture methods)
- Move category 10 (aquaponics) to category 9 (recirculation aquaculture systems)
- Modify in category 4 (lakes and other natural water bodies used for aquaculture) the following:
  - Rename category as ‘lakes, lagoons and other natural water bodies used for aquaculture’
  - Rename item ‘potholes’ as ‘pothole lakes’
  - Add item ‘cirque lakes’.

9. The farming system categories consolidated by the CWP-AS and the adjusted exhaustive list of farming systems are reported in **Annex 2**.

10. CWP-AS recommended FAO, through its global networking experts and professionals, to identify possible omissions from the current list of certain farming methods in use for inclusion in the exhaustive list. To finalize the update for international aquaculture farming systems classification to be part of the CWP Aquaculture Handbook, further improvement is required to consolidate and adjust the farming methods classification structure with a focus on meeting national needs for data collection in accordance with local conditions.

11. CWP-AS agreed to present the list with changes as indicated above to CWP-26 for information on the progress being made.

Aquaculture section in the revised handbook (Agenda item AS.4)

12. The current aquaculture section of the CWP handbook has currently only one main page. CWP-AS discussed about important topics to be included and agreed on the following content agreement:

Concepts
- Definitions
- Culture environment
- Culture methods
- Production areas
- Measurement units and conversion

Data
- Seed production
- Wild seed production
- Artificial seed production
- Artificial seeds as input into culture-based fisheries
- Grow-out production
- Quantity
- Monetary Value
- Culture area and facilities
- Area or volume by culture method

13. CWP-AS agreed to present the proposed structure of the Aquaculture section of the CWP handbook to CWP-26 and propose the creation of a CWP-AS ad-hoc Task Group to work on it.

Any other business (Agenda item AS.5)

14. CWP-AS agreed on the following work plan for the inter-sessional period:

1. Implementation of the new ISSCAAP
2. Improving and finalizing proposal for the update of
   A. international aquaculture farming systems classification for production statistics
   B. international aquaculture production area and facility classification for statistics
3. Develop the content of the Aquaculture section of the CWP Handbook.

Draft and Report adoption (Agenda item AS.6)

Work plan for 2019-2022 (Agenda item AS.6.1)

15. The report to be presented to CWP26 will highlight the recommendations and propose a work plan and the proposal of the creation of a CWP-AS ad-hoc Task Group to work on the Aquaculture section of the CWP Handbook.

APPENDIX 6 - Annex 1

Proposal for an updated ISSCAAP

The proposal for an updated ISSCAAP developed by CWP-AS is in right column in the table. The highlighted codes and text indicate the proposed changes or new creations. The ISSCAAP codes in brackets indicate the proposed recording. The existing ISSCAAP Divisions and Groups are listed in the left column for comparison.

ISSCAAP in current use		ISSCAAP with new structure proposed for update	
1 Freshwater fishes		**1 Freshwater fishes**	
11	**Carps, barbels and other cyprinids**	**11**	**Carps, barbels, river suckers**
12	**Tilapias and other cichlids**	**12**	**Loaches and hillstream loaches**
13	**Miscellaneous freshwater fishes**	**(13)**	**Tilapias and other cichlids**
		14	**Freshwater catfishes**
		15	**Freshwater perches and basses**
		16	**Snakeheads**
		17	**Characins**
		18	**Swamp eels and spiny eels**
		(19)	**Miscellaneous freshwater fishes**
2 Diadromous fishes		**2 Diadromous and euryhaline fishes**	
21	**Sturgeons, paddlefishes**	**21**	**Sturgeons, paddlefishes**
22	**River eels**	**22**	**Anguilla eels**
23	**Salmons, trouts, smelts**	**23**	**Salmons, trouts, smelts**
24	**Shads**	**24**	**Shads**
25	**Miscellaneous diadromous fishes**	**25**	**Milkfish, mullets**
		26	**Euryhaline puffer fishes**
		(27)	**Miscellaneous diadromous and euryhaline fishes**
3 Marine fishes		**3 Marine fishes**	
31	**Flounders, halibuts, soles**	**31**	**Flounders, halibuts, soles and other flatfishes**
32	**Cods, hakes, haddocks**	**32**	**Cods, hakes, haddocks**
33	**Miscellaneous coastal fishes**	**33**	**Miscellaneous coastal fishes**

