SCRS/80/ 27

# REPORT OF THE TENTH SESSION OF THE COORDINATING WORKING PARTY ON ATLANTIC FISHERY STATISTICS

Madrid, Spain, 22-29 July 1980



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Rome 1980

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#### PREPARATION OF THIS DOCUMENT

This document is the Report of the Tenth Session of the Coordinating Working Party on Atlantic Fishery Statistics (CWP) held in Madrid, Spain, 22-29 July 1980.

Until the end of the 1968 the CWP was known as the "Continuing Working Party on Fishery Statistics in the North Atlantic Area".

A list of the Sessions, dates, places and reports of the CWP is given in Appendix 6.

For bibliographic purposes this document should be cited as follows:

FAO, Report of the tenth session of the 1980 Coordinating Working Party on Atlantic Fishery Statistics.

Madrid, Spain, 22-29 July, 1980.

FAO Fish.Rep., (242):71 p.

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#### 1. PROCEDURAL MATTERS

#### (Agenda Item 1)

Relevant Documents: CWP-10/1, 2, 3, 4, 5, 6, 7 and 39

Relevant Appendices: App. 1, 2, 3, 4, 5, 6, 12 and 13

#### 1.1 Opening of Session

The Secretary of the CWP, Mr. L. P. D. Gertenbach, opened the Tenth Session of the Coordinating. Working Party on Atlantic Fishery Statistics. He introduced Mr. Roger Lagarde, Executive Secretary of the International Commission for the Southeast Atlantic Fisheries (ICSEAF), who welcomed, on behalf of the two host agencies, ICCAT and ICSEAF, the participants to Madrid (see Appendix 6). Dr. Olegario Rodríguez Martin then also welcomed the participants to Spain.

#### 1.2 Election of Officers

The Secretary, after a few general announcements to the participants (see Appendix 3), invited nominations for the offices of Chairman and Vice-Chairman.

Dr. W. G. Doubleday was elected Chairman; in this capacity Dr. Doubleday chaired all the meetings of the Tenth Session of the CWP, 22-29 July 1980. Mr. H. Lassen was elected Vice-Chairman.

#### 1.3 Adoption of Agenda

The draft agenda was reviewed and adopted with amendments (see Appendix 1). The numbered sections of 1-19 of this report correspond to the numbers of the Agenda Items.

#### 1.4 Appointment of Rapporteurs

The schedule of work was established and rapporteurs were appointed as follows for the various Agenda Items:

- L. P. D. Gertenbach
- Participants from each agency
- L. P. D. Gertenbach and F. E. D. Aartsen
- D. Cross and C. Nédélec
- C. Nédélec and J. Terré
- V. M. Hodder and V. M. Nikolaev D. A. Tilley and H. B. Becker 6.
- 8. B. G. Thompson and Ms. B. Rusin
- 9. D. Cross and K. Sullivan
- 10.
- B. G. Thompson and T. Shimura D. Chakraborty and B. J. Kowalewski 11.
- 12. L. P. D. Gertenbach and V. M. Hodder
- V. M. Nikolaev and Ms. N. V. Janovskaya 13.
- 14 L. P. D. Gertenbach
- B. G. Thompson and D. A. Tilley 15.
- 16. D. Cross
- L. P. D. Gertenbach and V. M. Hodder 17.
- L. P. D. Gertenbach
- L. P. D. Gertenbach

#### 1.5 Documentation and related materials

The full list of documents presented to the Tenth Session of the CWP is given in Appendix 2. A list of acronyms selected by the participants, relevant to fishery matters, is given as Appendix 4. In Appendix 5 are listed the dates, places and reports of the first ten sessions of the CWP, as well as the proposed dates and place of the Eleventh Session.

#### 1.6 Recommendations

The recommendations incorporated in this Report of the Tenth Session, have been extracted and listed as Appendix 13.

#### 2. AGENCY PROGRAMMES AND PUBLICATIONS PRESENTING ATLANTIC FISHERY STATISTICS

#### (Agenda Item 2)

Relevant Documents: CWP-10/9, 10, 10: Addendum 2, 10: Addendum 2, 10: Corrigendum 1, 11, 12, 13, 14, 15, 37, and 38.

Relevant Appendices: App. 11

- 2.1 FAO statistical programme and publications
- 2.1.1 The Secretary of the CWP, in presenting Document CWP-10/10, referred to his mentioning at the Ninth Session, the proposal then before FAO's governing bodies, to combine the Fishery Statistics Unit staff in a new Fishery Information, Data and Statistics Service within FAO's Fisheries Department. This new Service (FIDI) has been in operation since 1 January 1978.
- 2.1.2 The statistical activities of FIDI are now organized in the following modules:
  - (a) catch statistics
  - (b) fishing vessel statistics
  - (c) fishery commodities and conversion factors
- 2.1.3 The sub-programme within FAO's programme of work to be carried out by the various modules concerned with statistical activities within FIDI, has an objective to assemble relevant, reliable and timely data and other quantitative information on all aspects of fisheries, and to support planning and development activities in the sector. Specifically, it has the following primary functions:
  - to collect, compile, store and disseminate statistics and data, at the national and global levels, on fish resources, fishing activities and commodities. Most of the information is published in the FAO Yearbook of Fishery Statistics and other publications, for member countries, other international and regional organizations and the public; and
  - to provide a range of data support services to fishery activities under the Regular Programme and Field Programmes, which require extensive mechanical data analysis and computerized data operations.

In addition, the sub-programme is expected to contribute to the improvement in the quality and the scope of fishery statistical information at the national, regional and global levels. Through its routine operations, it assists in the elaboration of standard definitions, classifications and methods of collection and compilation of fishery statistics throughout the world. A new activity in 1979 was assistance to developing countries in improving their national fishery information systems, including data collection and analysis.

- 2.1.4. The catch statistics module has been responsible for the publication since the Ninth Session of the CWP from the computerized data base, of Volumes 42, 44 and 46 of the Yearbook of Fishery Statistics. This unit intends to issue Volume 48 ("Catches and Landings, 1979") in November 1980, and Volume 50 in 1981.
- 2.1.5. The module responsible for fishery commodity statistics and conversion factors, has in recent years issued as "fishery commoditites" volumes, Volumes 43, 45 and 47, as manually typed publications. It is expected to issue in December 1980, Volume 49, produced through computer procedures.
- 2.1.6 The fishing vessel statistics module is working on the manuscript of a publication presenting by country and type of vessel, annual data on fishing fleets.
- 2.1.7 In cooperation with the Marine Resources Service (FIRM) of FAO's Fisheries Department, FIDI has also assisted in the editing and preparation for publication, of Statistical Bulletins for the GFCM area (Major Fishing Area 37), and the CECAF area (Major Fishing Area 34).

2.1.8 Activities in the field of fishery statistics require close collaboration of the FIDI staff at Headquarters, the FAO staff in the field, and with the secretariats of all the intergovernmental bodies concerned with fisheries. The two principal coordinating mechanisms for this type of work are the CWP (Coordinating Working Party on Atlantic Fishery Statistics) and the JWP. Their work covers all standard concepts, standard definitions, standard classifications, standard methods, standard questionnaires, and standard notes for their completion, etc. The CWP and the JWP serve as inter-agency focal-points for the review, further refinement and improvement and final clearance of all these standards (see also Section 2.10).

#### 2.2 WECAF Project statistical programme

- 2.2.1 The statistics programme of the Interregional Fisheries Development and Management Programme (WECAF) with headquarters at Panama, serves 27 member countries by assisting them in upgrading the existing fishery data and improving statistical capabilities of national offices in charge of collection of fishery data.
- 2.2.2 The national fishery data reflect inadequate coverage and reliability, especially the data derived from the artisanal fishery which is very important in the region.
- 2.2.3 The Project is attempting to establish a system for collecting statistics on a regional basis according to standardized classification procedures. Based on the extensive FAO literature on statistical standards and the work done by the Working Party on Fishery Statistics of WECAFC held in Panama during May 1978, statistical standards for catch, species, fishing vessels and gear have been established though not firmly. When catches are landed in processed or semi-processed state, national conversion factors are yet to be established; the practice of identification of nationality of the catch through the flag of the vessel deserves attention as well.
- 2.2.4 Apart from insufficient financial resources, the basic factor for inadequate fishery data is the use of procedures for collecting data which do not allow the measurement of the reliability of collected data. The WECAF Project therefore has encouraged the member countries to use scientific sampling procedures and direct observations and measurements in their data collection programmes. The greatest obstacle in the implementation of an objective survey plan is the lack of trained personnel in the area. Following the receipt of funds from Norway to finance a training course for English-speaking countries of the WECAF area, a two-week training course was held in collaboration with the Government of Saint Lucia at Castries in November 1979. Fifteen participants from the English-speaking member countries attended the course. Follow-up actions are being undertaken by the Project. A similar course is contemplated for the Spanish-speaking member countries in the near future.
- 2.2.5 At present WECAFC obtains from FIDI at FAO Headquarters tabulations (from the FAO Yearbook data base) on countries and species in Major Fishing Area 31. These, incorporated in improved regional statistical bulletins, might be issued in the future following significant improvements in the national statistical capabilities.
- 2.3 Principal issues affecting fishery statistical activities in the CECAF Area (Major Fishing Area 34)
- 2.3.1 Shortcomings in catch and effort statistics as well as biological data for stock assessment purposes have always been a matter of concern for CECAF and its Working Party on Resource Evaluation. Therefore, a lot of work has already been done in order to improve fishery statistics in the CECAF area. Statistical standards were formulated for the region five years ago. The CECAF Statistical Bulletin, Nos. 1 (1964-74) and 2 (1967-77) have been published. As a result of resolutions by CECAF and its working parties the quality and coverage of regional statistics have recently been greatly improved.
- 2.3.2 In compliance with the CECAF resolutions, some of the coastal countries have included regular reporting systems for foreign fishing vessels in their bilateral agreements. Sample surveys on landings for the artisanal fisheries have been initiated by several coastal states.

- 2.3.4 The first session of the Working Party on Fishery Statistics for the CECAF Area will be held in Dakar in October 1980. In-service training courses will be carried out as one of the most efficient ways of promoting statistical activities in the coastal countries.
- 2.4 ICES fishery statistical programme, publications and ADP processing
- 2.4.1 The Report on the ICES fishery statistical programme, publications and ADP processing (CWP-10/12) reviewing various developments which had taken place since the Ninth Session of the CWP, was presented by the ICES Statistician.
- 2.4.2 On the basis of a detailed specification for hardware and software requirements of a mini-computer system for ICES, a NORD-100 computer was installed at the new ICES Headquarters in May 1980. An outside UNIVAC 1100 computer can be accessed by RJE (batch)-2400 baud terminal and by a dialuptelephone line at 300 baud.
- 2.4.3 At present the ICES FISHDAT System is in the final stage of its establishment. At its meeting in May 1979, the ADP Working Group identified various classes of computer programs designed for use by the Assessment Working Groups and suggested where the responsibilities for these programs should lie. The first class contained the "standard" assessment programs, and the ACFM set up a small study group which met in May 1980, and prepared specifications for data files, and programs for Virtual Population Analysis (VPA), Catch Predictions, Yield Per Recruit and Mesh Assessments. It is anticipated that these will be implemented on the NORD-100 computer by early 1981.
- An undertaking to use the ICES FISHDAT System for the production of all the major tables in the ICES Bulletin Statistique was fulfilled in Volume 61, released in November 1979, with Tables 7 and 10 prepared by ADP methods. The format of Table 7 was changed and an additional measure of fishing effort, "days on ground" (i.e. level of priority C), has been added and the table heading has been expanded to include all asterisked species items (i.e. species considered to be of major commercial importance) on the revised STATLANT 27B Form. Table 10 (replacing Tables 10 and 11 in previous issues) was a new table giving nominal catches of selected species by country and month for each of the ICES fishing areas. The selected species items are those asterisked on the revised STATLANT 27B Form. It should be noted that only those countries reporting their catches on a monthly breakdown are included in the table, and that the NK (Not Known) column indicates the differences between the total yearly national catch of a species in a particular fishing area as officially reported on STATLANT 27A Form and included in Table 5 and the sum of monthly catches entered in the "month" boxes as reported on STATLANT 27B Form. In Volume 62 (with data for 1977) released in March 1980, annual seaweed harvest data were published in Tables 5 and K, and some of the 3-alpha identifiers of species items were changed and some adjustments made in accordance with the revised FAO ISSCAAP. Publication of Volume 63 (with data for 1978) was suspended, pending the Council decision at the 1980 Statutory Meeting on ways and means of possible savings in the production cost.
- 2.4.5 At the 67th Statutory Meeting of ICES in 1979, the ACFM brought attention of the Delegates to shortcomings and gaps in data required for stock assessment purposes by the ICES Working Groups. These covered catch and effort statistics, separation of catches by species and fisheries, by-catches and the small-meshed trawl fisheries and discards, age and length compositions, agereading, growth rate, selectivity, abundance surveys and tagging experiments, etc.
- 2.4.6 At the 1977 Statutory Meeting, the recommendations of the Ninth Session of the CWP on reporting discards were considered. It might prove difficult for member countries, at the present time, to submit data on discards in provisional form together with preliminary nominal catch data and broken down by month, therefore the Council adopted a form for annual national returns of information on discards (see CWP-10/36). At the 1978 Statutory Meeting, ICES re-emphasized the need for establishing national schemes for collecting discard data and drew attention of member countries to the importance of sending observers to sea to collect discard data.
- 2.4.7 At the Joint Session of Theory and Application of Sampling Systems and Statistical Data Analysis in Fisheries Science at the 66th Statutory Meeting, the minimum adequate level of biological sampling was discussed.

The general conclusion was that the best sampling design is to spread sampling over as many vessels and landing places as possible, and sample relatively few fish from each ship, rather than to sample a large number of fish from few ships. If the intensity of sampling is maintained at or above 500 fish measured per 1000 tons landed, the precision achieved appears to be satisfactory. It was noted that this intensity was not being achieved in several major ICES fisheries.

