COORDINATING WORKING PARTY ON FISHERY STATISTICS (CWP)
The Intersessional Fishery Subject Group Meeting
Swakopmund, Namibia 25-27 February 2015
Report

OPENING OF THE MEETING

1. The Intersessional Meeting of the Coordinating Working Party on Fishery Statistics (CWP), Capture Fishery Subject Group meeting (CWP-FS) was held on 25-27 February 2015 in Swakopmund, Namibia, with the kind hosting by the South Eastern Atlantic Fisheries Organization (SEAFO). Mr George Campanis, the Coordinator of the Fishery Subject Group, opened the meeting and briefly explained the logistics. The meeting was attended with seven experts from four CWP participating organizations (Eurostat represented by DG Mare, FAO, NAFO, and SEAFO) and additional three participants from the Benguela Current Commission (BCC), the Western Central Atlantic Fishery Commission (WECAFC) and the South Pacific Regional Fisheries Management Organization (SPRFMO). Ms Friderike Oehler of Eurostat and Ms Dawn Borg Costanzi and Mr Erik Van Ingen of FAO participated to some of discussion through internet connection. The list of participants is in Attachment 1.

2. This was the third Fishery Group meeting after establishing two subject groups at the 23rd CWP session and the first intersessional meeting after the 24th CWP session (CWP-24).

ADOPTION OF THE AGENDA

3. The FS Coordinator proposed to add two agenda items, “Clarification of operating procedure” and “Direction of CWP and CWP Membership”. The draft agenda was adopted after this modification. The finalized agenda is in Attachment 2.

CLARIFICATION OF OPERATING PROCEDURE

4. Following the request of the FS Coordinator, the Secretariat explained the arrangement of subject group (Attachment 3) agreed at the 23rd CWP session. It was explained that with the establishment of two subject groups, the main responsibility of reviewing the statistical requirements, developing standards, and proposing necessary collaboration is shifted to the relevant subject groups, while the main session remains as a body for final adoption of the decisions taken by each group. The main session is also responsible for reviewing and approving the work plans of subject groups during the intersessional period.

5. The subject group would work independently according to the work plans and could make operational decisions to complete the necessary tasks. It was pointed out that the subject groups should hold their meetings concurrently to the main session.

REVIEW OF ACTIVITIES BY PARTICIPATING ORGANIZATIONS

6. The CWP participating organizations briefly reported their recent activities relating to fishery statistics. The organizations participating in the meeting by invitation were invited to present their roles in fisheries statistics.

7. The NAFO indicated that it had made progress in four areas in addition to the regular update of statistics. First it has convened a joint science/management working group to review and make recommendations on the procedure for catch estimation, focused on halibut, cod and American plaice, which will be shared with the Group. Secondly, the NAFO is reviewing its conversion factors to harmonize values across Contracting Parties. The NAFO and EU have agreed on the harmonization of STATLANT reporting dates. The NAFO has made vessel-transmitted information (daily catch reports) available to its Scientific Council. This was used to provide catch figures for scientific assessments in 2014 as a full set of STATLANT 21A was not available at the time of the meeting.

8. The SEAFO provided catch data to the FAO using data agreed upon at the annual Scientific Committee meetings. The SEAFO Commission also agreed to provide logbook data to the SEAFO Secretariat to be used as a means of validating historical catch data. During the intersessional period, the SEAFO agreed that the definition of SEAFO fishing "sub-area" should be changed to "division", to ensure consistency with the CWP area naming conventions. It was also noted that, SEAFO's Scientific Committee has agreed, where possible, to align scientific observer data collection protocols with those being used by the CCAMLR.

9. The SPRFMO is a recently established Regional Fishery Management Organization (RFMO). The SPRFMO collects a wide variety of data from its members at varying resolutions. The SPRFMO collects tow by tow data for most fisheries and has good observer coverage across most of its fisheries. Other data sources include monthly reports, landing and transshipment and Vessel Monitoring System (VMS) data (not real time). The SPRFMO confirmed that its data collection protocols (described in SPRFMO's Standards for the Collection, Reporting, Verification and Exchange of Data) closely follow the CWP recommendations. In general the data collection currently relies on National bodies and the SPRFMO has well developed data confidentiality rules. The data sharing protocols are still being developed.

10. The EU does not use the STATLANT anymore but relies on the integrated data exchanging system developed during the last few years. The details on the system would be explained under Agenda 8.4.

11. Although the BCC is at infancy stage in data and information management, its member countries have collected data for 30 years. The main interest is trans-boundary data. A new system is planned with funding from development partners aiming to achieve standardization and information sharing during the 2015-2019 strategic programme.

12. In the WECAFC region there continues to be many gaps and deficiencies in the Subregional fisheries databases. Information and statistics in the WECAFC region are primarily provided through the Subregional partners (i.e., the Caribbean regional Fisheries Mechanism (CRFM) and the Organization of Fishing and Aquaculture in Central America (OSPESCA)) and through the WECAFC Commission scientific working groups.