34	**Miscellaneous demersal fishes**	**34**	**Miscellaneous demersal fishes**
35	**Herrings, sardines, anchovies**	**35**	**Herrings, sardines, anchovies**
36	**Tunas, bonitos, billfishes**	**36**	**Tunas, bonitos, billfishes**
37	**Miscellaneous pelagic fishes**	**37**	**Miscellaneous pelagic fishes**
38	**Sharks, rays, chimaeras**	**38**	**Sharks, rays, chimaeras**
39	**Marine fishes not identified**	**39**	**Marine fishes not identified**
4 Crustaceans		**4 Crustaceans**	
41	**Freshwater crustaceans**	**41**	**Freshwater shrimps and prawns**
42	**Crabs, sea-spiders**	**42**	**Freshwater crayfishes**
43	**Lobsters, spiny-rock lobsters**	**(43)**	**Miscellaneous freshwater crustaceans**
44	**King crabs, squat-lobsters**	**(44)**	**Marine crabs, sea-spiders**
45	**Shrimps, prawns**	**(45)**	**Lobsters, spiny-rock lobsters**
46	**Krill, planktonic crustaceans**	**(46)**	**King crabs, squat-lobsters**
47	**Miscellaneous marine crustaceans**	**(47)**	**Marine shrimps and prawns**
		(48)	**Krill, marine planktonic crustaceans**
		(49)	**Miscellaneous marine crustaceans**
5 Molluscs		**5 Molluscs**	
51	**Freshwater molluscs**	**51**	**Freshwater molluscs**
52	**Abalones, winkles, conchs**	**52**	**Abalones, winkles, conchs and other sea snails**
53	**Oysters**	**53**	**Oysters**
54	**Mussels**	**54**	**Sea mussels**
55	**Scallops, pectens**	**55**	**Scallops, pectens**
56	**Clams, cockles, arkshells**	**56**	**Clams, cockles, arkshells and other bivalves**
57	**Squids, cuttlefishes, octopuses**	**57**	**Squids, cuttlefishes, octopuses**
58	**Miscellaneous marine molluscs**	**58**	**Miscellaneous marine molluscs**
6 Whales, seals and other aquatic mammals		**6 Whales, seals and other aquatic mammals**	

61	**Blue-whales, fin-whales**
62	**Sperm-whales, pilot-whales**
63	**Eared seals, hair seals, walruses**
64	**Miscellaneous aquatic mammals**
7 Miscellaneous aquatic animals	
71	**Frogs and other amphibians**
72	**Turtles**
73	**Crocodiles and alligators**
74	**Sea-squirts and other tunicates**
75	**Horseshoe crabs and other arachnoids**
76	**Sea-urchins and other echinoderms**
77	**Miscellaneous aquatic invertebrates**
8 Miscellaneous aquatic animal products	
81	**Pearls, mother-of-pearl, shells**
82	**Corals**
83	**Sponges**
9 Aquatic plants	
91	**Brown seaweeds**
92	**Red seaweeds**
93	**Green seaweeds**
94	**Miscellaneous aquatic plants**

61	**Blue-whales, fin-whales**
62	**Sperm-whales, pilot-whales**
63	**Eared seals, hair seals, walruses**
64	**Miscellaneous aquatic mammals**
7 Miscellaneous aquatic animals	
71	**Frogs, salamanders and other amphibians**
72	**Turtles**
73	**Crocodiles, alligators and caimans**
74	**Sea-squirts and other tunicates**
75	**Horseshoe crabs and other arachnoids**
76	**Sea-urchins and other echinoderms**
77	**Sea cucumbers**
78	**Marine worms**
(79)	**Miscellaneous aquatic invertebrates**
8 Miscellaneous aquatic animal products	
81	**Pearls, mother-of-pearl, shells**
82	**Corals**
83	**Sponges**
9 Aquatic plants	
91	**Brown algae**
92	**Red algae**
93	**Marine macro green algae**
94	**Aquatic Cyanobacteria (blue-green algae)**
95	**Miscellaneous aquatic micro-algae**
96	**Miscellaneous aquatic macrophytes**
(99)	**Miscellaneous aquatic macrophytes**

APPENDIX 6 - Annex 2

Consolidated categorization of aquaculture farming methods

1. Earthen ponds
2. Tanks and raceways
3. Man-made and semi man-made water bodies
4. Lakes, lagoons and other natural water bodies
5. Cages
6. Pens and enclosures
7. RAS (recirculating aquaculture systems)
8. Rice-Fish culture and integration with other aquatic crop plantation
9. Culture methods for shelled molluscs
10. Culture methods for seaweeds
11. Culture methods for microalgae
12. Other culture methods