- 2.4.8 ICES Data Form 5 for reporting catch estimates on a monthly basis was extended to include all species and stocks of major commercial importance in the NEAFC and IBSFC areas. Therefore, the NEAFC monthly returns have been discontinued.
- 2.4.9 The form for reporting preliminary annual catch statistics by 1 February each year has also been extended to include all finfish species asterisked on STATLANT 27B as being of prime commercial importance. Member countries have been more successful in meeting this deadline than those for STATLANT returns.
- 2.4.10 Response difficulties and their solution were discussed at the May 1980 Meeting of the ICES Statistics Committee Liaison Working Group, and its conclusions are given in CWP-10/37.
- 2.4.11 Norway, Scotland and Sweden are submitting their STATLANT 27B returns to ICES on computer tapes, in accordance with the ICES format and codes. The tape specifications are acceptable to EUROSTAT. Several other countries are known to be investigating this means of submission which saves time and minimizes clerical errors.
- 2.4.12 The Liaison Working Group also considered national logbook systems. It asked the CWP to study the problem in further detail for the purpose of preventing unrestricted proliferation of different formats and codes of logbooks, rather than of achieving a high degree of standardization. The CWP was asked to prepare a minimum standard set of requirements to a logbook, with such a format which should provide possibilities of gradually extending it to the "ideal" set of entries, which may be useful for different purposes.
- 2.4.13 It also discussed ICES Data Form 6 (revised), "Fishing Craft and Fishermen" (CWP-10/35) and, taking into account the pertinent developments in EUROSTAT and FAO, recommended to cease collection and publication of data on fishing fleet and fishermen by ICES, after the first relevant FAO tabulations have been published.
- 2.4.14 ICES has published Description of national fisheries statistics systems of ICES members countries (ed. D. de G. Griffith) as Cooperative Research Report No. 91. Short descriptions of the systems in operation in those countries which have not been able to submit them as papers to the ICES Statistics Committee, are found in the 1978 Report of the Statistics Committee Liaison Working Group (C.M.1978/D:11). Updated descriptions were reported to the 1980 Meeting of the Liaison Working Group by Scotland, Sweden and USSR, and the Group recommended that these edited versions should be submitted to the 1980 meeting of the ICES Statistics Committee.
- 2.4.15 The CWP noted that the ACFM Reports submitted to NEAFC and IBSFC contain 10-15 year's series of updated catch data by country and by stock. The ACFM Reports and some of the working groups' reports are published in the Cooperative Research Report Series. Since the Ninth Session of the CWP, the following most relevant volumes have been issued: Nos. 70, 71, 73, 78, 79, 81, 82, 83, 85, 87, 89 and 93. The latest published reports of the ACFM (with scientific advice for 1980) are in No. 93. Besides, Nos 74 and 86 describe the biology, distribution and state of exploitation of fish stocks in the ICES area. Additional statistical and biological data for the Northeast Atlantic stocks are contained in the Annales Biologiques, Volumes 33, 34 and 35 (for 1978) which have been published since the Ninth Session of the CWP.

## 2.5 <u>ICCAT statistical programme</u> and publications

2.5.1 The ICCAT Systems Analyst presented a report of her organization's statistical activities (CWP-10/13). She explained that ICCAT's statistical requirements are divided into four different levels, as follows:

- (a) Task I statistics include total annual nominal catches and the number of boats engaged in tuna fisheries throughout the year;
- (b) Task II statistics include catch and effort data by fine time-area strata (1°x 1°, monthly), and summarized catch and effort statistics by larger time-area strata corresponding to the biological data;
- (c) Task II biological data, including "actual" sample size frequencies and weighted size frequencies by catch and by time-area strata as agreed to by the Commission;
- (d) Quick estimates of the catch and catch per effort for the current year.
- 2.5.2 There are three different data sources:
  - (a) National offices which send data directly to the ICCAT Secretariat;
  - (b) The CWP Secretary sends data to the ICCAT Secretariat for some countries which have minor catches in the ICCAT area;
  - (c) The ICCAT Secretariat collects data directly from industries at fishing ports.
- 2.5.3 All data sent to ICCAT in the form of Task I and Task II data are input into the files and data bases. These data bases can be divided into three categories, as follows:

<u>Category 1:</u> Task I data base - this contains all the nominal catch information by country, gear, species and year.

Category 2: This refers to several bases and several files which contain the catch and effort data by country, gear, areas, time, etc.

<u>Category 3</u>: This includes a data base and several files which contain size frequencies by country, species, gear, area and time.

Very often the data for the major fisheries are received on magnetic tape, but those for the minor fisheries are received on paper. Some countries present raw data (e.g. measurements at the ports) to the Secretariat.

- 2.5.4 The following series, relating to statistics, are being published by the Secretariat:
  - (a) Statistical Bulletin: This series includes the annual nominal catches by country, gear, species by major Atlantic areas for the last 11 years. This publication is yearly but actually each year two versions are made: preliminary and final.
  - (b) Data Record:

    This series is published twice a year, and contains Task II catch and effort and size frequency data. It also includes a catalogue of all existing data files available at ICCAT. Size frequencies are for the ICCAT sampling areas. Catch and effort are also summarized by the ICCAT sampling areas to match the size frequency data.
  - (c) Statistical Series: This series contains the data collected by the Secretariat or those sent to the Secretariat in raw form and processed by the ICCAT data management system.
- 2.6 <u>ICSEAF statistical programme and publications</u>
- 2.6.1 The Assistant Executive Secretary presented a report on the statistical activities of ICSEAF (CWP-10/14), noting that annual catch and effort information reported by different member countries was stratified by species, ICSEAF division, month, type of vessel and gear, main species sought and effort unit.

Fishing effort is reported in three main categories for trawl fisheries, i.e., number of hours fished, number of days fished and number of days on ground; the first of these is the unit most often applied in stock assessment.

- 2.6.2 Catch and fishing effort statistics are reported using the STATLANT system. It is estimated that nearly 100 percent of the catches taken in the Convention Area are reported to the Commission. However, six fishing countries failed to report effort data for 1978, although only two with important catches failed to do so. In general, over the last few years reporting of catch and effort data has improved considerably.
- 2.6.3 An ADP system consisting of two computer programs is used to process the information sent in on STATLANT forms. A total of six tables, presenting catch and effort data under various combinations of the headings (year, country, species group, subarea, division, month, target species, fishing effort unit, gear and vessel category), is printed out. Provisional and final versions of these tables are published annually in the Statistical Bulletin, eight editions of which have appeared to date, for the years 1971 through 1973. The revision of the existing computer programs to introduce and harmonize FAO and ICSEAF fishing gear and fishing effort codes constitutes a further modification to the Statistical Bulletin. With regard to the species inhabiting the Convention Area, 3-alpha identifiers have now been adopted, following the Commission recommendation to that effect.
- 2.6.4 The effectiveness of the Commission's discard-reporting system was first evaluated during the Fourth Regular Session (December 1977). The result was discouraging, since only two countries had reported on discarding practices. However, the situation in December 1979 had improved markedly, as the majority of the national offices had reported their discards on a 47D form designed for this purpose in collaboration with the CWP Secretary.
- 2.6.5 Provisional catch statistics for the first half of the current year are reported to ICSEAF using a form 47E, the deadline for submission being 31 August. It was observed at the Fifth Regular Session (December 1979) that two-thirds of the member countries, including all of those with major catches in the ICSEAF Area, had provided the required information.
- 2.6.6 SAC has given substantial attention to conversion factors used in the Convention Area and has recommended that national offices of the member countries provide the Secretariat with their factors. Routine updating of factors has also been recommended. Some progress has been made for the major species in the Convention Area.
- 2.6.7 The ICSEAF list of fishing vessels is updated annually based on the information supplied by member countries at the beginning of each year.
- 2.6.8 A monthly catch reporting system has been introduced for only two species in the Convention Area, following a recommendation adopted by the Commission at the Fifth Regular Session (December 1979).
- 2.6.9 Biological data reported by ICSEAF member countries on BIOLDAT forms comprise mainly the length and age composition samples of important species. These data are compiled and coded for processing using the ICSEAF ADP system which prints out the tables that make up the Sampling Bulletin published annually. To date, seven editions have been released.
- 2.7 <u>EUROSTAT statistical programme and publications</u>
- 2.7.1 The EUROSTAT participant, in introducing EUROSTAT's statistical programme (Document CWP-10/15), said that the development of the programme has continued to be hindered by the lack of an agreed Common Fisheries Policy for the EEC. However, some contingency planning has occurred.
- 2.7.2 EUROSTAT continues to place great emphasis on the development of its fishery statistical programme in cooperation with other international fishery organizations, specifically to develop compatible statistical systems and concepts and to avoid duplication of effort.
- 2.7.3 In the last two years the bulk of the limited staff resources was used to enter the fisheries data into the computer. These data would shortly be accessible online to subscribers through the EURONET system.

- 2.7.4 Since the Ninth Session of the CWP, EUROSTAT has increased its publication programme for fishery statistics to include two annual publications (on catches by fishing region and on fishery products and the fishing fleet) and a quarterly bulletin on the quantities and values of landings in Community ports. The production of these volumes will soon be accomplished using ADP techniques.
- 2.7.5 A statistical register for Community vessels (Document CWP-10/17) is being established and should be operational within the next few months. EUROSTAT is collaborating with FAO in the establishing of a joint questionnaire on fleet statistics for completion by EEC Member States.
- 2.8 NAFO statistical programme, publications and data processing
- 2.8.1 The Assistant Executive Secretary of NAFO, in his review of statistical activities relevant to the Northwest Atlantic (Document CWP-10/11), noted that 1979 was a year of transition from ICNAF to NAFO, the latter coming into existence on 1 January 1979 and the former being terminated on 31 December 1979. To provide continuity during the transition, the Scientific Council of NAFO adopted the previous work of ICNAF's Standing Committee on Research and Statistics as the basis for continuing its research and statistical activities.
- 2.8.2. STATLANT 21A and 21B reports, with deadlines of 15 April and 30 June respectively, form the basis of the NAFO statistical system, the former providing the data required for the advance release of reasonably complete nominal catches of individual species in the preceding year for consideration at the June Meeting of the Scientific Council, and the latter providing more up-to-date and more detailed catch and effort statistics for publication in the Statistical Bulletin. Other local and more variable requirements involve the submission of preliminary statistics for management and for stock assessment at mid-term meetings.
- 2.8.3 Fisheries statistics for 1978, to be published in *Statistical Bulletin*, Vol.28, will terminate the ICNAF series. The NAFO *Statistical Bulletin* will commence with the publication of 1979 statistics, the format of presentation of the tabular material to be continued as in the ICNAF issues, except for a possible modification of Tables 5 and 6 containing the details catch and effort data. All tables of the reported year's statistics are computer-compiled from the STATLANT 21B data base, copies of which are made available in the form of computer printout or magnetic tape on request to scientists and institutes involved in the work of NAFO.
- 2.8.4 The revision of the NAFO data base of national statistics is a continuing programme of the Secretariat in order to maintain as complete an historical record as possible of catches from the marine resources of the Northwest Atlantic. A review of STATLANT 21A type data back to 1965 has recently been completed and efforts are being made to computerize the more detailed STATLANT 21B data prior to 1970. In view of the numerous revisions to previously published statistics, it is planned that computer-compiled summary tables for these earlier years will be published in one or more volumes as supplements to the Statistical Bulletin series.
- 2.8.5. The List of Fishing Vessels series will continue to be published every three years, the first NAFO issue being that containing the names and various characteristics of vessels (50 GRT and over) operating in the Northwest Atlantic during 1980. The only change from the previous issue for 1977 will be a column to indicate the presence or absence of reduction facilities on each vessel.
- 2.8.6 Biological data on length and age composition of catches of many species taken commercially in the Northwest Atlantic have been published annually in the Sampling Yearbook for 1956 to 1972. Subsequent computerization of the data resulted in the Sampling Yearbook being relegated to the role of containing lists of sampling data reported and incorporated into the data base. Starting in 1979, the requirements involve the reporting of sampling data in considerably more detail than previously: individual samples in the case of length frequencies, and monthly age-length keys.
- 2.8.7 Among the recent recommendations of ICNAF/NAFO, of significance to the collection and reporting of fishery statistics by member states, are: (a) that each member state provide a detailed description of its national system of collecting and processing fishery statistics;

(b) that the maps (charts) and notes relevant to the completion of STATLANT 21A and 21B forms be modified to reflect the change in the boundary line between Subareas 0 and 1 and the "NAFO" be substituted for "ICNAF"; (c) that the NAFO list of species be amended to include Anarchichas lupus, A. minor, Sebastes marinus, S. mentella, Molva byrkelange, and Macrowrus berglax, with their corresponding 3-alpha identifiers; and (d) that countries reporting large quantities of unspecified finfish in their national statistics should conduct studies during fishing operations with a view to providing an estimated breakdown of such quantities by species in future reports.

#### 2.9 OECD statistical programme and publications

- 2.9.1 The early publications of provisional data for OECD member countries in the Annual Review will continue. Every effort will be made to standardize and harmonize the data provided. These data include (a) vessels, classified by tonnage; (b) fishermen, whether full-time or part-time; (c) landings and landed value; and (d) imports and exports. With regard to (c) some countries provide only a breakdown by human comsumption purposes and industrial usage while other countries provide breakdowns by species. For (d) there are, again, discrepancies in the way member countries present data though the usual subdivisions are by fresh, frozen, cured, canned and industrial (meal and oil). Some countries indicate the volume of trade by country.
- 2.9.2 OECD is currently studying international trade in fish and fish products. This exercise consists of three main parts:
  - (a) compilation of historical catch data to 1976 by country, major species and fishing areas;
  - (b) compilation of similar data from 1977 onwards which is supplemented by quota allocations to national fishermen (if applicable) and foreign nations. These statistical data reflect changes in the structure of supply emanating from the implementation of the new management regime in 1977 when many member countries declared 200 miles exclusive economic zones around their coasts;
  - (c) an analysis of trade by major species in member countries and possibly selected non-member countries.

#### 2.10 The STATLANT Programme under the aegis of the CWP

- 2.10.1 The Secretary of the CWP reported that since the Ninth Session (17-23 August 1977) long-term work on the refinement and improvement of the international, regional and inter-agency standards continued. The activities in this field covered concepts, definitions, classifications, codes, identifier lists, nomenclature, abbreviations, etc. He pointed to the documents prepared and distributed to the participants in the Tenth Session of the CWP; these papers amply reflect the results of the standardization work.
- 2.10.2 The Secretary and all the participating agencies continued to maintain the close collaboration and constant consultation necessary to ensure that the various STATLANT forms and notes (instructions) for their completion reflected the required degrees of standardization and harmonization of the various essential details. This joint and constant striving to achieve and maintain these objectives is resulting in a significant facilitation of the tasks of the national reporting offices. Also the subsequent work (compilation, processing, publication, etc.) on the data submitted in the offices of all the agencies, benefit greatly from these standardization results.
- 2.10.3 The Secretary considered that with a few minor exceptions all the recommendations of the Ninth Session of the CWP have been executed.
- 2.10.4 The Secretary and representatives from nearly all the agencies participating in the CWP's STATLANT Programme were able to attend an Ad Hoc Inter-Agency Consultation on Atlantic Fishery Statistics, organized on 28-29 September 1979, in Warsaw during the Statutory Meeting of ICES. This consultation provided an excellent opportunity to review the progress made in various fields of significance to the CWP and its activities. The participants prepared also the Draft Agenda (Document CWP-10/3) for the Tenth Session of the CWP. The full report of this Ad Hoc Inter-Agency Consultation is reproduced as Appendix 11 (see also CWP-10/9).