13. In addition to various achievements reported under other agenda items, the FAO informed that the Central Framework of System of Environmental and Economic Account of the United Nations (SEEA) adopted the revised classification of land-use that include i) coastal water body as well as Exclusive Economic Zone (EEZ) water, in addition to inland water, ii) disaggregation of water bodies, according to the utilization for aquaculture purpose, environmental conservation, other uses including fishing, and no use, and iii) new categories of land use for aquaculture. The FAO already dispatched its first questionnaire based on the revised classification and expected improvement in understandings on water use.

14. There was discussion about potential problems in identifying catch distinguishing between inside and outside EEZs; this has long been requested by the United Nations General Assembly. The NAFO indicated a problem in their area. In the case of SEAFO and SPRFMO there is a clear separation of species caught inside and outside the EEZs. Some catch inconsistencies were also identified by the BCC in relation to national boundaries.

15. Regarding inconsistencies of catch statistics available from different organizations, the Group was reminded about the CWP agreement in the past concerning on the preference of using the catch data reported by the RFMOs for those species under their mandate. FAO reassured the Group that it is following this guidance unless the reporting countries providing the rational to do otherwise. The collaborative effort in 2010 succeeded in removing most of the inconsistencies of catch statistics between FAO and SPRFMO that were mainly caused by double reporting of catch.

16. The Group noted the general tendencies to shift towards compilation of statistics directly from data collected at the fine-scale level, like the cases observed in SEAFO, SPRFMO, DG Mare and to a lesser extent in FAO and other organizations.

REVIEW OF THE CURRENT STATUS OF CWP HANDBOOK REVISION

17. The Secretariat summarized the conclusions of the CWP-24 relating to the revision of CWP Handbook, including the overall structure and contents agreed, the need to clearly separate core standard components and supplementary information such as background materials including references, supporting materials, case studies, argument of emerging issues, and the request to enhance search engines and links. Although the CWP-24 established the review mechanism to finalize the revision before the end of 2013, the Group was informed that the progress was limited to minor revisions and updates of classifications. The delay is partially because the FAO placed more emphasis on development of a content management mechanism in order to enable effective search of all contents from Google, prior to replacing the text and content structure of the CWP website.

18. In conclusion, the Group reconfirmed its previous agreement on overall structure and contents and agreed to focus on the finalization of contents to disseminate. For that purpose, the Group urged the Secretariat to upload the latest version of the draft developed by Mr Hans Lassen, the CWP Handbook coordinator, into the CWP wiki page as promptly as possible.

19. The importance of establishing global standards was outlined. The Group stated its belief that the CWP has played an important role in establishing and maintaining the global standards in fisheries statistics that are well accepted and utilized. By contrast,

the contribution by the CWP in setting standards in some areas, e.g. management data collection and scientific observer data, has been limited, even though the need to standardize have been consistently raised in the previous CWP discussions. Despite different views on the extent of the CWP mandate to cover setting standards, the Group agreed that the CWP should provide a forum for communication and a place to coordinate the harmonization amongst interested parties. The implementation of CWP agreed standards and classification is a user responsibility, including the CWP Members, and not a mandate of the CWP itself. These users are eventually expected to channel their proposals for later consideration and review by the CWP for subsequent endorsement.

20. The Group discussed the benefits and feasibility of unifying the standard classifications for each domain. Multiple classifications on the same domain, e.g. fish and fisheries commodities, usually reflect the difference in objectives and histories where the different organizations are responsible with respective evaluation mechanisms. Cost required to switch one classification to the other would cause another obstacle for harmonization/ unification of the existing multiple classifications. One potential way forward would be to set agreed minimum standards while striving to accommodate differences amongst existing or emerging needs. Mapping technologies may provide a way to accommodate these differences.

REVIEW OF PROGRESS IN THE INTERSESSIONAL WORK PLAN

Dissemination of the revised Handbook on the CWP web page:

21. The FAO presented the concept of a framework to support dissemination of the new CWP Handbook with enhanced capacity for dynamic search and links and overall requirements for a new user interface. The new interface will harvest data and information across building blocks identified in “Terminology” (terms and definitions), “Classifications” (code systems and codes), and “Methodology Standards for Measurements” (rules and procedures, questionnaires). Associated with these main components are source of information, bibliographies and other relevant resources. Items in building blocks are reciprocally mapped through logical connectors. Users will be provided with cohesive access to information and their search keywords will be dynamically interlinked with other relevant elements. The new interface is also expected to harvest information from external sources such as the CWP Members, International Organization for Standardization (ISO), The United Nations Statistics Division (UNSD), and the World Bank Group to supplement the contents of the handbook.