Adjusted exhaustive list of aquaculture farming methods

1 Earthen ponds

excavated or constructed earthen ponds (usually of regular shape)
modified or renovated natural ponds (often less regular in shape and larger in size)

earthen ponds without lining
earthen ponds with lining
- lined with synthetic material
- lined with cement and other materials

rain-fed undrainable earthen ponds
irrigated and drainable earthen ponds
- irrigated with surface water
- irrigated with underground water
- irrigated with brackish or sea water
- irrigated with underground sea water

earthen pond monoculture
earthen pond polyculture
- in-pond mixed polyculture
- partitioned pond polyculture
  - pond polyculture with species partitioned by net or fence
  - pond polyculture with species partitioned with cages or happas
  - pond polyculture with species partitioned with baskets or boxes on floating racks

earthen pond culture without in-pond integration
earthen pond culture with in-pond integration
- in-pond integration with aquatic vegetable planted on pond bottom
- in-pond integration with floating aquatic plants
- in-pond integration with plant crops on floating beds

earthen ponds without aeration
earthen ponds with aeration
- aerated with floating aerator, paddle wheel or air-jet
- aerated with on-bottom nano-hose aeration

earthen pond culture without effluent treatment for discharge
earthen pond culture with effluent treatment for discharge
  effluent treated on farm with manufactured facilities and equipment
  effluent treated with uses of extra ponds for sedimentation and bio-treatment
    effluent treated with on-farm uses of extra ponds for treatment
    effluent treated with communal uses of extra ponds for treatment

earthen pond with in-pond raceway recirculating system
  with in-pond raceway recirculating system built on bottom
  with in-pond raceway recirculating system floating above bottom
earthen pond with out-of-pond tank recirculating system
partitioned pond system & split-pond system

openly exposed earthen ponds
greenhouse-covered earthen ponds
  earthen ponds covered with greenhouse of permanent manufactured structure
  earthen ponds covered with greenhouse of temporary structures

earthen ponds with steep dykes
earthen ponds with exposed area for other related uses
  Earthen ponds with area for sunbath or feeding of farmed animals (turtles, frogs, etc.)
  Earthen ponds with area for green folder plantation for feeding farmed animals in ponds

earthen ponds irrigated without heating or cooling
earthen ponds irrigated with heating or cooling
  earthen ponds irrigated and heated
    earthen ponds irrigated and heated with geothermal energy
    earthen ponds irrigated and heated with other energy (e.g. power plant waste hot water)
  earthen ponds irrigated and cooled
    earthen ponds irrigated and cooled with cold water from LNG regasification terminal
    earthen ponds irrigated and cooled with OTEC deep sea water

2 Tanks and raceways

raceways
  raceways of permanent construction (cement and bricks, etc.)
  raceways constructed with removable structure and materials
  traditional stone walled flow-through tanks in mountainous regions

raceways openly exposed
raceways under roof or covering
raceways in greenhouse
  raceways in greenhouse of permanent manufactured structure
  raceways in greenhouse of temporary structures

tanks
  tanks of permanent construction (cement and bricks, etc.)
  tanks constructed with removable structure and materials
  tanks manufactured by industry

tanks openly exposed
tanks under roof or covering
tanks in greenhouse
  tanks in greenhouse of permanent manufactured structure
  tanks in greenhouse of temporary structures

* additional filter by type water used for raceways and tanks:
  surface water, pumped or diverted
  underground water
  brackish or sea water
  underground sea water

3 Man-made and modified water bodies used for aquaculture

small reservoirs, dammed water bodies and barrages
irrigation canals and ditches
borrow pits and dugouts
ex-mining pools
impounded land depression areas (caused by mining, etc.)
crop farm ponds and farm reservoirs
small lagoons or salt marshes modified with water management facilities like water gates
valliculture and jiwei (gei-wai), etc.

** additional filter by period of impoundment in the year*
  of permanent impoundment
  of seasonal impoundment

4 Lakes and other natural water bodies used for aquaculture

lakes
oxbow lakes (locally called "boars" in Bangladesh and West Bengal, India)
wetland (locally called "beel" or "beal" in Bangladesh and India)
seasonal flood plains
seasonal lakes (locally called seasonal tanks in Sri Lanka)
potholes (in North America)

** additional filter by period of impoundment in the year if needed*
  of permanent impoundment
  of seasonal impoundment

5 Cages

traditional / conventional net cages
  stationary traditional / conventional net cages in shallow waters
  floating traditional / conventional net cages
  traditional wooden / bamboo cages

modern net cages

  metal framed floating net cages (HDPE = high-density polyethylene)
  metal mesh cages
  perforated metal sheet cages
  flexible framed floating net cages
  HDPE framed floating net cages (HDPE = high-density polyethylene)
    with on-the-spot monitoring, control and management platform
    without off-the-spot land-based monitoring, control and management

modern net cages of synthetic netting materials
modern net cages of copper alloy wire net fitting

modern net cages installed in protected coastal area or inside fjords
modern net cages installed in exposed offshore area

modern net cages without fish waste collection devices for disposal/treatment on land
modern net cages with fish waste collection devices for disposal/treatment on land

ultra-modern net cages (engineered/manufactured with latest tech and automation)
floating (or semi-submersible) ultra-modern net cages
fully submersible or bottom-sitting ultra-modern net cages