#### 3. FISHING AREAS FOR STATISTICAL PURPOSES

#### (Agenda Item 3)

Relevant Documents: CWP-10/16, 16:Addendum 1, 16:Addendum 2, 24, 25, 32 and 50

#### Relevant Appendices:

- 3.1 The CWP Secretary presented the Document CWP-10/16 and its two addenda and explained that these constitute a compendium of all existing information on the demarcation of the boundaries of the nineteen major marine fishing areas and the seven major inland fishing areas. The paper contains an historical record showing the evolution of this currently used global system together with the details of the further breakdown of these major fishing areas into subareas, divisions, subdivisions, etc. The document also describes the standards developed at the Eighth and Ninth Sessions of the CWP to code and identify statistical quadrangles based on a graticule system using latitudes and longitudes.
- 3.2 It was pointed out that during the past ten years only minor changes have been made in the boundaries of these major marine fishing areas. The CWP noted that it is not expected that any major changes would be required in the foreseeable future and it was agreed that any changes should be kept to the basic and essential minimum.
- 3.3 The CWP noted that among these few possible changes would be the following:
  - (a) adjustments in the boundaries of Subdivision Vbl within the ICES Major Fishing Area 27.
  - (b) the possible transfer of subarea 48.8 from Major Fishing Area 48 to the adjacent Major Fishing Area 41.
- 3.4 The CWP agreed that the chart (C27) appearing in Document CWP-10/16 should be amended to show principally the region of the Northeast Atlantic (Major Fishing Area 27) and to exclude, to avoid confusion, the Northwest Atlantic.
- 3.5 The CWP also considered that a global system to code and identify individual national maritime fisheries zones (e.g. EEZ's, territorial waters, extended fisheries jurisdiction zones, patrimonial seas, etc.) which have already emerged or might be emerging during the next decade or so, could become essential. However, it is at this stage somewhat premature to recommend a framework. The system of a two-alpha system based on the ISO codes, as proposed by the Secretary, might be one of the alternatives to take into account when the final coding structure is established.
- The CWP Secretary presented Document CWP-10/25 and pointed out that the seaward boundaries of various major marine fishing areas are precisely described and reflected in the various charts. He stressed that the landward boundaries of these marine areas, i.e. the boundaries between such marine areas and their adjacent inland fishing areas, are nowhere precisely described. There is a need to establish guidelines which could be used by the coastal countries wishing to identify their national marine/inland demarcation lines.
- 3.7 The baselines proposed by the UN Law of the Sea Conference to be drawn principally along the low-water mark and across the mouths of bays, etc., could not be used for this purpose. The *internal waters* on the landward side of such baselines consist of marine areas which belong to marine fishing areas and should not be considered as "inland" waters.
- 3.8 The CWP considered various proposals to identify the boundaries separating marine and inland waters. It appears that the use of tidal levels in estuaries, the salinity levels of lagoons and other partially or completely landlocked coastal water bodies, the species composition, etc., do not provide satisfactory solutions to these demarcation problems in all parts of the world.
- 3.9 After a careful consideration of the aforementioned inland/marine boundary issues, the CWP recommends:

that the CWP Secretary present to the Eleventh Session of the CWP a paper incorporating (a) a collection of the various criteria now used by national administrations to distinguish between inland and marine fisheries; and (b) additional information on these questions from international and regional fisheries bodies interested in this matter.

#### 4. FISHING FLEET AND FISHING VESSEL STATISTICS

(Agenda Item 4)

Relevant Documents: CWP-10/17, 18, 32, 35, 46 and 51

#### Relevant Appendices:

#### 4.1 <u>Classifications</u> and definitions for fishing fleet statistics

4.1.1 Complying with a recommendation of the Ninth Session (See Section 6.1.5 of FAO Fisheries Report No. 197) the FAO representative introduced Document CWP-10/18 on the classifications and definitions currently used for fishing fleet statistics. While it was possible to reconcile differences in the classifications used by FAO and EUROSTAT (for example, the tabulation of vessel age) some problems were experienced with the EUROSTAT classification of type of fishing vessels. These apply particularly to the item on tuna fishing vessels and the CWP recommends:

that EUROSTAT reconsider its classification of types of fishing vessels and collaborate with FAO to unify this and other classifications used in fishing vessel statistics.

- 4.1.2 The CWP noted that there were basically two types of fishing fleet statistics: those based on the structural characteristics of the vessels and those based on the fishing gear used. A third type based on operations in different fisheries was also mentioned. It was recognized that the first was required for the development and administration of fleet structural policies and the second for resource management purposes.
- 4.1.3 The CWP, noting the contents of Document CWP-10/46 and its usefulness, considered that a similar document for fishing vessels would be very useful and therefore, recommends:

that resources permitting, FAO should prepare a technical document containing descriptions and illustrations of fishing vessel types as a guide to the vessel-type classifications.

4.1.4 With regard to the classification of fishermen (Document CWP-10/35) as full-time, part-time and occasional, it was observed that discrepancies existed as to the criteria adopted for the breakdown (for example, a distinction according to the working time or the income received), but that no ready solution to the problem was apparent.

#### 4.2 FAO Questionnaire for fishing fleet statistics

- 4.2.1 The ICES Statistician agreed that, with the object of avoiding duplication of work by national statistical services, the FAO questionnaires on fishing fleet statistics (or its EUROSTAT equivalent) would meet his organization's requirements for fishing fleet statistics. Accordingly, the FAO and EUROSTAT representatives undertook to include in the notes for completion of their questionnaires an instruction for the national statistical services to send a copy of the completed questionnaires to the ICES Secretariat. The ICES Statistician then agreed to withdraw ICES Data Form 6 on fishing craft and fishermen.
- 4.2.2 It was noted that national services were still producing fleet tabulations with differing reference dates. The CWP thus reiterated the recommendation contained in the report of the Ninth Session (Section 6.1.6) that regular fleet tabulations should refer to the end of the calendar year (i.e. 31 December).

### 4.3 <u>Registers of fishing vessels</u>

4.3.1 The EUROSTAT participant described plans to establish a statistical register of European Community fishing vessels and methods to be used to obtain tabulations from this register (Document CWP-10/17). The FAO participant pointed out that his organization was observing with interest the progress in establishing this register and hoped to make use of the experience gained to establish a world-wide register.

- 4.3.2 It was noted that the Commission of the EEC has produced a computerized register of fishing vessels using Lloyd's Register of Shipping for the data input but that such a register was limited to vessels of 100 GRT and above and recorded those vessels registered as fishing vessels without regard to their current activity.
- 4.4 Publication of fishing fleet statistics
- 4.4.1 The FAO participant introduced his organization's plans to produce a publication of fishing fleet statistics based on the replies received from the recently introduced questionnaire (CWP-10/51). The CWP expressed an interest in this publication and a preference for the tabulation showing by country for each type of vessel the number and total tonnage for each tonnage class. An historical series of the five most recent years with a limited selection of earlier years was considered to be a useful presentation.
- 4.4.2 The Assistant Executive Secretary of NAFO reported that the list of vessels of 50 GRT and above fishing in the Northwest Atlantic in 1977 had recently been published and that this volume contained several summary tabulations. The next volume in the series would contain the list of vessels for the year 1980.

## 5. FISHING GEARS AND THEIR STANDARD CLASSIFICATION

(<u>Agenda Item 5</u>)

Relevant Documents: CWP-10/19, 30 and 46

Relevant Appendices: App. 8 and 10 (Table 1)

- 5.1 <u>Classification of fishing gear for use in statistics</u>
- Referring to Document CWP-10/19, the CWP Secretary pointed out that the amendments proposed for the International Standard Statistical Classification of Fishing Gear were made in order to make it more complete and more readily understood. Most of the amendments proposed were found useful, except for a few cases where further alterations or simplifications were proposed and agreed upon. However, modification of already adopted abbreviations and code numbers were considered not advisable and the existing ones should therefore be maintained or referred to. Taking this into consideration, the CWP recommends:

that the final version of the International Standard Statistical Classification of Fishing Gear (ISSCFG) presented in Appendix 8 of this Report should be used as the basic list of gear types and abbreviations by all international, regional and national institutions.

- 5.2 <u>Definitions and descriptions of gear categories</u>
- 5.2.1 While presenting the Document CWP-10/46, it was pointed out that its main objective was the improvement of fishery statistics by providing concise descriptions and simple illustrations to facilitate the identification of the various fishing gears. It was also noted that this document could also be of interest for fishing technology work, training activities, and enforcement of gear regulations. In view of this, the CWP recommends:

that an expanded version of the Document CWF-10/46 dealing with the definitions and descriptions of fishing gears, based on and complemented by the amended international standard statistical classification of fishing gears, be prepared and published by FAO.

#### 6. SPECIES ITEMS AND THEIR GROUPINGS

#### (Agenda Item 6)

Relevant Documents: CWP-10/20, 21, 21 Addendum 1, and 49

#### Relevant Appendices:

6.1 The CWP reviewed the existing international identifiers and qualifiers to individual species items. It noted that the system of the 3-alpha identifiers initiated at the Ninth Session has now been extended to all individual species items of ISSCAAP, and are listed at the back of the FAO Yearbook of Fishery Statistics, Volume 46. The CWP recommends:

that the 3-alpha identifiers should be adopted by all regional agencies for statistical tabulations and related matters, such as questionnaires, forms, etc.

- 6.2 The CWP Secretary reported on the current system of adding new species items, identified by regional agencies, to ISSCAAP by registering them and assigning to them English, French and Spanish names, together with scientific names, taxonomic codes and 3-alpha identifiers. It was noted that member agencies will be continuously informed by FAO, on a quarterly basis, of all new additions to ISSCAAP. It was agreed that, for internal monitoring purposes, it would be very helpful if such quarterly lists were allocated consecutive serial numbers.
- The CWP Secretary presented Document CWP-10/49 with proposals for the future revision of ISSCAAP. At present, there are about 800 individual species items which are arranged, in their taxonomic order, within the 51 "groups of species" of ISSCAAP, these groups being in turn, classified within nine ISSCAAP divisions. However, scrutiny of the currently used ISSCAAP groupings indicates that certain difficulties arise with respect to some of the groups under Division 3 and in particular (i) Group 33, Redfishes, basses, congers, etc. accommodating at present at least 220 items, and (ii) Group 34, Jacks, mullets, sauries, etc. accommodating about 68 items. While there is no urgent need to introduce any drastic changes in the groups within the next few years, it is advisable to initiate studies to identify alternative groupings for introduction by as many regional and national agencies as possible sometime in
- A revision of the species items now within Groups 33 and 34 provides an opportunity to consider the advisability and feasibility to amend also the groupings of the items in all the other seven groups under ISSCAAP Division 3. However, the general feeling was that such changes were not necessary at present, since the number of individual species items in each do not appear to be excessively high, and since the extension of the number of these groups might cause some technical difficulties in regional and national agencies.
- 6.5 The CWP agreed that FAO, in consultation with regional agencies, should consider the feasibility of revising Groups 33 and 34. Any proposals for change should be brought to the attention of ICES at its Statutory Meeting in October, 1981, for comment prior to their consideration at the Eleventh Session of the CWP.
- The CWP further considered FAO proposals to exclude data on aquatic mammals and plants from the national nominal catch figures and from the aggregates in the FAO Yearbook tables, but, instead, to show them for comparison purposes in separate tables. These proposals were agreed to with the understanding that the annual yield of aquatic mammals should be expressed in numbers, and that the published data on seaweed should be expressed on a wet-weight basis in metric tons (tonnes). FAO plans to use a separate form to obtain more comprehensive statistics on seaweed harvesting, including those for back years.
- 6.7 The CWP agreed that the reporting of annual seaweed production data on a wet-weight basis on STATLANT A and B Forms of the regional agencies should be retained. The change in the FAO practice of publishing statistics on aquatic mammals and seaweeds should not affect the existing procedures in regional agencies.

#### 7. LANDINGS AND CATCH STATISTICS

(Agenda Item 7)

Relevant Documents: CWP-10/20, 22, 23, 32, 47 and 48

Relevant Appendices: App.7

#### 7.1 <u>Selected basic concepts</u>

- 7.1.1 The Secretary of the CWP presented a report on "Selected Basic Concepts" (CWP-10/20) and requested comments or suggestions for improvement. This report contained notes on basic concepts used in fish catch statistics which appear in the FAO Yearbook of Fishery Statistics, as well as a diagram to illustrate the relationships among these basic concepts. The CWP reviewed the diagram on page 4 of CWP-10/20, which was amended as shown in Appendix 7 for general use.
- 7.1.2 The EUROSTAT participant presented Document CWP-10/22 describing the recording and transmission of information concerning catches taken by fishing vessels of member states. He brought two points to the attention of the group, as follows:
  - (a) The conversion factors used to estimate the nominal catch from the landings are those in use in the country of landings. This could give rise to problems when catches of one member state are landed in another member state, whose conversion factors may be very different.
  - (b) The onus of reporting trans-shipments has been attributed to the country whose vessel caught the fish because of the technical problems of collecting these data from non-EEC member states.
- 7.1.3 On reviewing Document CWP-10/48 the CWP discussed the rounding-off of catch data. The CWP was of the opinion that the catch data should be handled as before. The arguments were that rounding-off does not make the data more accurate and that some catches of certain species might completely disappear from the tables in international publications. The CWP recommends:
  - (a) that FAO, in the publishing of its Yearbooks of Fishery Statistics, should continue its current practice to publish all catch data by countries, by major fishing areas, by species groups and items, expressed in metric tons.
  - (b) that data rounded-off to hundred metric tons, thousand metric tons, etc., should, with the exception of a few summary tables, only be incorporated where the nationally submitted tabulations are not to the nearest metric ton.
  - (c) readers should be reminded in a properly worded paragraph in the front pages that this presentation of data in metric tons should in no way convey the false impression that all such data are necessarily accurate.

#### 8. CONVERSION FACTORS

(Agenda Item 8)

Relevant Documents: CWP-10/20, 23, and 27

#### Relevant Appendices:

- 8.1 Conversion factors were discussed at the Seventh, Eighth and Ninth Sessions of the CWP. Two types of factors were recognized. The first consists of those that are used to convert landings to nominal catches and the second type consists of those used to relate landings to products processed ashore for calculation of supply balance sheets. At previous Sessions the CWP recommended that FAO undertake a review of conversion factors, and at the Ninth Session, that EUROSTAT be requested to collect these factors from the EEC Member States. It was stressed at the Seventh Session that such compilations are not for establishing international factors but to stimulate national statistical offices to compare factors they are using with those applied by other countries so that significant discrepancies could be researched. The ultimate objective of this activity is to improve the quality of conversion factors.
- About a decade ago FAO obtained available conversion factors used to calculate the live weight equivalent of fish and fish products landed from North Atlantic countries ("Conversion Factors: North Atlantic Species, 1970", Bulletin of Fishery Statistics No. 25, 1971). FAO recently requested, from national statistical offices, up-to-date conversion factors used to convert (a) landings (landed weight) to nominal catches (live weight); (b) fishery products (net product weight) to live weight; and (c) selected volume and capacity units (crans, baskets, etc.) and non-metric mass units to metric mass (weight units) metric tons, kilograms, etc. A number of countries responded to this request with results presented in CWP-10/23.
- 8.3 The FAO representative indicated that computerization of the conversion factors will permit updating of the list whenever countries submit changes and the retrieval of selected components upon request (e.g., a list of conversion factors for species peculiar to a particular region). It was noted that these conversion factors will be identified by country, species descriptor, area of capture where relevant, degree of dressing, processing and preserving, and the applicable major fishing areas. The CWP agreed to the need for continual updating of the list, noting that countries should be urged to report revisions to their national lists at any time. The CWP therefore, recommends:
  - (a) that FAO proceed immediately with the computerization of the national lists of conversion factors for Atlantic commercial fisheries and publish the list, based on national reports received to the end of 1980, in one of its series;
  - (b) that FAO provide for the regular updating of the list of conversion factors by requesting countries to review and revise national lists of conversion factors submitted to them on computer printout every three years; and
  - (c) that FAO provide to interested regional agencies upon request the initial complete lists of conversion factors for the relevant regions and keep the agencies informed of any revisions to their regional lists.
- 8.4 The CWP noted that there are problems in developing representative factors for certain items, especially for fillets and cured fish. The size and condition of fish have a large influence on recovery rates, which may also fluctuate seasonally and by method of production. It may be possible to improve conversion factors for fillets by expanding the classification to include sub-classifications for fish sizes and for processing methods.