22. The envisaged scenario is well supported by on-going information technology (IT) developments within the FAO, in particular the new Reference Tables Management System (RTMS++) and GRADE. The RTMS++ is for mastering reference data including standard terms, concepts and classifications, many of which are authorized by the CWP and Fisheries and Resources Monitoring System (FIRMS). The new application - first version to be released on April 2015 - is offering: data exposure through web services (XML, JSON), data structuring, data versioning as well as editing and visualization interface. GRADE, a management tool for linked data assets that map, align, and enhance data that originates in multiple and autonomous data sources. The tool offers data integration across repositories (both local and external), classification mapping, and system integration based on cutting-edge technologies of web semantics (google like searches, annotation facilities etc.), data acquisition from heterogeneous sources

without specific protocols or agreements. The two systems complement each other in handling core and reference data owned and managed by different communities.

23. The FAO also provided a conceptual architecture for organizing the CWP Handbook content and to facilitate access, review and consideration by the Members at a later stage.

24. The Group was in general supportive of enhancing a search capacity, as long as the contents remained in line with the agreement made at the CWP-24. This would provide an opportunity to improve visibility of existing standards and their utilization and allow for selected downloads, including to mobile devices. In addition, the Group proposed to add to this architecture the geospatial layer concept.

Further enhancement of the socio-economic section of the Handbook:

25. The Eurostat remotely reported that no progress was made in development of the socio-economic section of the Handbook. The socio-economic statistics in Europe are handled by the DG Mare with specific interest on fishing fleet segment and its social and economic performance. All the materials available at the DG Mare were already passed to the CWP. Through the communication with relevant persons during the meeting, the DG Mare indicated their wish to provide further inputs but no intention to lead the Group. As a consultation among the interested parties, it was agreed for FAO to lead this task based on an increasing involvement of developing guidelines relating to social and economic aspects of fisheries sector. Core participating organizations should stay as current, i.e. DG Mare, GFCM and OECD. It was also recommended to contact with Joint Research Centre (JRC)-ISPRA and ICCAT for possible interest to participate.

Further elaboration of the section on standards for GIS data and geospatial presentation in the Handbook:

26. The leading organization, SEAFO, reported that no overriding geographic information system (GIS) standards exist specifically for fisheries. The focus of this section should include general geospatial references, not limiting to GIS. The Group considered it beneficial for the section to catalogue existing authoritative geospatial resources, including shape files, and to capture a general guidance of utilizing GIS technologies. Comparative description of different grid reference systems, pros and cons between grid reference system vs. area/zone approach, access to web-services, and Open Geospatial Consortium (OGC) standard for metadata components are another potential area to be included. The DG Mare explained their experience encountered with the United Nations Code for Trade and Transport Locations (UN-LOCODE) and shifting to ACE digital positioning, which was shared by FAO. It was also agreed that the Group would be led by FAO based on availability of existing resources and expertise, with participation of DG Mare and SPRFMO in addition to existing core member of SEAFO, CCAMLR, ICES and NAFO. Since the issue is also relevant to aquaculture, the Group should invite the participation of Aquaculture Group Members.

Further streamlining of the reporting of national statistics

27. The Group was informed that Eurostat, ICES and FAO continued to work together in simplifying data flow of statistics of the EU countries through the Eurostat and ensuring complete data sharing among three organizations. The Eurostat, GFCM and FAO are also working together toward harmonizing aquaculture questionnaires and developing a set of global standards.

REVIEW AND REVISION OF EXISTING CONCEPTS AND CODES

Fisheries Commodities classifications

28. The FAO reported that the 2017 round of revision process of Harmonized Commodity Description and Coding System, commonly referred to as the Harmonized System (HS), of the World Custom Organizations was completed recently. The HS is used as a basis for the collection of customs duties and international trade statistics by more than 200 countries and over 98 percent of the merchandise in international trade is classified in terms of the HS. The FAO continued its collaboration with the WCO in view of further enhancing the quality and precision of fish trade coverage with a consequent improvement, as well as the apparent consumption data that the FAO calculates. Following the 2012 revision where the classification for fishery products was significantly restructured according to main groups of species of similar biological characteristics, the HS2017, effectively starting from January 2017, will contain improved specification for fisheries species and products forms, in particular for endangered species.

29. The FAO also informed about the revision of the Central Product Classification of the United Nations (CPC), an international classification of commodities and services delivered. Corresponding to the decision of FAOSTAT to adopt CPC as its basic classification in 2011, FAO has made efforts in collaboration with other relevant organizations to incorporate adequate level of detail and proper structure in describing fish and fisheries products. The version 2.1 would include separation of wild and farmed products for primary fish products, taxonomic groups as a comparable as HS, and distinction of products for non-food uses.

30. In addition the FAO informed its plan to modify the International Statistical Standard Classification of Fisheries Commodities (ISSCFC) in a way to provide more direct linkage with trade commodity classifications and ASFIS List of Species for Fishery Statistics Purposes. The ISSCFC has been developed for the collation of national data in the FAO fishery commodities production and trade database and covers more than 1 200 products derived from fish, crustaceans, molluscs and other aquatic animals, plants and residues. The Group welcomed the FAO's initiative and expected to receive a more concrete proposal in the future.