6 Pens and enclosures

traditional net pens supported with poles
modern net pens with fortified supporting frame

enclosures without supporting poles or frame
enclosures supported with poles or frame

7 Recirculation aquaculture systems (RAS) with manufactured equipment

RAS system with tailored design and manufactured facilities and equipment
single storey large rearing tank installation
multiple storey small-to-medium rearing tank installation
stacked multi-storey boxes for individual rearing of aquatic animals (crab condominium)
RAS system using modified recycled structures (out-of-use shipping containers, etc.)

aquaponics
commercial scale aquaponics system
small backyard scale aquaponics system

8 Rice-fish culture and other integrated farming systems with plant crop

rice-fish culture
rice-fish culture in conventional rice field (paddy)
rotational rice-fish culture
rice-fish co-culture
rice-fish culture in renovated rice field (paddy) to suit aquaculture
rotational culture
co-culture

rice-fish culture without artificial feeding
rice-fish culture with artificial feeding

farming integrated with other aquatic plant crops
integration with aquatic vegetables
integration with aquatic herbs, flower, etc.

9 Culture of shelled molluscs (and benthic animals like sea cucumber & sea urchins)

on-bottom culture
sea ranching - seeds sowed at seabed
inter-tidal mudflat - seeded sowing (shelled molluscs)
(polyculture with other species in coastal earthen ponds is also commonly practiced)
(culture of gastropod molluscs in tanks is also commonly practiced)

off-bottom culture
- longline ropes (suspended vertically in column) with anchors and buoyance
- net bags on stationery racks installed in inter-tidal zone or in shallow sea
- baskets or trays on stationery racks installed in inter-tidal zone or in shallow sea
- rafts (with seeded ropes for culture attached)
- poles (of rock, cement, bamboos and other materials)
- lantern net cages suspended from floating longline or raft (mostly for scallops)
- perforated plastic boxes suspended from floating longline or raft
- abalone houses in floating net cages
- automated truss-structured abalone culture platform (modern high-tech)

10 Culture of marine macroalgae (seaweeds)

longline ropes (suspended horizontally or vertically in the sea) with anchors and buoyance
web or net of ropes fixed on stationery racks or poles typically in inter-tidal areas
rafts or floating racks (with seeded ropes for culture attached)
floating baskets (chained with ropes; seaweeds protected from grazing animals)
sleeve shaped long net bags (seaweed seedling held inside)
suspended net trays (mostly for sea grapes)
(tanks are used, too)

11 Culture of microalgae (including cyanobacteria, etc.)

plastic bags (transparent)
closed biophotoreactors systems (tubes or flat panels)
(raceways and tanks are more commonly used)
(tanks also used)

12 Other culture methods

specified with description for data collection / reporting
- close containment culture system (in the sea, lake or reservoirs)
- fish culture vessels
  - modified from decommissioned cargo ships
  - purposely designed and constructed fish culture vessels

not specified for data collection / reporting

APPENDIX 7

Report of the 2017 Intersessional Joint Meeting of the Aquaculture and Fishery Subject Groups, 19–22 June 2017

The report is available here:
http://www.fao.org/documents/card/en/c/577b771c-d131-4a55-a4b5-3ca2b1d142ef/

This document contains the report of the twenty-Sixth Session of the Coordinating Working Party on Fisheries Statistics (CWP) and meetings of the Aquaculture Subject Group and Fishery Subject Group held in Rome, Italy, from 15–18 May 2019.

The CWP provides a mechanism to coordinate the statistical programs conducted by intergovernmental organizations including regional fishery bodies with a remit for fishery statistics. The two Subject Groups – Aquaculture (CWP-AS) and Fisheries (CWP-FS) conducted their own meetings to review the progress made and develop work plans for the next intersessional period. The Session reviewed and approved updated structure and sections of the CWP Handbook on statistics for aquaculture, capture fisheries, the socio-economic dimension, and a section on GIS. The Session also reviewed progress in developing data structures under the CWP standard for reference harmonization for capture production and aquaculture production, which defines the structure of statistical concepts and the coding system to improve data exchange and reporting between national, regional and global organizations in an increasing digital context. The Session endorsed the International Standard Statistical Classification of Fishing Vessels (ISSCFV) and approved the International Standard Statistical Classification for Aquatic Animals and Plants (ISSCAAP) that will be refined.

The Session also developed a classification for aquaculture farming systems.

ISBN 978-92-5-131886-7 ISSN 2070-6987

9 789251 318867

CA6684EN/1/10.19