#### 9. STATISTICS ON AQUACULTURE - INLAND AND MARINE

(Agenda Item 9)

Relevant Documents: CWP-10/24, 25 and 50

#### Relevant Appendices:

- 9.1 In introducing Document CWP-10/24, the EUROSTAT participant pointed out that, although national statistics were generally not available, there was a growing demand, both nationally and internationally, for statistics on aquaculture. Two basic problems existed:
  - (a) the lack of a clear definition of aquaculture, and
  - (b) the lack of a clear distinction between mariculture and fresh water aquaculture,

The OECD participant reported that his organization had experienced the same problems in the preparation of Document CWP-10/50.

9.2 The CWP considered that these problems could not be resolved at the present session and recommends:

that FAO, ICES and EUROSTAT and other interested agencies study the problems associated with establishing of statistics on aquaculture and, after seeking advice of the relevant experts, prepare a report with, if possible, a questionnaire for submission to the Eleventh Session of the CWP.

#### 10. RECREATIONAL FISHING

(Agenda Item 10)

Relevant Documents: CWP-10/26, 52 and 53

#### Relevant Appendices:

- The Ninth Session of CWP (See Section 5.2 of the Report) noted that recreational fishing has become a significant fishery in many countries. Stock removals, for some important species and some regions, by this fishery are substantial. The CWP (Ninth Session) recommended that regional agencies bring to the attention of national fishery administrations and tourist boards the value of collecting catch statistics on this fishery.
- The participant from OECD presented an overview of economic and statistical problems in analyzing recreational fisheries (CWP-10/26). OECD requested data on these fisheries from member countries. Response indicated data are sparse, with the most complete data available from Canada and the United States. Recreational fishing in Europe and North America is estimated to be quite large, especially when one combines freshwater and marine fishing. It is difficult to classify data available in economic terms. While related in certain ways to the traditional money economy, the economics of recreational fishing is not completely integrated in the same way as commercial fishing. Biological and economic evaluations of fisheries would be enhanced by better statistics on recreational fisheries.
- A United States participant presented a paper on problems of developing cost/efficient methodology to collect statistics on marine fisheries, past efforts to collect data, new survey methodology developed, and results of a 1978-1979 survey employing the new methodology (CWP-10/52). Collection of statistics on recreational fishing is difficult and expensive. Catches by recreational fishing in the United States are large for some species and for some regions.
- The WTO (World Tourism Organization) has prepared a summary of the replies received from 52 countries, to whom a questionnaire letter was sent. Few countries provided any statistical information on recreational fishing, and what statistics they could supply were not comprehensive. These results argue strongly for a determined effort aimed at correcting what WTO feel are serious lacunae in our knowledge of this important topic.
- 10.5 Each regional agency was asked whether they were received recreational fishery statistics and whether these were combined with commercial fishery statistics. ICES data includes some subsistence catch which may be confused with recreational catches. NAFO is not collecting recreational data. Commercial catches reported to ICCAT include some recreational catches. The other agencies are not receiving any recreational fishery data.
- 10.6 Clarity is needed in the publishing of recreational fishery statistics. It appears that some commercial fishery statistics include recreational fishery statistics while others do not. The statistics on commercial fisheries are used in the calculation of primary industrial production and national accounts. Methods for including recreational fisheries data in national accounts have not yet been universally agreed. Therefore, the CWP recommends:

that statistics on recreational catches be recorded and published separately from statistics on the commercial catches, and where possible, from subsistence catches.

Data are needed on the recreational fisheries but nations will need to develop survey methodology before this can be done accurately. Because of the infancy of collecting statistics on the recreational fisheries, the CWP, at this stage, cannot recommend international definitions and standards. The efforts of OECD and WTO to improve data availability of recreational fishery statistics are recognized.

#### 11. LOG SHEETS AND LOGBOOKS

(Agenda Item 11) ,

Relevant Documents: CWP-10/27, 28 and 37

Relevant Appendices: App. 10 (including Tables 1 and 2)

- 1].] The CWP reviewed Document CWP-10/27 which presented proposals for international standards for logbooks and log sheets.
- The ideas developed under this item and the consequent recommendation at the CWP's Ninth Session (Section 8 of the Report) were carefully examined. The Report of the Statistics Committee Liaison Working Group of ICES, Copenhagen, 19-20 May 1980 (CWP-10/37) was also studied. The contents of the Document CWP-10/28 entitled "Developments of logbooks for use in the EEC Fishery Statistical Programmes" were also noted.
- The CWP noted that several objections had been raised to the recommendations at the CWP's Ninth Session. The recommended logbook system was too detailed and restrictive for universal application. For example, the recording of data on a haul to haul basis may not be essential and practicable while day to day records may be sufficient. Also the format of the logbook should be fishery specific, hence a universal prescription is not possible and the compulsory use of 3-alpha species identifiers, the reporting of position of fishing grounds by latitude and longitude, and of depths may cause difficulties.
- In view of the importance of the logbook system especially its usefulness in the context of the newly-introduced exclusive economic zones, the CWP appointed a task force comprising E. Heyerdahl (Convener), D. Tilley, D. Chakraborty, T. Shimura, B. Kowalewski, H. Becker, V. Nordstrom, F. Fernandez de Santaella. The terms of reference of the task force were to examine the problems in depth and to submit a report to the current CWP Session. The report of the task force is given in Appendix 10.
- 11.5 The CWP noted that several terms, e.g. log sheets, logbooks, log records, fishing sheets, etc., are used to designate the forms for collecting data. It was, therefore, agreed that only one term, logbook, would be used for such forms.
- The CWP emphasized the need for flexibility while attempting to enumerate the items of information for inclusion in the logbook and also in its implementation. The CWP identified three distinct and independent groups of people involved in this process: (1) those in the fishing industry who supply the data; (2) those responsible for collecting and compiling data; and (3) the scientists, administrators, etc., who use the data. Development of effective logbook systems requires consultation with these three groups. It was, therefore, emphasized by the CWP that while the minimum items in the logbook should be decided based on the needs of the country involved, the implementation procedures should be tailored based on the local conditions of the fishing industry. In this context some education programme explaining the overall purposes of the logbook system for the people involved in the fishery promises better results.
- 11.7 While going through details of Section 8 of the Ninth Session of the CWP, it was noted that special emphasis had been placed on the use of alpha identifiers for recording the species items. The merit of their use, however, can only be determined by weighing the experiences of different countries. As no participating country has as yet used the 3-alpha identifiers in logbooks, the CWP at the Tenth Session took a neutral view on the application of this system to logbooks. The applicability of the system should, therefore, be judged at future CWP sessions when the results of some field trials might be available.

11.8 The CWP expressed appreciation for the work done by the task force. Recognizing the current world-wide trend towards more effective fisheries management through the establishment of exclusive economic zones has given rise to a need for better fishery statistical data and that many countries were developing logbook systems, the CWP recommends:

that the Secretary of the CWP explore the possibility of FAO producing a technical report or a manual, arraying the requirements for planning, designing and implementing logbook systems, and that this be completed as early as possible, and not later than the Eleventh Session of the CWP.

## 12. STANDARDIZATION AND HARMONIZATION OF QUESTIONNAIRES, FORMS, NOTES, ETC.

#### (Agenda Item 12)

Relevant Documents: CWP-10/29, 30 and 35

#### Relevant Appendices:

- The CWP Secretary announced that CECAF's Working Party on Resource Evaluation, which met in Dakar, Senegal, on 23-27 April 1979 (FAO Fisheries Report No. 220) suggested that the STATLANT 34B form was not suitable for the national reporting of catch and effort data in Major Fishing Area 34. The Marine Resources Service of FAO's Fisheries Department prepared a special CECAF form for reporting CPUE data (see Appendix 2 to Document CWP-10/30).
- 12.2 FAO appointed Mr. E. Cadima as a consultant to review the STATLANT B forms in an attempt to produce a version that could meet the CECAF requirements. The results of Mr. Cadima's study and review of the STATLANT B forms appear in CWP-10/30.
- Mr. Cadima explained to the CWP his proposals to revise the STATLANT 34B form and he indicated how these could be reflected in the other B forms. He stressed that he attempted to make the classification standards of catch and effort less rigid. The existing definitions of these "classes of fishing units" in terms of GRT categories, gear, etc. would be replaced by "unit fisheries". The effort measures and catch quantities would be reported for these nationally established "unit fisheries". Flexible definitions for these would be determined by fishery scientists from national laboratories who would, on request, identify them for the national statistical services.
- The CWP members had strong reservations about these proposals. The flexibility in definitions and the use of scientists to present these to statistical offices could result in a serious lack of consistency and continuity in the presentation of the data. It was feared that the result would be significant incompatibilities over a period of time, in the data submitted to the agencies. The participants also expressed strong reservations about the proposed changes, through revisions in the B forms, which could adversely affect the comparability of long time series already available in great detail in existing on-going data banks. The CWP also pointed out that a fundamental change in a STATLANT B for one region could, if not introduced throughout the whole system, affect adversely the national capability to complete adequately also the unchanged forms. It is obvious that lack of harmonized and standardized concepts would lead to unnecessary confusion in national statistical offices responsible for completing forms on catch/effort data for the different regions.
- The CWP noted that although scientists brought special data series to stock assessment working parties, the catch/effort data from B forms are also used. The scientists extract and often aggregate the details available in the long-term series published by the agencies using the catch/effort data reported to them on the B forms. Because of the timing of these stock assessment working groups provisional and specialized data are brought by participants to such meetings. Such provisional and supplementary data should not be interpreted as an indication that the B data are not used.
- The CWP agreed that the use of forms for the coordination of stock assessment data provided by fisheries research laboratories is outside its terms of reference but it points out that internationally adopted standard concepts, definitions, classifications, etc., should be employed in the design of such regional forms and their notes. This requirement is particularly important when scientists, completing their specialized forms, have to obtain all or part of their data from national statistical offices.
- 12.7 The CWP noted that the major problem in the CECAF area seems to be related to the lack of monthly catch and effort data in sufficient detail and coverage for the regular completion of STATLANT 34B forms and that these issues relate more to the urgent regional need to strengthen the statistical capabilities than to the proliferation of reporting forms within the current statistical STATLANT programme.
- 12.8 National statistical offices in many countries are deeply involved with the collection, processing and reporting of data on their national fleets active in many areas throughout the world. Harmonized and standardized concepts, definitions, classifications, methods, forms, etc., are essential to avoid confusion, misunderstandings, etc.

- 12.9 It is also necessary for national and regional statistical offices as well as for the various users, to maintain continuity in already well-established data series.
- 12.10 The introduction of too-flexible concepts, lacking clarity and precision, could result in incompatible data which might seriously affect the quality and continuity of the overall data and their interpretation. In light of these considerations, the CWP recommends:
  - (a) that the basic standard concepts underlying the present system of STATLANT A and B forms remain unchanged, and
  - (b) that the participating agencies of CWP should consult each other on any proposed amendments to these concepts, and that such proposals be given careful consideration before their adoption.

## 13. RESPONSE DIFFICULTIES - NON-RESPONDENTS; POOR AND LATE RESPONDENTS

(Agenda Item 13)

Relevant Documents: CWP-10/31, 37, 41, 42, 44 and 45

#### Relevant Appendices:

- Response difficulties experienced by member agencies and currently attempted and proposed future remedial actions were presented in Documents CWP-10/37 (ICES), CWP-10/41 (ICCAT), CWP-10/42 (ICSEAF), CWP-10/44 (EUROSTAT), and CWP-10/45 (FAO). The prime reason for concern is the very poor submission performance by certain statistical offices of developed countries with large fisheries in their own and other waters.
- In the Northwest Atlantic the problem of non-response is minimal and in the Northeast Atlantic is mainly limited to catch/effort data by months. With regard to annual nominal catch data the major problem lies with late respondents and poor-quality responses in some cases. In many instances both the adherence to the established deadlines for submitting national returns and the quality and coverage of such returns have deteriorated in recent years, and are considered unsatisfactory. The CWP identified two main difficulties: insufficient manpower and budgets in national fishery statistical offices, and demands to monitor fisheries on real-time or near real-time basis.
- Improvement of the quality of statistics would require control measure's over the recording and reporting of data, both at sea and at landing sites to be imposed or enforced. No statistical system can produce high quality data without the cooperation of the fishermen; an improvement of the "credibility factor" with fishermen is required. The need for good communication between member agencies and national offices is obvious, and every means should be utilized to establish such communication. Direct personal contacts of member agencies with both national statistical offices and national laboratories facilitate improvements in the timeliness and accuracy of national returns. Besides this, a constant stream of reminders has to be maintained to bring pressure on national statistical offices to return promptly the completed questionnaires. In some instances, a denial to a country of access to other countries' data for the year, when this country itself has not yet submitted its national returns, might prove to be an additional possible means of persuasion.
- The CWP felt that administrators should be informed of the merits of timely and comprehensive statistics with regard to management and socio-economic decisions they make. In certain instances, semi-official data or estimates are used for fish stock assessment purposes, since official data are either not available or not considered accurate by assessment scientists. This, clearly, is a deplorable situation.
- 13.5 With respect to minimizing the problems of late responses, the CWP considered that changing deadlines for submission of completed STATLANT A and B forms would be ineffective.
- The CWP considered that a register (see Document CWP-10/31) for national focal points was not necessary in the North Atlantic, but that a need for such a register seemed to exist in certain other areas, where this approach to improve communications with national offices should be tried by FAO.

#### 14. THE ALLOCATION OF CATCHES BY NATIONALITY

#### (Agenda Item 14)

Relevant Documents: CWP-10/32

#### Relevant Appendices:

14.1 The CWP at its Ninth Session discussed the allocation of catches by nationality and recommended (Section 5.1.6):

"the flag of the vessel should, for the time being, be considered as the paramount indication of nationality and should only be over-ridden when it is obvious that the wording of chartering and joint operations contracts indicates otherwise or when the inter-relationships are too complicated to settle."

The CWP at this session reviewed the experience gained since its last meeting (CWP-10/32). In all major fishing areas difficulties have been encountered and the concept needs to be defined more precisely.