Vessels, Gear and Efforts statistics

31. The FAO summarized the current situation and remaining issues related to the fleet and fishing operation, including a description of fisheries. First, the International Standard Statistical Classification of Fishery Vessels by Vessel Types (ISSCFV-Type) was established in 1984, based on the specific form of vessel shape but often confused with fishing operation engaged in or fishing gear mainly utilized. Previous CWP discussions agreed to utilize the International Standard Statistical Classification of Fishery Gears (ISSCFG). Considering that the current ISSCFV-Types has a limited use in fisheries statistics, the FAO proposed to remove the ISSCFV-Types from the CWP Handbook and keep it in an archive to support those who still utilize it for vessel registration purpose.

32. Second, while the revised ISSCFG intended to provide overarching high-level classifications to ensure consistencies and comparability, the national and regional institutions, either of statistics or fishery management, need to define the finer subcategories (branching) under the proper ISSCFG classifications (parent), according to their needs. In order to assist better coordination and possible harmonization of sub-

categories classifications, the FAO plans to make an inventory of such sub-categories currently in use to disseminate in the CWP web page and asked collaboration by Members.

33. The fleet statistics collected by FAO are aimed at providing some estimates of the fishing capacity of a given country or territory. However, some additional metrics including effective efforts and fishing capacity may be needed to describe the fishing operation and analyze the cost of production, economic and environmental sustainability of the fishery sector and the impacts and contribution through fishing operations. FAO sought the opinion to establish a task group working on suitable measures to describe the fishing operational aspect in an integrated way. The Group agreed that this would be useful.

34. Although the difficulty for proper use of ISSCFV-Type was well recognized, caution was raised against the attempt to reduce the visibility of the ISSCFV-Type codes because of heavy reliance by some institutions on these codes for vessel registration. It is essential to harmonize with the requirement in other FAO instruments, including Port State Measures reporting format and the Global Record of Fishing Vessels, refrigerated Transport Vessels and Supply Vessels (Global Vessel Record) information requirement before taking any action.

35. The Group noted quite substantive works in the past on fleet capacity and efforts that had encountered technical difficulties, in particular, of defining standard measures in the context of impact to fish resources. At the same time, the trend of handling micro data (e.g. e-logbook and VMS) might result in innovative and more effective approaches producing macro level indicators (e.g. aggregated CPUE, fleet capacity). It was noted that this issue has a strong linkage with data required for fishery management.

36. Regarding the current status of revised ISSCFG, the Secretariat explained that the CWP could not formally claim its adoption of the revised version despite its general acceptance since the CWP-24 did not make quorum. At this moment, the revision of ISSCFG was treated as an operational agreement, to enable preparation of the publication of the gear catalogue and web dissemination of the revised classifications.

Identification of "Fisheries"

37. The FAO explained that this agenda item had been proposed as tentative, awaiting the outcome of FIRMS FSC9. The initiative of developing Unique Identifiers (UIDs) for fish stocks and fisheries is documented in the FIRMS FSC9 report including document FIRMS/FSC9/2015/4a and received the support of FSC9. These UIDs will enable the creation of a registry of distinct stocks and fisheries as part of a Global record which will facilitate federation of and reliable reference to reported status and trends of stocks and fisheries across various sources. These reports are essential to inform on the sustainability of exploited stocks and to understand the performance of fishery management schemes. The Global record will facilitate mapping and aligning stocks and fisheries information in a spatial and temporal context and identify them uniquely. The semantic relationships captured in the FIRMS schema could be used as a central reference for structuring ontologies and mapping logic among the heterogeneous data sources on stocks and fisheries. Initially the Global record will be instantiated from major global sources such as FIRMS, FishSource, and RAM Stocks legacy database, which are partially overlapping and partially complementary sources. At this early stage, FSC9 didn't discuss the type of coding system protocol for such unique identifiers. The main purpose for this topic was to seek the extent to which CWP would play a role with respect to the UID protocol.

38. The Group noted that fisheries and fish stocks could be defined with almost any combination of areas, species and fishing methods and recognized the long experience of FIRMS in developing the procedure to define fisheries for practical purposes. The Group encouraged FIRMS to continue the inventory of fisheries and fish stocks until such time as when the characteristics to define them would become clearer. It was agreed to maintain good communication with FIRMS and its partners on this issue.

REVIEW OF CURRENT GLOBAL DATA-EXCHANGE STANDARDS AND HARMONIZATION

The role of CWP and its endorsement of data-transmission standards; and potential fisheries data that could be standardized/harmonized e.g. scientific observer, VTI etc.

39. The FS Group Coordinator introduced the discussions relating to CWP setting standards for data collection of scientific, management, and socio-economic data with the presentation on the benefits of global data harmonization, standardization and coherence. He highlighted achievements and progress made by CWP, including the development of the CWP Handbook, and the FAO Questionnaires.

40. The presentation also included a possible solution for the development of a global repository for fisheries data standards, noting that existing standards such as FiMES, FLUX and SDMX could be endorsed by the CWP. He also introduced the possibility to restructure the CWP into sub-groups with core competencies in science, Monitoring, Control and Surveillance (MCS), and socio-economics. The rationale was that each group would have its own unique competency and thus would be able to contribute more substantively to the development of individual schemas. He also pointed out that previous CWP meetings had expressed the need to develop standards and definitions for fisheries management, including VMS and combatting against Illegal, Unreported and Unregulated (IUU) fishing. According to his interpretation of the current Rules of Procedure, standards for fisheries management do fall within the remit of the CWP.

41. The development of schema and their implementation need involvement of proper and adequate expertise, investment of resources, and incentives/ visible benefits to make the option attractive to potential users. Nevertheless, it would be beneficial to re-iterate the importance of standards and harmonization in the area of fisheries management data, information and communication schema and the role of CWP in coordination and provision of recommendations. The need for active engagement of Regional Fishery Bodies (RFBs) and communication at political level was re-iterated. Inclusion of the chapter in the State of World Fisheries and Aquaculture (SOFIA) 2016 and statements at the FAO Committee on Fisheries (COFI) were suggested as possibilities to pursue.

42. In some cases, the lack of standards, e.g. environmental and social economic information, could discourage countries from establishing their capacity to collect such information. This underlines the importance of the Handbook and associated standards to cover the whole spectrum of information needs.

43. As a minimum, technology should allow for easy and direct access to relevant standards, and lists (e.g. gears) for direct download in order to support improved harmonization. It was noted that this is the direction that the new Handbook is taking.

The FAO pointed out that it has a broad area of expertise, with CWP representing a small part, and could link to appropriate mechanisms to be a global repository of standards.

Strategy of implementing standardization/ harmonization of statistical time series e.g. SDMX

44. The FAO introduced the business case for working on Fisheries Metadata with different relevant information standards (FLUX, SDMX, FiMES, DarwinCore, etc.). Generic Statistical Business Process Model (GSBPM) presented a means to contextualize and position FLUX and SDMX and to identify overlaps. The presentation highlighted the difference between artifact based and schema based standards.

45. For any specific dataflow, the user should choose only one standard. The importance for CWP to ensure coherence over models (GSBPM, etc.) and standards (FLUX, SDMX, etc.) was emphasized.

46. The Group appreciated the presentation in clarifying the positioning of different standards, for both those directly relevant to CWP, such as terms, concepts, definitions and structure, and those less directly connected, such as IT and transport layer. The Group recognized general benefits in standardizing business models. Some Members emphasized that the priority should be focused on implementation and recalled that this is a user responsibility.

47. The FAO presented the use of Statistical Data and Metadata Exchange (SDMX) in fisheries. SDMX began in 2001 following an initiative to foster standards for the exchange of statistical information. The most valuable artifacts in SDMX are Codelist (CL) and Data Structure Definition (DSD) that define the dimensions and the related codelists. SDMX artifacts are published in a web based SDMX Registry. While any users can set up their own SDMX Registry, the internationally recognized SDMX artifacts can be promoted and published in the SDMX Global Registry. SDMX Global Registry currently hosts 63 CL and 9 DSD.

48. SEIF (SDMX for Eurostat, ICES and FAO) has developed the Catch DSD and a new version it is published every year in the Eurostat SDMX Registry that contains 748 CLs and 246 DSDs. IMF, OECD and BIS are active in developing their collaborative DSD. African Development Bank and StatCom Africa are implementing SDMX in African countries.

49. SDMX has two active working groups, one for technical and the other for statistical, each with about 20 members. SDMX has kept growing steadily, and enjoyed the international support.

50. A practical implementation roadmap for SDMX is to model, harmonize and standardize. The modeling phase could be done within the institute. The main identified issue with SDMX is that it is verbose and complex. Tangible benefits of SDMX are on the level of data harmonization, data collection/dissemination, good international adoption (WorldBank, IMF, FAO, Eurostat, etc.). It enables organic growth (3 layer model) and a delegated maintenance model. The presenter indicated that CWP could play an important role in ensuring all the SDMX codelists and data structures are coherent with the FLUX equivalents and promote the participation of RFBs in projects like FLUX, SDMX and SEIF.

51. Corresponding to the question on possible ways to integrate/ harmonize multiple different standards, the presenter advised avoiding establishing multiple standards for

one data flow, even if it might be possible at a later matured stage to enable backup of all metadata standard data flow e.g. metadata artifact. He also pointed out that the dialogue between DDI and SDMX is continuing and discussing concerning the differences in perceptions and the similar dialog group with specific focus on fisheries and aquaculture related items within CWP could be beneficial.