- 14.2 The problem has two aspects: who will be responsible for collecting and submitting the catch statistics, and under what country heading should the reported catches be included in the international statistics.
- There are many countries anxious to develop their fishery resources. These could be exploited by chartering fishing vessels, with or without the foreign skippers and/or crews. Joint companies could be established with the boats operating under the flag of the distant country while the shore installations are covered by the coastal participants. Are these catches, when landed in the port of the coastal country, to be considered as imports into that country and as exports from the distant country supplying the fleet side of the joint operations? The extension of exclusive economic zones has caused some countries to reconsider the flag concept. The rationale behind this rethinking is that a country receives a proprietary interest in the fish once it has been allocated a catch quota; it would then not matter by whom the fish were caught, the catch would be registered as having been made by the country to whom the quota was allocated. A further complication is the introduction of costly large long-distance operating fishing vessels, which may encourage the tendency to use "flags of convenience". A "flag of convenience" state is, in this context, any nation which registers a fishing vessel without including the vessel in its economy, and without assuming the responsibility of reporting catch statistics.
- 14.4 The CWP considers that the responsibility for reporting catch statistics should still be with the flag state of the catcher. When the catcher is flying a "flag of convenience" the best procedure seems to place the responsibility with the country in whose EEZ the fishing operation takes place. Outside any EEZ the problem must be tackled through the various regional agencies on a case-to-case basis.
- The CWP further considers that the nationality of the catch when reported through the STATLANT programme, should be the flag state of the catcher. If, however, chartering, joint ventures, contracts, etc., transfer the fleet into another state's economy, then the flag state nationality should be overridden. The bi- or multi-lateral agreements should, in such cases, specify the responsibility for the collection and submission of statistics. Similarly, the nationality of the catch should be specified. When "flag of convenience" states are involved, the nationality of the owner should be the next priority. Only when this nationality is obscure, the quota ownership or the national jurisdiction of the EEZ should be applied.

14.6 After thorough debate the CWP concluded that while the recommendation of the Ninth CWP, that the flag of the vessel should be paramount in the allocation of catches and landings be maintained, the exceptions to the use of the flag for such determination should be clarified. Criteria are needed for the application of this exception. The CWP recommends:

that the flag of the vessel should, for the time being, be considered the paramount indication of nationality and should only be overridden when one of the following arrangements between foreign flag vessels and host countries exist:

- (a) the vessels are chartered by the host country to augment its fishing fleet;
- (b) the vessels fish for a country through arrangement by joint venture contract, etc. (as opposed to the ad hoc practice of vessels selling catches to foreign boats or landing catches at foreign ports), and the operation of such vessels is an integral part of the economy of the host country.

#### 14.7 The CWP further recommends:

that when Governments negotiate joint ventures or other contracts where vessels of one nation land their catches at ports of another country or unload their catches to vessels of another country, and the above criteria are applicable, the allocation of nationality to such catches and landings data be specified in the agreements.

#### 15. DISCREPANCIES IN PUBLISHED STATISTICS

(Agenda Item 15)

Relevant Documents: CWP-10/29

#### Relevant Appendices:

- Discrepancies in published fishery statistics were considered by the CWP. Discussions centered around examples of differences in (1) national statistical publications; (2) regional agency statistics publications; and (3) statistics published by FAO. Many reasons were given for these differences but the most important were errors in reporting by nations to each agency, varying definitions, and policy interpretations, revisions and different deadlines for reporting to each agency.
- Nominal catches calculated from commodity production statistics may differ from nominal catches calculated from landed weights. It was concluded that different industry practices affect product recovery yields, and this did not appear to be associated with publication of different numbers. Data on product production cannot always be used to check country nominal catch statistics because of use of imported whole fish or semi-processed fished in the production of products.
- The problem of discrepancies in published statistics can be minimized by cross checking STATLAMT and NS forms. But the general problem lies with the national statistics offices. The CWP concluded that these offices have the responsibility for ensuring the accuracy and consistency of data submitted to regional agencies and FAO and any revisions to these data. The CWP encourages these offices to review procedures to manage the reporting of these statistics and subsequent revisions and make improvements where necessary.

#### 16. GLOSSARIES OF FISHERY STATISTICS

(Agenda Item 16)

Relevant Documents: CWP-10/33

#### Relevant Appendices:

- The EUROSTAT participant introduced Document CWP-10/33 by pointing out that national reporting officers often find, when completing questionnaires for national and international purposes, that necessary documents giving definitions and classifications are not readily available. A glossary of such items used in fishery statistics for distribution to all national reporting offices and other national agencies would alleviate the problem. The responsibility for establishing and updating of the glossary would seem to be a suitable function of FAO but EUROSTAT is prepared to assist FAO in this task. The supply and checking of part of the material would require the cooperation of other regional agencies.
- 16.2 The CWP noted that a glossary is in the final stages of preparation in Canada using not only material supplied by NAFO and FAO but also national items.
- 16.3 The CWP considered that a glossary as proposed by EUROSTAT, could be a useful document. It could include extracts from several of the documents discussed at the Tenth Session. Some editing would be preferable and national items would not normally be included. Accordingly, the CWP recommends:

that FAO and EUROSTAT, with, where necessary, the cooperation of other agencies, prepare a glossary of fishery statistics and report on progress to the Eleventh Session of the CWP.

## 17. FUTURE STRUCTURE OF THE CWP

(Agenda Item 17)

Relevant Documents: CWP-10

Relevant Appendices: App. 12

- Noting the comments and recommendations in its Report of the Ninth Session (FAO Fisheries Report, No. 197, section 11), the CWP considered that the time was now opportune for re-organizing its structure within the existing geographical context into a truly interagency body of experts providing technical advice on fishery statistical matters to participating agencies and national statistical offices upon request. In particular, it was agreed that the functions and activities of the CWP should be continued as an independent interagency consultation forum, composed of representatives of all the intergovernmental organizations of the entire Atlantic region with related objectives concerning the collection and publication of regional fisheries statistics.
- 17.2 The CWP recommends:

that FAO obtain the approval of its appropriate governing bodies to dissolve the present Working Party as an FAO statutory body.

17.3 The CWP agreed that its future functions as an inter-agency body for the Atlantic region should be guided by the terms of reference given in Appendix 12.

#### 18. TIME AND PLACE OF THE ELEVENTH SESSION OF THE CWP

(Agenda Item 18)

Relevant Documents: CWP-10/34

Relevant Appendices: App. 5

18.1 Time of the Eleventh Session

The CWP reviewed the time that would be required and considered that the most convenient dates for the Eleventh Session would be the period 21-28 July 1982.

- 18.2 Place of the Eleventh Session
- 18.2.1 Several participants extended invitations to the CWP to convene its next session at their Secretariat Headquarters. After careful consideration the CWP finally agreed that the Eleventh Session should be held in <u>Luxembourg</u> and expressed its appreciation to EUROSTAT for its kind invitation to provide the necessary facilities.
- 18.2.2 The CWP thanked the CWP Secretary for his invitation to the CWP to hold its next session at the FAO Headquarters in Rome and the ICES participants for their invitation to hold the Eleventh Session at the ICES Headquarters in Copenhagen.

#### 19. OTHER BUSINESS

(Agenda Item 19)

Relevant Documents: CWP-10/10

Relevant Appendices: App. 9

#### 19.1 Standard country abbreviations

- 19.1.1 The CWP noted that, although a considerable degree of standardization has been achieved in regional publications with regard to abbreviations used for species, gear, etc., there was no consistency in the use of abbreviations for countries. Consequently, the CWP proposed that the regional agencies should adopt the 3-letter country codes established by ISO (International Organization for Standardization) when it is necessary to use country abbreviations in tabular presentations. The list of 3-letter codes for countries fishing in the Atlantic Ocean is appended (see Appendix 9).
- 19.1.2 In the case of Canada (CAN) it was necessary to supplement the 3-letter codes by an additional letter in each case to designate components of this country for which fishery statistics are reported separately. Although it was noted that a similar treatment for the regional breakdown of United Kingdom would give rise to difficulties with the current presentation of tabulations in the ICES Bulletin Statistique, and the current ADP procedures, other treatments could cause conflict with those used by the ISO. It was thus decided to add a fourth letter to the ISO code for the United Kingdom (GBR).
- 19.2 Historical annual catch series
- 19.2.1 The CWP Secretary reported that FAO intends to initiate a project to collect on a global basis long-term time series of annual catch statistics which, as far as possible, could be linked to the 1970-1979 catch data already in the existing FAO catch data base. It is expected to construct these historical series back to approximately the early 1950's.
- 19.2.2 ICES, NAFO and ICSEAF have been compiling and publishing historical series and could make these available to FAO. ICCAT is at present developing historical series on tuna catch data.
- 19.2.3 The CWP participants pointed out that changes in the FNO's global area system during the 1960's might make it difficult for countries to provide comparable catch data over a long period of time. Many national offices might encounter problems in reflecting their currently used species identifications throughout the span of their long-term historical series.
- 19.2.4 Some catch series could be extended further back than others. Noting this, the CWP agreed that all agencies should participate as far as possible, in the FAO project to construct various historical series, by country, by species, by fishing areas, etc. FAO could supplement the tabulated materials with bibliographic lists indicating the sources of additional historical statistics.
- 19.3 Distribution of CWP Documents
- 19.3.1 Several participants expressed concern that the CWP documents are not distributed widely enough. On the other hand, it was recognized that problems could be created if there is a wide distribution of papers subject to revision. The CWP, after considering the various views, recommends:

that each participating agency retain for consultation at least one complete set of all CWP documents.

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2	List of documents
3	List of participants: Tenth Session of the CWP
4	List of selected acronyms and abbreviations: fisheries and statistics
5	CWP Sessions: dates, places and reports
6	Address of welcome by Mr. R. Lagarde
7	Catch concepts: diagrammatic presentation
8	International Standard Statistical Classification of Fishing Gear (ISSCFG)
9	FAO major fishing areas in the Atlantic: standard abbreviations for countries
10	Report of the logbook task force
11	Report of the Ad Hoc Inter-Agency Consultation on Atlantic Fishery Statistics, 28-29 September 1979, Warsaw, Poland
12	Future structure of the CWP
13	Recommendations and other proposals of the Tenth Session of the CWP

# AGENDA: TENTH SESSION OF THE CWP

Agenda Item	
1	Procedural matters
. 2	Agency programmes and publications presenting Atlantic fishery statistics
3	Fishing areas for statistical purposes
4	Fishing fleet and fishing vessel statistics
5	Fishing gears and their standard classification
6	Species items and their groupings
7	Landings and catch statistics
8	Conversion factors
9	Statistics on aquaculture - inland and marine
10	Recreational fishing
11	Log sheets and logbooks
12	Standardization and harmonization of questionnaires, forms, notes, etc.
13	Response difficulties - non-respondents; poor and late respondents
14	The allocation of catches by nationality
15	Discrepancies in published statistics
16	Glossaries of fishery statistics
17	Future structure of the CWP
18	Time and place of the Eleventh Session of the CWP
19	Other business

# LIST OF DOCUMENTS

CWP-10/1	General announcement
/2	Provisional agenda
/3	Annotated provisional agenda
/4	Provisional list of documents
/5	Provisional list of participants
/6	Provisional schedule of work
/7	General information for participants attending the Tenth Session of the CWP
/8	Not issued
/9	Ad <u>Hoc</u> Inter-Agency Consultation of Atlantic Fishery Statistics, 28-29 September 1979, Warsaw, Poland
/10	Report on the FAO fishery statistical programme and publications in general and specifically for the Atlantic and for WECAFC, CECAF, GFCM and CARPAS
/10	Corrigendum 1
/10 Addendum 1	Principal issues affecting fishery statistical activities in the WECAF area (Major Fishing Area 31)
CWP-10/10 Addendum 2	Principal issues affecting fishery statistical activities in the CECAF area (Major Fishing Area 34)
CWP-10/11	Report on the NAFO statistical program, publications and processing
/12	Report on the ICES statistical program, publications and ADP processing
/13	Report on the ICCAT statistical programme, publications and ADP processing
/14	Report on the ICSEAF statistical programme, publications and ADP processing
/15	Report on the EUROSTAT fishery statistics programme, publications and ADP processing
/16	Notes on the International Standard Statistical Classification of Fishing Areas
/16	Corrigendum 1
/16 Addendum 1	Notes on ICCAT's statistical system of Atlantic tuna fishing areas
CWP-10/16 Addendum 2	Notes on the ICES graticule-based statistical system of fishing areas
CWP-19/17	Statistical register of EEC fishing vessels
/18	Notes on international classifications and definitions used for fishing fleet statistics
/19	Notes on international classification and definitions used in fishing gear, fishing effort and fishermen statistics
/20	Selected basic concepts

#### Appendix 2 (continued)

CWP-10/21 Notes on current developments and improvements and refinements of International Standard Statistical Classification of Aquatic Animals and Plants (ISSCAAP) Notes on current developments and improvements of International Standard Statistical /21 Addendum 1 Classification of Aquatic Animals and Plants (ISSCAAP) Appendix H - ISSCAAP classification Appendix I - Statistical table headings The recording and transmission of information concerning catches taken by fishing CWP-10/22 vessels of EEC member states Quantity conversion factors: Atlantic fish species - landed or product weight to /23 live weight /24 The improvement of statistics on aquaculture and inland fisheries Boundaries for statistical purposes between inland and marine fishing areas /25 /26 Statistics of recreational fishing /27 Proposals for international standards for logbooks and log sheets /28 Fishing logbooks for use in waters of the European Communities /29 Standardization and harmonization of questionnaires /30 Improvement of questionnaries on catches and fishing effort /31 Proposals for a standard form to record details to compile registers of national focal points /32 Notes on the allocation of catches by nationality /33 Glossaries for fishery statistics /34 CWP Session: dates and places ICES Data Form 6: (revised): "Fishing craft and fishermen" and the notes for completion /35 ICES Data Form 7: "Annual return of information on discards" and the notes for /36 completion Report of the Statistics Committee Liaison Working Group (Copenhagen, 19-20 May 1980) /37 Report of the Working Group on Eventual Establishment of an ICES ADP System for /38 Fishery Statistics (Copenhagen, 21-23 May 1980) /39 Provisional list of acronyms /40 Not issued Response difficulties and their solution - ICCAT experience /41 Response difficulties and their solution - ICSEAF experience /42 /43 Not issued /44 Response difficulties and their solution - EUROSTAT experience /45 Response difficulties and their solution - FAO experience

Definitions and descriptions of fishing gear categories for statistical purposes

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# CWP-10/47 Notes on annual periods /48 The selection of measure units for catch and landings statistics and their roundings-off in national, regional and global publications /49 Proposals for the future revision of the International Standard Classification of Aquatic Animals and Plants /50 Notes on statistics on aquaculture /51 Proposals for publication of fishing fleet statistics /52 Marine recreational fishery statistics with particular interest to the United States /53 Statistics available on sport fishing

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#### Appendix 3 (concluded)

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#### LIST OF SELECTED ACRONYMS AND ABBREVIATIONS: FISHERIES AND STATISTICS