Harmonization for Catch Documentation Schemes (CDS)

52. The FAO explained that corresponding to the COFI request for FAO to develop a general guideline to establish global traceability of fish and fishery products. The FAO considers the landing as a unique opportunity to allocate unique product identifiers, i.e. Landing UID, to follow throughout the transaction afterword. The FAO has made previous attempts to develop standards for trade certificates without success and it was recognized that the requirements of already existing systems may mean that only relatively loose guidelines would be possible.

53. The Group noted that only few organizations, including CCAMLR, CCSBT and ICCAT, currently implement a CDS. The Group agreed that establishment of a working group would be useful.

Strategy towards standardization/harmonization of fisheries operational data, e.g. UN/CEFACT

54. The DG Mare Integrated Fisheries Data Management Programme (IFDM) presented its progress in building a highly performing, cost effective and agile data exchange system for fisheries control and management, with potential to expand it for scientific or other purposes and for global use. Technically, the approach combines several measures:

55. **Standardisation:** IFDM seeks to replace the current patchwork of data exchange formats by standards according to the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) approach.

56. A common terminology brings huge benefits and leads to one unique, complete and independent library covering all data elements used for fisheries management. This drastically simplifies the composition of new data exchange messages, and ensures that data is well understood by all actors involved.

57. For VMS and aggregated catch reporting a standard has been published by UN/CEFACT. A joint EU-FAO working group developed the fleet standard, ensuring compatibility with Global Vessel Record. Standards are being developed for electronic logbooks, licence requests and data exchanges for bluefin and tropical tunas.

58. When developing standards, there is not only attention for the data elements, but also for identifying correct code lists, and for defining the business rules to which data and data exchanges have to correspond.

59. **System development:** To facilitate the implementation of the data exchange standards, software was developed for exchanging any data. This software, called transportation layer (TL) can be installed by each party, thus creating a secure and configurable network between parties' IT systems.

60. New modules are being added for e.g. viewing and analysing VMS messages and electronic logbooks, handling licence requests or managing vessel data. The long-term ambition is to let this grow towards becoming an open source community that supports fisheries management by supplying a coherent set of interoperable IT solutions.

61. **Central services:** A network with one language for data exchange, allows for the creation of central services, or IT systems, and avoid that each party has to build such an IT system for its own purposes. A typical example is a master data register as single source of all code lists.

62. **Business community:** The actual value of this combination of standards, software and central services depends on its use.

63. The DG Mare invited the CWP participating organizations, individual countries and expert groups to participate in the standardisation development and implementation.

64. The Group complimented the big achievement made and appreciated the opportunity to bring this to the attention of CWP. The DG Mare indicated that their choice of language (UN/CEFACT) was due to the existing architecture.

65. It was recognized that the differences between schema-based and artifact based approaches have not been resolved, even at the UNECE level but it was pointed out that the respective communities could work together on the level of business rules using the Validation and Transformation Language (VLT), an independent component in SDMX. The Group agreed that the CWP should work towards promoting the acceptance of a global catch meta-data reporting standard.

66. The FAO, on behalf of the Global Vessel Record Project, described its collaboration with the DG Mare in drafting business specifications for the fleet UN/CEFACT standard and detailed the outcome of the working group discussion on the Global Vessel Record held this week in Rome. This was well received by the participants of this meeting. This Group expressed its view that the CWP should be involved in development of standards relating to the Global Vessel Record.

DIRECTION OF CWP AND CWP MEMBERSHIP

67. The Group acknowledged various ongoing efforts towards global meta-data standards (e.g., UN/CEFACT, SDMX, FiMES) contextualizing various components of the GSBPM overarching framework including collection, collation/exchange, and dissemination of fisheries data. (Attachment 4)

68. The Group continued previous discussions concerning the formation of additional subject groups in addition to the Fishery and Aquaculture Groups but decided to maintain the current structure. However the meeting considered it could be useful to form *ad hoc* task groups for consideration of special topics *inter alia*:

- Standard concepts for measuring capacity and fishing effort [para. 33]
- Development of guidelines on conversion factors [para. 72]
- Meta-data standards for science data (e.g. observer system data) [para. 19]
- Meta-data standards for catch documentation schemes [para. 53]
- Meta-data standards for global catch reporting [para. 65]
- Global Record and associated meta-data standards [para. 66]
- Meta-data standards for MCS [para. 19]
- Master Data Management (MDM) enabling consistency among existing standards for the use of CWP standard classifications [para. 51]

69. The Group requested the Secretariat to extend an invitation to all Members to indicate their interest in leading or participating in the *ad hoc* task groups aforementioned. The Members will be asked to identify experts and initiatives relevant to these *ad hoc* task groups. These efforts could also include other roles, for example the coordination of interactions between subject groups and the promotion of CWP objectives through outreach activities (e.g. RFMO, RFB Commission meetings).

70. Considering the quorum issue encountered at the CWP-24, the Secretary asked for guidance in applying the Article 15 of Rules of Procedure, "If a participating organization does not provide any experts for three consecutive sessions without notification, it will be deemed to have withdrawn." The Group requested the Secretariat to contact the relevant organizations to remind them and explain the implications of Article 15. The Group agreed that prior to this contact the Secretariat will seek legal advice. This issue will be discussed as the first item of the next session with the view to confirming CWP membership.

OTHER BUSINESS

Guideline of aquaculture/ capture fisheries surveys with census framework

71. The FAO informed that it is developing the guideline on how to integrate aquaculture and capture fisheries surveys in census framework, e.g. agriculture census, rural and population census. The guideline is designed to collect a full range of information relating to fisheries and aquaculture sub-sector, in particular of small scale, and intends to fulfill a gap in evaluating social, economic and food security contribution of subsistence and supplementary fishing and aquaculture activities. The final draft will be soon ready for further feedback and The FAO would appreciate any input from the CWP Members. The FAO also invites an expression of interest in participating in the evaluation of concepts and feasibility of procedures proposed.

Survey for conversion factor:

72. The FAO informed its intention to conduct a questionnaire survey to collect data on conversion factors during 2015. This is the first survey since 1992-1993 and is aiming to collect the conversion factors on different stages of production, including those for landed weight. The Group recommended that the FAO dispatch the questionnaire also to regional organizations. Recognizing the wide variability of conversion factors according to processing methods, areas and species, it was considered important to keep all of the details on products together with conversion factors, in particular, for the case of standardized conversion factors. The Group felt it not pragmatic to develop a set of standard conversion factors corresponding to global standard classification of fish and fishery commodities. It was noted that the Annex within the CWP Handbook is outdated and only indicative, and that particular care should be taken to highlight this in future revisions of the Annex. The Group agreed to establish task group to look into this issue.

Role of CWP in the governance of the iMarine initiative

73. The FAO indicated that FSC9 had been presented with an overview of iMarine, a Data infrastructure in support to Ecosystem Approach to fisheries management and conservation of marine living resources, looking for guidance from FIRMS partners as to how FIRMS interests and RFBs interests might be best represented while this platform develops. FSC9 decided that the FIRMS Secretariat is in a good position to understand

and lead iMarine and FAO should represent the views of FIRMS and its partners with respect to iMarine when sitting in the iMarine Advisory Board. The FAO/FIRMS Secretariat could funnel information back and forth between FIRMS and iMarine. An additional communication mechanism could be the iMarine Extended Board where RFBs can subscribe. It was proposed that FAO should represent the interest of CWP and its Members while contributing to iMarine Governance. In particular this would concern the use and promotion of fisheries data and information standards, and their implementation through IT solutions.

74. This proposal was welcomed and the Group agreed for FAO to play such representative role. That would not prevent RFBs from taking a more proactive and direct role in Governance in the future if deemed necessary. As an example, it was pointed out that two-way communication with vessels was one component that was missing in order to fulfill the request for communication and information exchange between vessels and local authorities.

75. Interaction between CWP and iMarine could lead to build/promote/publish a complete open source solution for fisheries data management by:

- Making a complete data workflow from all sources to all destinations, in priority order;
- Make a high level description of all software, standards, hardware needed in support of each step in that workflow;
- Make an inventory of all standards, and standardisation efforts, indicating which steps in the workflow these relate to;
- Make an inventory of all on-going software development projects, or finalised products, on the market and how these relate to the individual steps in the workflow. Clearly indicating whether these are open source or proprietary products, and which standards they are compatible with;
- Identify gaps and overlaps in the above and propose a way forward.

Others

76. The FAO sought opinions on maintaining FishStatJ, a stand-alone data extraction and aggregation tool, or replacing it with an equivalent web based application. Members indicated a general need for an on-line data extraction tool, and requested more time to consult.

77. The Group briefly discussed possible timing and venue for the next Fisheries Group meeting that could be held in conjunction with the CWP-25. The Group tentatively agreed to hold the CWP-25 in February 2016. The DG Mare kindly offered to possibly host the meeting in Brussels, Belgium, or alternatively to hold it back-to-back with a UN/CEFACT meeting (Geneva, Switzerland).

78. The Group agreed to include “the improvement of visibility and public communication” as a standard item of the future agendas.

REPORT ADOPTION AND CLOSE OF THE MEETING

79. The report was adopted on Friday 27 February 2015 at 22:10, and the meeting was closed.

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Attachment 2. Agenda

1. **Opening of the meeting**

2. **Adoption of the Agenda**

3. **Clarification of operating procedure**

4. **Review of activities by participating organizations**
The participating organizations briefly report their statistical activities since the CWP-24.

5. **Review current status of the revised CWP Handbook**
The Secretariat briefly report on the current status of the revised CWP Handbook in-terms of content.