CWP	Coordinating Working Party on Atlantic Fishery Statistics (formerly known as the "Continuing Working Party on Fishery Statistics in the North Atlantic Area")
STATLANT -	Statistical Programme for Atlantic Fisheries (previously STANA)
ACC:SCSA	Administrative Committee on Coordination - Sub-Committee on Statistical Activities (United Nations)
ACFM	Advisory Committee on Fishery Management (ICES)
ACMRR	Advisory Committee of Experts on Marine Resources Research (FAO)
ASFIS	Aquatic Sciences and Fisheries Information System (UN/FAO/IOC)
BIWS	Bureau of International Whaling Statistics
CARPAS	Regional Fisheries Advisory Commission for the Southwest Atlantic (FAO)
CECAF	Fishery Committee for the Eastern Central Atlantic (FAO)
(CICAR)	See IOCARIBE
CIFA	Committee for Inland Fisheries of Africa (FAO)
COFI	Committee on Fisheries (FAO)
COPESCAL	Commission for Inland Fisheries of Latina America (FAO)
(CWP)	See above
ECE .	Economic Commission for Europe (UN)
EEC	European Economic Community
EIFAC	European Inland Fisheries Advisory Commission (FAO)
ESS	Statistics Division, Economic and Social Policy Department (FAO)
EUROSTAT	Statistical Office of the European Communities
FAO	Food and Agriculture Organization of the United Nations
FIDI	Fishery Information, Data and Statistics Service, Fisheries Department (FAO)
FII	Fishery Industries Division, Fisheries Department (FAO)
PITT	Fisheries Technology Service, Fisheries Department (FAO)
FIIU	Fish Utilization and Marketing Service, Fisheries Department (FAO)
FIP	Fishery Development Planning Service, Fisheries Department (FAO)
FIPL	Fishery International Institutions and Liaison Unit, Fisheries Department (FAO)
FIR	Fishery Resources and Environment Division, Fisheries Department (FAO)
FIRI	Iĥland Water Resources and Aquaculture Service, Fisheries Department (FAO)
FIRM	Marine Resources Service, Fisheries Department (FAO)
GFCM	General Fisheries Council for the Mediterranean (FAO)
IAFMM	International Association of Fish Meal Manufacturers
IASI	Inter-American Statistical Institute
IATTC	Inter-American Tropical Tuna Commission
(IBRD)	See World Bank
IBSFC	International Baltic Sea Fishery Commission

International Commission for the Conservation of Atlantic Tunas

ICCAT

#### Appendix 4 (continued)

**ICES** International Council for the Exploration of the Sea (ICNAF) See NAFO **ICSEAF** International Commission for the Southeast Atlantic Fisheries ICSEM International Commission for the Scientific Exploration of the Mediterranean Sea Inter-Secretariat Committee on Scientific Programmes Relating to Oceanography (UN/UNESCO/ **ICSPRO** WMO/FAO/IMCO/IOC) **ICSU** International Council of Scientific Unions **ICZN** International Commission on Zoological Nomenclature ILO International Labour Office IMCO Intergovernmental Maritime Consultative Organization **INPFC** International North Pacific Fisheries Commission IOC Intergovernmental Oceanographic Commission **IOCARIBE** IOC Association for the Caribbean and Adjacent Regions IOFC Indian Ocean Fishery Commission **IPFC** Indo-Pacific Fisheries Council **IPHC** International Pacific Halibut Commission **IPSFC** International Pacific Salmon Fisheries Commission ISI International Statistical Institute ISO ' International Organization for Standardization International Standard Statistical Classification of Aquatic Animals and Plants (FAO) ISSCAAP International Standard Statistical Classification of Fishing Gear (FAO) **ISSCFG** International Standard Statistical Classification of Fishing Vessels (FAO) ISSCFV IWC International Whaling Commission Joint Working Party of Experts on Indian Ocean and Western Pacific Fishery Statistics JWP (IPFC/IOFC) MCBSF Mixed Commission for Black Sea Fisheries Northwest Atlantic Fisheries Organization (previously ICNAF - International Commission NAFO for the Northwest Atlantic Fisheries) Fisheries Commission of NAFO NAFO/FC NAFO/SC Scientific Council of NAFO NEAFC North-East Atlantic Fisheries Commission NPFC Northwest Pacific Fisheries Commission **NPFSC** North Pacific Fur Seal Commission 0ECD Organization for Economic Co-operation and Development SAC (ESS) Statistics Advisory Committee of Experts (FAO) SAC (ICSEAF) Scientific Advisory Council (ICSEAF) SCAR Scientific Committee on Antarctic Research SCORRAD Standing Committee on Resources Research and Development (IPFC) **SEAFDEC** Southeast Asian Fisheries Development Centre

Permanent Commission for the Conference on Use and Conservation of Marine Resources of the

SPC

SPPC

South Pacific Commission

South Pacific

#### Appendix 4 (concluded)

STACFISH

Standing Committee on Fisheries Science (of Scientific Council of NAFO)

STACREC

Standing Committee on Research Co-ordination (of Scientific Council of NAFO)

(STANA)

See STATLANT

STAT (ICSEAF) Standing Committee on Statistics (ICSEAF)

(STATLANT)

See top of list

UNCLOS

United Nations Conference on the Law of the Sea

**UNCTAD** 

United Nations Conference on Trade and Development

UNDP

United Nations Development Programme United Nations Environment Programme

UNEP Unesco

United Nations Educational, Scientific and Cultural Organization

United Nations Statistical Office

UNSO WECAFC

Western Central Atlantic Fisheries Commission (FAO)

WMO

World Meteorological Organization

WTO

World Tourism Organization

World Bank

International Bank for Reconstruction and Development (previously IBRD)

#### Source and additional reference:

Initials and acronyms of bodies, activities and projects concerned with fisheries and aquatic sciences. Initiales et sigles des organismes, activités et projets lies à la pêche et aux sciences aquatiques. Iniciales y siglas de organismos, actividades y proyectos relacionados con la pesca y las ciencias acuáticas. FAO Fish.Circ., (110) Rev.3:111 p.

Appendix 5

CWP SESSIONS: DATES, PLACES AND REPORTS

CONTINUING WORK	ING PARTY ON FISHERY HE NORTH ATLANTIC AR	EA			FAO Fisheries Report No.
1st Session	25-26 May, 1	960	BERGEN	Norway	<u>a</u> /
2nd Session	6-8 June, 1	961	WASHINGTON D.C.	U.S.A.	<u>b</u> /
3rd Session	18-22 March, 1	963	ROME	Italy	No7
4th Session	9-12 March, 1	965	ROME	Italy	No. 21
5th Session	10-14 April, 1	967	ABERDEEN	Scotland	No. 45
COORDINATING WO ATLANTIC FISHER 6th Session 7th Session 8th Session 9th Session	3-7 February, 1 10-16 November, 1 12-20 September,	1969 1971 1974 1977	COPENHAGEN ROME PARIS DARTMOUTH	Denmark Italy France Canada	No. 70 No. 121 No. 156 No. 197
10th Session		1980	MADRID	Spain	No. 242
11th Session	21-28 July		LUXEMBOURG	Grand Duchy of Luxembour	ŗģ

a/ Annexe J of FAO Fisheries Report No. 3

b/ Annexe K of FAO Fisheries Report No. 3

<sup>★</sup> Proposals for the 11th Session as made by the CWP (10th Session) - see Section 18 of Report

#### ADDRESS OF WELCOME BY MR. R. LAGARDE

I am pleased to be able to welcome you to the friendly city of Madrid on behalf of the two international fishery commissions with headquarters here, who feel very honoured to host this Tenth Session of the Coordinating Working Party on Atlantic Fishery Statistics. I do so on my own behalf, representing the International Commission for the Southeast Atlantic Fisheries, as well as on behalf of Dr. Olegario Rodríguez Martín, Executive Secretary of the International Commission for the Conservation of Atlantic Tunas, present here today. A most hearty greeting goes to those of you representing the other fisheries agencies, several of whom I have known and worked with for many years. I am very glad to see around this table, in addition to the participants from FAO, ICES and NAFO, those from EUROSTAT and OECD, who have played such an active role in CWP's activities in recent years. I also wish to thank the participants from Canada, Denmark, the Netherlands, Poland, USA and USSR for their presence, and give a special welcome to those organizations who are attending the CWP only recently: the International Baltic Sea Fisheries Commission, and the FAO UNDP Projects for the Eastern Central Atlantic (CECAF) and for the Western Central Atlantic (WECAF).

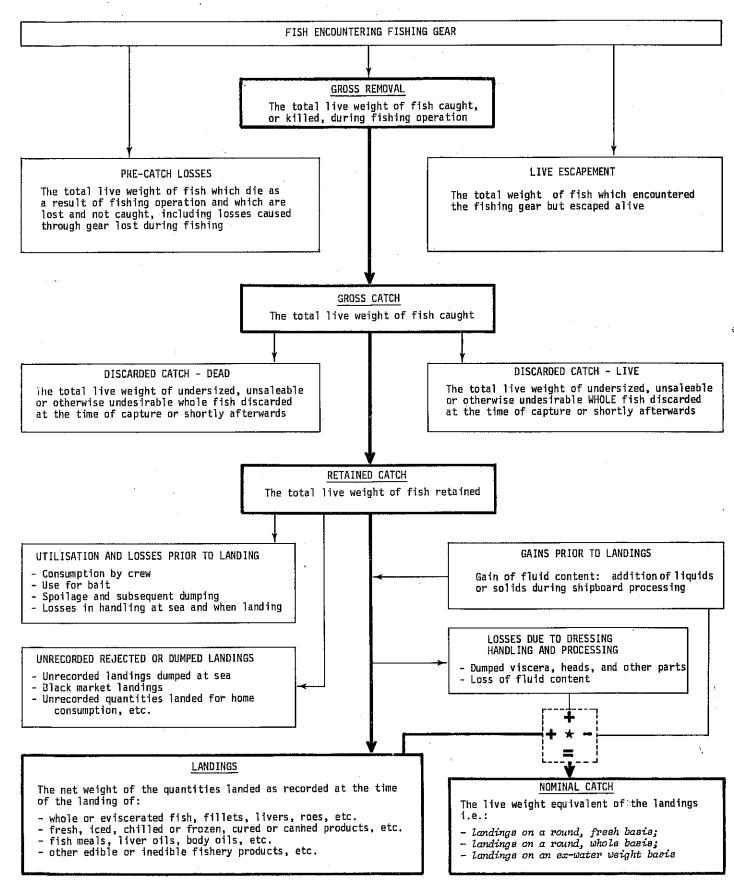
For those participating for the first time I would recall that the Continuing Working Party on Fishery Statistics in the North Atlantic Area was established in 1959 by virtue of a resolution of the Conference of the Food and Agriculture Organization. Since its first session in 1960, the working party has successfully endeavoured to comply with the main tasks assigned to it: the consultation with the officers of governments and international organizations with respect to difficulties encountered in implementing recommendations in the field of fishery statistics and, as appropriate, the making of suggestions for further national and international action in this

The Coordinating Working Party on Atlantic Fishery Statistics, so schristened in 1968, was extended in 1971 to include ICCAT as a member agency, and ICSEAF participated in its work for the first time n 1974. Since that time there has been very close collaboration between our two Commissions and the other members of the CWP; we enjoy, as well, especially good working relations with its secretary, Mr. L. P. D. Gertenbach, a distinguished member of the FAO staff and an old friend of lany of us, who, through his skillful management has achieved important accomplishments in the coordination of fishery statistics among the various agencies, and gained prestige for this body.

will not attempt to go into the many specific contributions the CWP has made through its work, ut from the point of view of the efficiency of international fisheries agencies, I would like to mphasize that the results obtained are of the greatest importance for the effective conservation f the fish resources of the Atlantic Ocean. The quality of the scientific evidence on which anagement measures are based depends directly, as you know, on the statistics reported by ishing countries. The CWP has been instrumental in improving the quantity and quality of data vailable. Agencies like ICSEAF who, when undertaking their statistical activities, found a well reganized and standardized reporting system already in effect, are in great debt to this working arty.

ay I, then, express my deep appreciation of your past record, and at the same time my wishes, ertainly shared by the Executive Secretary of ICCAT, for a very successful and pleasant meeting.

Appendix 7: CATCH\_CONCEPTS: DIAGRAMMATIC PRESENTATION



Appendix 8

INTERNATIONAL STANDARD STATISTICAL CLASSIFICATION OF FISHING GEAR (ISSCFG)

29th July 1980

Gear Categories	Standard Abbre- viation	ISSCFG Code
SURROUNDING NETS		01.0.0
With purse lines (purse seines) - one boat operated purse seines - two boats operated purse seines Without purse lines (lampara)	PS PS1 PS2 LA	01.1.0 01.1.1 01.1.2 01.2.0
SEINE NETS		02.0.0
Beach seines Boat or vessel seines - Danish seines - Scottish seines - Pair seines Seine nets (not specified)	SB SV SDN SSC SPR SX	02.1.0 02.2.0 02.2.1 02.2.2 02.2.3 02.9.0
TRAWLS		03.0.0
Bottom trawls - beam trawls - otter trawls 1/ - pair trawls - nephrops trawls - shrimp trawls - bottom trawls (not specified)	TBB OTB PTP TBN TBS TB	03.1.0 03.1.1 03.1.2 03.1.3 03.1.4 03.1.5 03.1.9
Midwater trawls - otter trawls <u>1/</u> - pair trawls - shrimp trawls - midwater trawls (not specified)	OTM PTM TMS TM	03.2.0 03.2.1 03.2.2 03.2.3 03.2.9
Otter twin trawls Otter trawls (not specified) Pair trawls (not specified) Other trawls (not specified)	OTT OT PT TX	03.3.0 03.4.9 03.5.9 03.9.0
REDGES		04.0.0
Boat dredges Hand dredges	DRB DRH	04.1.0 04.2.0

# Appendix 8 (continued)

Gear Categories	Standard Abbre- viation	ISSCFG Code
LIFT NETS		05.0.0
Portable lift nets Boat operated lift nets Shore operated stationary lift nets Lift nets (not specified)	LNP LNB LNS LN	05.1.0 05.2.0 05.3.0 05.9.0
FALLING GEAR		06.0.0
Cast nets Falling gear (not specified)	FCN FG	06.1.0 06.9.0
GILLNETS AND ENTANGLING NETS		07.0.0
Set gillnets (anchored) Drift nets Encircling gillnets Fixed gillnets (on stakes) Trammel nets Combined gillnets-trammel nets Gillnets and entangling nets (not specified) Gillnets (not specified)	GNS GND GNC GNF GTR GTN GEN GN	07.1.0 07.2.0 07.3.0 07.4.0 07.5.0 07.6.0 07.9.0
TRAPS		08.0.0
Stationary uncovered pound-nets Pots Fyke nets Stow-nets Barriers, fences, weirs, etc. Aerial traps Traps (not specified)	FPN FPO FYK FSN FWR FAR FIX	08.1.0 08.2.0 08.3.0 08.4.0 08.5.0 08.6.0 08.9.0
HOOKS AND LINES		09.0.0
Hand-lines and pole-lines (hand operated) 2/ Hand-lines and pole-lines (mechanized) 2/ Set lines (longlines set) Drifting longlines Longlines (not specified) Trolling lines Hooks and lines (not specified) 3/	LHP LHM LLS LLD LL LTL LTL	09.1.0 09.2.0 09.3.0 09.4.0 09.5.0 09.6.0 09.9.0
RAPPLING AND WOUNDING		10.0.0
Harpoons	HAR	10.1.0

#### Appendix 8 (concluded)

Gear Categories	Standard Abbre- viation	ISSCFG Code
HARVESTING MACHINES		11.0.0
Pumps Mechanized dredges Harvesting machines (not specified)	HMP HMD HMX	11.1.0 11.2.0 11.9.0
MISCELLANEOUS GEAR 4/	MIS	20.0.0
RECREATIONAL FISHING GEAR	RG	25.0.0
GEAR NOT KNOWN OR NOT SPECIFIED	NK	99.0.0

<sup>1/</sup> Fisheries agencies may indicate side and stern bottom and side and stern midwater trawls, as OTB-1 and OTB-2, and OTM-1 and OTM-2, respectively.

<sup>2/</sup> Including jigging lines.

<sup>3/</sup> Code LDV for dory operated line gears will be maintained for historical data purposes.

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

Appendix 9

FAO MAJOR FISHING AREAS IN THE ATLANTIC: STANDARD ABBREVIATIONS FOR COUNTRIES

COUNTRY	ALPHA-3 CODE (ISO)	COUNTRY	ALPHA-3 CODE (ISO)	
Albania .	ALB	Faeroe Islands	FRO	
Algeria	DZA	Falkland Is. (Malvinas)	FLK	
Angola -	AGD	Finland	FIN	
Antigua	ATG	France	FRA	
Argentina	ARG	French Guiana	GUF	
Bahamas	BHS	Gabon	GAB	
Barbados	BRB	Gambia	GMB	
Belgium	BEL	German Democratic Rep.	DDR	
Belize	BLZ	Germany, Fed. Rep. of	DEU	
Benin	BEN	Ghana	GHA	
3ermuda	BMU	Gibraltar	GIB	
Bouvet Island	BVT	Greece	GRC	
Brazil	BRA	Greenland	GRL.	
ritish Virgin Islands	VGB	Grenada	GRD	
ulgaria	BGR	Guadeloupe	GLP	
nited Republic of Cameroon	CMR	Guatemala	GTM	
anada	CAN	Guinea	GIN	
Canada (Maritimes)	CAN-M	Guinea-Bissau	GNB	
Canada (Newfoundland)	CAN-N	Guyana	GUY	
Canada (Quebec)		Haiti	HTI	
•	CAN-Q	Honduras	HND	
ape Verde	CPV	Iceland	ISL	
ayman Islands	CYM	Iraq	IRQ	
olombia	COL	Ireland	IRL	
ongo	COG	Israel	ISR	
osta Rica	CRI	Italy	ITA	
uba	CUB	Ivory Coast	CIV	
yprus	CYP	Jamaica	JAM	
enmark	DNK	Japan	JPN	
ominica	DMA	Korea, Republic of	KOR	
ominican Republic	DOM	Lebanon	LBN	
gypt	EGY	Liberia	LBR	
quatorial Guinea	GNQ	Libyan Arab Jamahiriya	LBY	

# Appendix 9 (concluded)

COUNTRY ALPHA-3 CODE (ISO)		COUNTRY	ALPHA-3 CODE (ISO)	
Malta .	MLT	Sierra Leone	SLE	
Martinique	MTQ:	South Africa	ZAF	
Mauritania	MRT	Spain	ESP	
Mexico	MEX	Suriname	SUR	
Monaco	MCO	Svalbard and Jan Mayen	SJM	
Montserrat	MSR	Sweden	SWE	
Morocco	MAR	Syrian Arab Republic	SYR	
Mozambique	MOZ	Togo	TGO	
Namibia	NAM	Trinidad and Tobago	TTO	
Netherlands	NLD	Tunisia	TUN	
Netherlands Antilles	ANT	Turkey	TUR	
Nicaragua	NIC	Turks and Caicos Is.	TCA	
Nigeria	NGA	Union of Sov. Soc. Rep.	SUN	
Vorway	NOR	United Kingdom	GBR	
Panama	PAN	UK (England and Wales)	GBR-E	
Poland 🐇	POL	UK (Scotland)	GBR-S	
Portugal	PRT	UK (Northern Ireland)	GBR-I	
Puerto Rico	PRI	UK (Channel Islands)	GBR-C	
Romania	ROM	UK (Isle of Man)	GBR-M	
St. Helena	SHN	United States of America	USA	
it. Kitts-Nevis-Anguilla	KNA	US Virgin Islands	VIR	
aint Lucia	LCA	Uruguay	URY	
t. Pierre and Miquelon	SPM	Venezuela	VEN	
t. Vincent	VCT	Western Sahara	ESH	
ao Tome and Principe	STP	Yugoslavia	YUG	
enega l	SEN	Zaire	ZAR	

#### REPORT OF THE LOGBOOK TASK FORCE

In their initial discussions concerning log sheets and logbooks the CWP participants expressed
the need for the formation of a smaller task force to consider the full range of data elements found
on these types of records and the degree to which they might be standardized. The task force
consisted of the following:

H. Becker.

D. Chakraborty

F. Fernandez de Santaella

E. Heyerdahl

B. Kowalewski

V. Nordstrom

T. Shimura

D. Tilley

#### 2. Background

In anticipation of an increase in the implementation of  $\frac{a/}{}$  logbook system to meet the enforcement and resource assessment needs arising from the extension of national jurisdictions, a similar task force was appointed during the Ninth Session of the CWP (Section 8 of the Report). Work of this group resulted in a listing of "essential requirements" for logbooks and the recommended suggestions for certain standards that should be included in the design and completion of such forms. In the last years it has been noted that a plethora of logbooks have been put into use. A review of the current situation and the associated consequences are included in CWP-10/27, and this document formed a major reference for this 1980 task force. In addition, the ICES Statistics Committee Liaison Working Group (CWP-10/37) requested the Tenth Session of the CWP "to consider, .... and to prepare, a minimum standard set of requirements to a logbook". This paper, as well as the contents of the document CWP-10/28 entitled "Developments of logbooks for use in EEC Fishery Statistical Programmes" were also considered. The CWP noted that several objections had been raised to the recommendations of the CWP's Ninth Session. The recommended logbook system was too detailed and restrictive for universal application. For example, in the description of the fishing operations and sometimes mandatory in its applications. For example, the recording of data on a haul to haul basis may not be essential and practicable while day to day records may be sufficient. Also, the format of the logbook should be fishery specific, hence a universal prescription is not possible and the compulsory use of 3-alpha species identifiers, the reporting of position of fishing grounds by latitude and longitude, and of depths may cause difficulties.

#### 3. Review of existing forms

In anticipation of discussions on the subject of logbooks the Secretary of the CWP collected a large number (73) of logbooks world-wide (Table 1), and these were reviewed by the task force. This analysis resulted in a summary of data items reflected in Table 2.

#### Review of current initiatives to revise or establish logbook systems

As can be seen by the listing of logbooks (Table 1), use of these has become a world-wide phenomenon. Many systems are in use, many are under revision, and many more are undoubtedly planned. In this regard, the Secretary of the CWP reported that a number of requests for descriptions of logbook systems have been received by his office.

#### 5. <u>Information needs for enforcement, resource assessment and general statistical use</u>

The CWP emphasized the need for flexibility while attempting to enumerate the items of information for inclusion in the logbook and also in its implementation. The CWP identified three distinct and independent groups of people involved in this process: (1) those in the fishing industry who supply the data; (2) those responsible for collecting and compiling data; and (3) the scientists, administrators, etc., who use the data. Development of effective logbook systems requires consultation with these three groups. It was, therefore, emphasized by the CWP that while the minimum items in the logbook should be decided based on the needs of the country involved, the implementation procedures should be tailored based on the local conditions of the fishing industry.

 $<sup>\</sup>underline{a}^{\prime}$  The term "logbook" covers terms "log sheets", "log records".

#### Appendix 10 (continued)

In this context some education programme explaining the overall purposes of the logbook system for the people involved in the fishery promises better results.

The task force noted that a number of discussions are currently in evidence, including the current session of the CWP, attempting to describe levels of necessary information required for assessment and management of fishery resources. Recognizing that the formulation of existing logbook systems has arisen from expressions of requirements, the task force considered that the incidence of data elements is yet another way of measuring data needs. Table 2 indicates the priority of elements requested in terms of their frequency of occurrence in logbooks.

#### 6. Implementation of logbook systems

In considering the aspects involved with implementing systems of logbooks, the task force felt that this subject is not one to be taken lightly by those anticipating establishing such systems. Items for consideration include: (a) a systems analysis of the requirements of proposed systems; (b) means for the collection of the statistics; (c) data processing validation and control of collected statistics; (d) access to collected data in a timely manner; (e) preservation of confidentiality requirements; (f) a consideration of the full range of limitations of logbook data; (g) the role of such statistics in coordination with other sources of data, e.g. processor records, observer reports, fisherman interviews, and remotely sensed automatically recorded information, should be considered; and (h) the implementation of a logbook programme a corrollary programme of vessel identification.

The successful introduction of new implemented systems will be greatly fostered by including both the industry and data-processing staff involved in the decisions concerning the design of the logbook, and through education programmes concerning its use. Because of the limited time available during the current session of the CWP, and because of the need to consider all the implications, the task force suggests

that the Secretary of the CWP explore the possibility of FAO producing a technical report or a manual, arraying the requirements for planning, designing and implementing logbook systems, and that this be completed as early as possible, and not later than the Eleventh Session of the CWP.

#### 7. Consideration of minimum and ideal elements for logbook systems

Logbooks at hand and the discussions thereon arrayed various levels on information and led the task force to the conclusion that, depending on the special uses the logbook are to meet, some subsets of the following categories could be selected and expanded where necessary:

-		Manager and a second		والمعامل والمعادل		wassal de	involved
1	Vessel identification:	Name, number,	master,	date; where	a partner	A62261 12	MADIAEA
		similar infor	mation is	required.			

II	Trip information:	Sailing date and time, port of departure, trip number, date and time of landing/off-loading, port of land/vessel of off-loading,
		nurchaser

III Catch information:	Species identification and quantities on a live weight basis that were retained or discarded, by categories related to corresponding effort units.
III Gaten information:	

IV	Area information:	Level of detail will be determined by the management regulations i	n
		effect and by the required effort units.	

٧	Gear information:	Type of gear and units being used, specifications of the	gear,
		e.g. mesh size.	

VI <u>Effort information:</u> Fishing data and time, units of effort appropriate for gear being used. This information may be supplemented by associated parameters of effort, e.g., depth of gear, fishing speed, course heading, etc.

#### Appendix 10 (continued)

VII Remarks:

Fishing conditions such as weather observations, water temperature, gear behaviour, and fishing support requirements, e.g. aircraft

spotters, surface vessels, etc.

VIII Biological materials:

Samples of lengths and notes of specimens retained for age

determination.

IX Authorization:

Signature of master.

#### 8. Standardization of logbooks

Due to the widely varying requirements for the collection of fishery statistics using logbooks and the use of the data collected thereon, the task force is of the opinion that there appears to be no single "ideal" logbook capable of meeting all the needs. However, there are certain points worth noting:

- I In developing a log format, care should be taken to keep it as simple as possible, particularly where the programme and introduction is just beginning. Constant data parameters other than those required for identification of the fishing unit should be kept to a minimum, e.g. HP, GRT, Length.
- II Once the required list of data items has been determined, care should be taken to observe any existing standards in definitions and coding, such as those developed and agreed to through the work of the CWP.
- . III Where possible, a logbook should be designed so that it could be used to collect information summarized on a daily or trip basis, as well as very detailed data on a haul-by-haul basis.
- IV Although the last session of the CWP felt that the logbooks were more important for vessels having trips longer than one day, the 1980 task force is of the opinion that the application will be determined by the overall management needs.

#### Appendix 10 (continued)

Table 2: Frequency of available national and international logbook forms reviewed by the task force

Countries	Frequency
AUSTRALIA BELGIUM BRAZIL CANADA GERMANY FR DENMARK SPAIN FINLAND FRANCE GUINEABISSAU INDONESIA ICELAND ITALY JAPAN KOREA REP LIBERIA MOROCCO MAURITANIA NETHERLANDS NORWAY PHILIPPINES	4 1 1 12 1 3 3 1 1 2 1 1 6 1 1 4 1 1 1 2
POLAND SENEGAL USSR SWEDEN SEYCHELLES USA SOUTH AFRICA	1 1 2 1 1 3 6 3
Organizations	
EEC-NAFO IATTC SPC Other <u>a</u> /	1 3 2 2

 $<sup>\</sup>underline{a}/$  Joint Eastern Tropical Indian Ocean Fishery Survey

#### Appendix 10 (concluded)

Table 1: Frequency of data items observed on logbooks and log-sheets

Vessel Related Items	Frequency of Occurrence	<u>Catch Related Items</u> (cont'd) <u>F</u>	requency of Occurrence
Name	55	Number tagged and released	· 1
Registration number	41	Quantity for industrial consumption	1
Master	40	Area Related Items	
Number of crew	27 26	Alea Ketatea Itelia	
GRT Master's signature	21	Statistical area	36
Permit or license number	20	Lat/Lon at start of fishing	22
Horsepower	13	Lat/Lon at end of fishing	11
Nationality	12	Noon position	8
Radio call number	11	Economic zone Name of grounds	6 · · · 6
Home port	11 10	Average lat/lon position	3
Vessel length Master's license	10	The tage that ten postation	Ŭ
Freezing capacity	4	Gear Related Items	
Hold capacity	3		
Vessel's width	3	Type of gear	56 30
Vessel's draft	1 1	Size of gear Quantity of gear	30 28
Icing capacity	1	Depth of gear	20 11
Freezing temperature Names of crew	i	Gear material	ii
runes of crea	·	Course heading	6
Fishing Partner Related Items		Fishing speed	5
•	_	Effort Dolated Thems	
Vessel :a	5 · 4	Effort Related Items	
Registration number Call sign	3	Hours fished	37
GRT	2	Date of haul/set	31
Horsepower	• 1	Number of hauls/sets	30
Aircraft spotter	3	Time at start of fishing	26
		Time at end of fishing	19 15
Trip Related Items		Haul/set number Days fished	15 8
Date of departure	33	Days on grounds	4
Port of landing	28	Type/quantity of bait used	4
Date of landing	26	Average tow time	3
Date of arrival on fishing grounds	s 19	Time hooked	1
Date of departure from fishing gro	ounds 16	Time boated	1
Name of purchaser/buyer	14 13	Remarks Related Items	
Trip number Port of departure	12	Remarks Related Items	
Date of sale	4	General remarks/observations	26
Date of transfer	3	Depth of bottom	19
Time of arrival at home port	. 3	Wind direction	11
Landed abroad	3	Surface temperature	11
Date of entry to foreign zone	. 2	Sea state	9
Purchaser/buyer number	! T	Wind force Cloud cover	8 · 5
Purchaser/buyer contract Value of catch	1	General weather	5
tarde or caccii	ı	Barometer reading	4
Catch Related Items		Bottom type	3
		Reasons for not fishing	. 3
Quantity of catch by species	20	Log book number Petrol consumed	2
Quantity of discards by species	18 4	Petrol consumed Wind duration	\ \ \
Quantity of processing by species Quantity of freezing by species	4	Visibility	1
Main species sought	3	•	
Quantity for human consumption	2	Biology Related Items	
Number of fish	1	Laurath Paramana 3	
Number of strikes	I	Length frequency sample measurement	ts 2

Footnote: The lack of instructions accompanying these logbook forms made it difficult to interpret precisely what was requested in some instances.