6. **Review of progress in the inter-sessional work plan agreed at the CWP-24**
The Secretariat and participating organizations review the progress of the agreed inter-sessional work plan.

   6.1. Dissemination of the revised Handbook on the CWP web page (Secretariat)

   6.2. Further enhancement of the socio-economic section of the Handbook (lead: Eurostat/DG Mare, core participation: FAO, GFCM, OECD**)**

   6.3. Further elaboration of the Handbook in the newly developed sections, especially on standards for GIS data and geospatial presentation (lead: SEAFO, core participation: CCAMLR, ICES, NAFO, FAO)

   6.4. Further streamlining of the reporting of national statistics (Eurostat, FAO, GFCM, ICES)

7. **Review and revision of existing concepts and codes**
The Secretariat will introduce the subject for further discussion.

   7.1. Fisheries Commodities classifications (FAO)

   7.2. Vessels, Gear and Efforts statistics (FAO)

   7.3. Identification of "Fisheries" (FAO)

8. **Review of current global data-exchange standards and harmonization**
Participating organizations who propose the agenda (shown in parentheses) will introduce the subject for further discussion.

   8.1. The role of CWP and its endorsement of data-transmission standards; and potential fisheries data that could be standardized/harmonized e.g. scientific observer, VTI etc. (SEAFO, FAO)

   8.2. Strategy of implementing standardization/ harmonization of statistical time series e.g. SDMX (FAO, Eurostat, OECD)

   8.3. Harmonization for Catch Documentation System (FAO)

   8.4. Strategy towards standardization/harmonization of fisheries operational data, e.g. UN-CEFACT (EU DGMare)

9. Direction of CWP and CWP Membership

10. Other business:

10.1. Guideline of aquaculture/ capture fisheries surveys with census framework (FAO) – *information only*

10.2. Survey for conversion factor (FAO) – *information only*

10.3. Role of CWP in the governance of the iMarine initiative (FAO)

10.4. Others

11. Report adoption

12. Close of the meeting

Attachment 3. Operational Guidelines Corresponding to the Establishment of Two Subject Groups (Appendix 5 of the Report of CWP-23)

The 23rd session of the CWP established the Fishery Group and the Aquaculture Group in accordance with the CWP Rules of Procedure. These groups were created to enhance the effectiveness of the CWP to address issues specific to capture fisheries and to aquaculture.

OBJECTIVES: Each group should:

1. identify and discuss major issues and requirements on information, data and statistics;
2. determine those issues and needs of importance requiring actions to improve information, data and statistics for policy making in achieving sustainability and enhancing the contribution of individual sector to food security, economic development and poverty alleviation;
3. recommend actions to coordinate and harmonize information and statistical data collection, collation and dissemination;
4. advise on mechanisms to prepare, facilitate and implement actions towards meeting the growing demand for timely and reliable information, data and statistics;
5. advise on the strengthening of collaboration to assist national, regional and global institutes in improving and harmonizing information, data and statistics collection, collation and dissemination; and
6. advise on the preparation of technical reviews on information, data and statistics on issues of international significance and concerns.

STRUCTURE AND TERMS:

The Fishery Group and the Aquaculture Group are established under the governance of the Working Party. The Working Party shall review the operational status of each group at each session.

WORKING ARRANGEMENTS:

1. The Fishery Group and the Aquaculture Group shall meet in conjunction with the session of the CWP.
2. Each group shall elect a coordinator from the participating organizations in the group.
3. The coordinators should attend the session of the CWP, but should they not be able to attend the session, he or she should nominate an alternate from among the participating organizations in the group.
4. The coordinator shall arrange intersessonal activities of the group, including meetings, workshops, collaborations with relevant partners and stakeholders, preparation of working papers, communication by correspondence, and web-conference, under general guidance of the CWP session.
5. The coordinator may simultaneously hold a position of Chair or Vice-Chair of the session of the CWP.
6. The Fishery Group and the Aquaculture Group shall report to each CWP session on its own activities, achievements, and recommendations including *inter alia* the proposal of terms of reference and work plans for a subsequent intersessional period, if necessary.
7. The Fishery Group and the Aquaculture Group may request decisions of the Working Party by correspondence when considered that a delay in decision until the proceeding session would have a

significant negative impact on their work.

COMPOSITION:

1. Participation in the Fishery and Aquaculture Groups shall be open to all CWP participating organizations. Each participating organization shall notify to the CWP Secretary of its intention to participate in a group, including its nomination of expert(s).

2. Each of the above groups may identify organizations which have a competence in statistics of relevant to their work and may extend invitations to nominate experts to participate the Group.

OTHER MATTERS:

Operational procedures on voting, expenses, and working languages should follow the principles of the CWP Rules of Procedure. When a question arises concerning a procedure or course of action, a request for guidance or clarification should be delivered to the CWP Secretary, which if necessary will seek guidance from the participating organizations

Attachment 4