# REPORT OF THE AD HOC INTER-AGENCY CONSULTATION ON ATLANTIC FISHERY STATISTICS, 28-29 SEPTEMBER 1979, WARSAW, POLAND

- The meetings took place on the mornings and afternoons of Friday and Saturday, 28-29 September 1979, in the Palace of Culture and Science. As Convenor, Mr. L. P. D. Gertenbach opened the consultation and Mr. D. Griffith was elected Chairman with Mr. D. G. Cross and Mr. L. P. D. Gertenbach as
- 2. The participants in the consultation are listed in Annex A.
- The draft agenda was presented and adopted (see Annex B).
- A representative from each participating agency (ICCAT, ICSEAF, ICES, FAO, EUROSTAT and OECD)
  described briefly the present status of their fishery statistical programmes, including publications.
- 5. The FAO participant presented a draft questionnaire designed for submission to the IPFC's SCORRAD in Hong Kong in December 1979. It is designed to obtain information on the structure and status should be confined to those regions where the national institutions are relatively poorly known to the IPFC/IOFC areas and possibly in the WECAF, CECAF and GFCM areas.
- 6. The FAO participant reported that he had submitted and retrieved from virtually all the intergovernmental agencies the information required to prepare the Tenth Session of the CWP in the form Organization" (see Appendix 9 to the Report of the Ninth Session of the CWP). However, it was from OECD, FAO and EUROSTAT whose secretariats have wider responsibilities than those of the other
- 7. The FAO participant described the progress made with the FAO computer data base file containing almost 800 species items, from the 9 divisions and 53 groups of ISSCAAP. For each item there are 3-alpha identifiers) as well as the common names, Scientific names, FAO taxonomic codes and areas in which it is caught and the regional statistical codes used by NAFO, ICES, ICSEAF and EUROSTAT.
   8. The participants valored the res.
- 8. The participants welcomed the offer of FAO to provide computer printouts of this species file with the data arranged and extracted in prescribed alphabetical and numerical order. Magnetic tapes will be made available to the agencies to permit them to prepare the tabulation of the material in material used for the printing of Volume 46 of the FAO Yearbook of Fisheries Statistics.
- 9. The ad hoc consultation ascertained that ICCAT will propose its Scientific Committee to collaborate in standardizing the 3-alpha identifiers on a global basis but that due to local postal difficulties had not received the draft identifiers, and thus had not commented thereon. In principle, ICCAT currently being used and which conflicted with the recently established inter-agency 3-alpha identifiers.

There remained a few ICCAT abbreviations which cannot be changed because they not only represent ICCAT usage but have been widely used in the tuna fishery world. The ICCAT representative urged strongly that these few 3-alpha identifiers be amended as urgently requested by ICCAT. Following a discussion of these and other matters, in which various compromises and several important revisions were made, the participants unanimously agreed on the following:

#### Appendix 11 (continued)

Tunas species items	Former ICCAT codes	Final 3-alpha identifiers
Thunnus obesus	BE .	BET
Tunnus atlanticus	BLF	BLF
Thunnus thynnus	BF	BFT
Sarda sarda	BON	BON
Auxis rochei	-	
Orcynopsis unicolor	- PBON	BLT
Auxis thazard	FRT	BOP
Scomberomorus cavalla		FRI
	KM	KGM
Scomberomorus spp.	SCOM	KGX
Tetrapturus pfluegeri	SPF	SPF
Euthynnus alletteratus	LT	LTA
Makaira indica	BLM	BLM
Makaira nigricans	BM.	BUM
Tetrapturus albidus	WM ·	WHM
Thunnus maccoyii	SBF	SBF
Katsuwomis pelamis	SJ	SKJ
Istiophorus platypterus	SAIL	SAI
Scomberomorus maculatus	SPM	SSM
Acanthocybium solandri	WAH	WAH
Thumus albacares	YF	YFT
Xiphias gladius	SF	SWO
Big tunas	BIGT	BGT
Small tunas	SMAT	SMT
Young tunas	YOUN-	YOU
Other	OTH:	OTH
		<del>-</del>

- 10. The FAO participant described the progress made in retrieving and tabulating (for 20 countries and 65 species) approximately 500 sets of conversion factors. The participants supported his plans for the presentation of this material in loose-leaf form. It is the intention to computerize the data and to request national offices, every three years, to update and expand the data sets. In this activity FAO and EUROSTAT would continue to pool their resources.
- 11. It is not expected that there will be a demand in the immediate future for significant changes in the boundaries of Major Fishing Areas. However, the need for data to be collected and reported by much smaller units (e.g. statistical rectangles or one-degree squares) in the context of EEC management was identified by the participants as being a potential requirement for regulatory bodies which are not already handling data in this way.
- 12. FAO is experiencing difficulties in some regions in developing standard concepts for the precise demarcation between inland and marine fishing areas.
- 13. The participants discussed the allocation of catches by reporting countries, particularly in the light of the recent increase in the number of cooperative ventures. It was felt that the situation had not changed significantly from that discussed at the Ninth Session of the CWP and thus the recommendation of that meeting, namely that the flag of the vessel should, for the time being, be considered as the paramount indication of nationality and should only be over-ridden when it is obvious that the wording of chartering and joint operation contracts indicate otherwise or when the inter-relationships are two complicated to settle, was endorsed. It was felt that problems resulting from the reallocation of catch quotas would be resolved most readily by adjustments to the systems of monitoring quotas.

#### Appendix 11 (continued)

14. Attention was drawn to the joint FAO/EUROSTAT questionnaire on fleet statistics. This questionnaire has been successfully introduced for completion by the EEC Member States but the FAO Senior Fishery Statistician reported that the number and completeness of returns from other countries had been rather disappointing.

The EUROSTAT representatives described the proposed statistical register of EEC fishing vessels. Initially the contents of the register would correspond with the contents of the national registers and would be restricted to the structural characteristics of the vessels. Once the register has been established, effort would be made to harmonize the content and to include operational characteristics. EUROSTAT was investigating methods of aiding EEC Member States in submitting the information on individual vessels in a harmonized manner and it was hoped that the register would be operational by mid-1980. FAO was awaiting the results of this work before attempting the introduction of a world-wide register.

The FAO participant introduced a draft document on statistical standards, fishing craft, fishing gears and fishing effort. The participants considered this to be a useful document and requested that a means of publishing the final form of this document should be investigated. One proposal was for the compilation of a glossary of terms, concepts and definitions used in fishery statistics and it was suggested that this glossary should be a subject for discussion at the Tenth Session of the CWP.

- 15. The Consultation considered it advisable that, before FAO proceeds with the use of word-processing equipment to produce the English, French and Spanish notes for the completion of the various STATLANT forms to be dispatched in early January 1980, the various instructions should be standardized and harmonized as far as possible. A small task force, through comparison of the detailed notes, eliminated a number of unnecessary discrepancies and produced the final draft for immediate reproduction by FAO. In the absence of a representative from NAFO it was decided that the revised versions relating to the completion of the forms STATLANT 21A and 21B are to be submitted to Mr. V. M. Hodder for final approval.
- 16. It is hoped that the few remaining differences will be eliminated by a similar exercise to be undertaken during the Tenth Session of the CWP.
- In noting the urgent need for the publication or a series of publications on glossaries for fishery statistics, it was reported that, in certain countries and for certain species, recreational fisheries are growing in importance. The OECD representative reported that investigations into the current national statistics on recreational fisheries showed that there was a high degree of variation both in quality and coverage. The FAO representative mentioned that he had expressed, to the statistician of the International Tourism Organization, the hope that the latter organization would be able to participate in the Tenth Session of the CWP.
- 18. The participants discussed the draft agenda of the Tenth Session of the CWP and prepared a document for the CWP Secretary to distribute (Annex C). The Consultation also agreed that the Tenth Session will take place in Madrid from 22-29 July 1980, with ICCAT and ICSEAF as host agencies.
- 19. The EUROSTAT participants reported that they had difficulties in manually processing the data received on STATLANT forms and that, like ICES, EUROSTAT preferred to receive the data on magnetic tape provided that the tape specifications were suitable.
- 20. Some countries have requested a reduction in the size of the STATLANT forms. However, a careful review of the forms indicated that many other even more serious problems would arise from such reductions and changes.
- 21. The representatives of both EUROSTAT and ICES commented on the very late return of completed STATLANT questionnaires for 1978. The FAO participant announced that, although his overall world-wide retrieval was significantly better than in previous years, his situation for western European countries was also less satisfactory.

#### Appendix 11 (continued)

#### Annex A: Participants

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#### Appendix 11 (concluded)

#### Annex B: Agenda

- Opening
- 2. General Statement
- Registers of international and national statistical focal points or institutions
- 4. Species items
- 5. Conversion factors
- 6. Fishing areas
- 7. The allocation of catches by country
- 8. STATLANT forms and notes for completion
- 9. Tenth Session of the CWP
- 10. Fleet statistics
- 11. Other matters

Annex C: CWP's Tenth Session: Annotated Provisional Agenda

See Document CWP-10/3

#### FUTURE STRUCTURE OF THE CWP

#### 1. Name

The group shall be known as the Coordinating Working Party on Atlantic Fishery Statistics (CWP).

#### 2. Membership

The membership of the CWP shall be the following:

- (a) Food and Agriculture Organization of the United Nations (FAO):
- (b) International Commission for the Conservation of Atlantic Tunas (ICCAT);
- (c) International Council for the Exploration of the Sea (ICES);
- (d) International Commission for the Southeast Atlantic Fisheries (ICSEAF);
- (e) Northwest Atlantic Fisheries Organization (NAFO);
- (f) Commission for the Conservation of Antarctic Living Marine Resources (CCALMR);
- (g) Statistical Office of the European Communities (EUROSTAT);
- (h) Organization for Economic Cooperation and Development (OECD).

#### 3. Representation

- (a) Each of the ICCAT, ICES, ICSEAF, NAFO and CCALMR may nominate up to three participants, one of whom must be a member of the secretariat, one should be the chairman (or a designated member) of the appropriate statistics committee of the agency, and one may be a participant of a member state of the agency.
- (b) EUROSTAT and OCED may each be represented by one person. In the event that no participant of the member states of the European Economic Communities is included in the nominations of ICCAT, ICES, ICSEAF, NAFO and CCALMR, EUROSTAT may nominate a national participant, in addition to the participant from the Statistical Office.
- (c) FAO may nominate up to five participants to ensure representation of FAO itself and those inter-governmental agencies related to Atlantic fisheries under the aegis of FAO (e.g., GFCM, CARPAS, WECAF, and CECAF).
- (d) The total number of participants in sessions of the CWP shall normally be limited to 25.
- (e) Each agency shall normally inform the Secretary of the CWP of the names and addresses of its nominees at least six months in advance of each session.

#### 4. <u>Meetings</u>

- (a) Sessions of the CWP shall normally be held every two years, at times and places to be agreed by the Secretariats of the participating agencies.
- (b) An <u>ad hoc</u> inter-agency consultation shall be held approximately one year before each session to draw up a provisional agenda and coordinate plans and participation for the session. This consultation may be by correspondence initiated by the CWP Secretary, or may be a meeting.

#### Appendix 12 (concluded)

#### 5. <u>CWP Secretariat</u>

The CWP Secretariat should preferably be provided by FIDI of FAO, Rome. Should it become necessary to alter this arrangement, secretariat services for the CWP should alternate among those participating agencies with adequate resources to undertake this task.

#### 6. Officers

At the beginning of the session the CWP Secretary shall call the meeting to order. In the absence of the CWP Secretary, the host agency will open the session. The participants shall from among their members elect a chairperson and vice-chairperson, who shall hold the offices for the duration of the session.

#### 7. <u>Documentation</u>

Documents for each session should, if possible, be distributed to all nominated participants at least two months before the start of each session. However, documents prepared by one agency that may require the secretariat of another agency to consult with its statistics committee before a decision can be taken should be distributed at least four months before the start of the session. Each agency shall be responsible for the timely distribution of its documentation in accordance with the mailing list of participants supplied by the CWP Secretary.

#### 8. Report

The CWP Secretary, in collaboration with the Chairman, shall, within three months of the end of each session, prepare for publication and distribute the adopted English version of the report with all relevant appendices as

- (a) One copy for each participant in the session; and
- (b) The number of copies specified by each participating agency before the end of the session.

French and Spanish versions of the report may be prepared by FAO, in consultation with other agencies requiring such versions, and distributed upon request in sufficient copies to meet the needs of the various agencies.

#### 9. Effective date

The terms of reference will come into force on approval by at least four member agencies.

# RECOMMENDATIONS AND OTHER PROPOSALS OF THE TENTH SESSION OF THE CWP

(1)	Recommendations	Section No.
	that the CWP Secretary present to the Eleventh Session of the CWP a paper incorporating (a) a collection of the various criteria now used by national administrations to distinguish between inland and marine fisheries; and (b) additional information on these questions from international and regional fisheries bodies interested in this matter	3.9
	that EUROSTAT reconsider its classification of types of fishing vessels and collaborate with FAO to unify this and other classifications used in fishing vessel statistics	4.1.1
	that resources permitting, FAO should prepare a technical document containing descriptions and illustrations of fishing vessel types as a guide to the vessel-type classifications	4.1.3
	that the final version of the International Standard Statistical Classification of Fishing Gear (ISSCFG) presented in Appendix 8 of this Report should be used as the basic list of gear types and abbreviations by all international, regional and national institutions	5.1.1
•	that an expanded version of the Document CWP-10/46 dealing with the definitions and descriptions of fishing gears, based on and complemented by the amended international standard statistical classification of fishing gears, be prepared and published by FAO	5.2.1
	that the 3-alpha identifiers should be adopted by all regional agencies for statistical tabulations and related matters, such as questionnaires, forms, etc.	6.1
	that FAO, in the publishing of its Yearbooks of Fishery Statistics, should continue its current practice to publish all catch data by countries, by major fishing areas, by species groups and items, expressed in metric tons	7.1.3
	that data rounded-off to hundred metric tons, thousand metric tons, etc., should with the exception of a few summary tables, only be incorporated where the nationally submitted tabulations are not to the nearest metric ton	7.1.3
	readers should be reminded in a properly worded paragraph in the front pages that this presentation of data in metric tons should in no way convey the false impression that all such data are necessarily accurate	7.1.3
	that FAO proceed immediately with the computerisation of the national lists of conversion factors for Atlantic commercial fisheries and publish the list, based on national reports received to the end of 1980, in one of its series	8.3
	that FAO provide for the regular updating of the list of conversion factors by requesting countries to review and revise national lists of conversion factors submitted to them on computer printout every three years	8.3

#### Appendix 13 (continued)

Recommendations (concluded)	
recommendations (correcteded)	Section No.
	44 B
that FAO provide to interested regional agencies upon request the initial complete lists of conversion factors for the relevant regions and keep	8.3
the agencies informed of any revisions to their regional lists	
that FAO, ICES and EUROSTAT and other interested agencies study the problems associated with the establishing of statistics on aquaculture and, after seeking advice of the relevant experts, prepare a report with, if possible, a questionnaire for submission to the Eleventh Session of the CWP	9.2
	•
that statistics on recreational catches be recorded and published separately from statistics on the commercial catches, and where possible, from subsistence catches	10.6
that the Secretary of the CWP explore the possibility of FAO producing a	4.7
technical report or a manual, arraying the requirements for planning, designing and implementing logbook systems, and that this be completed as early as possible, and not later than the Eleventh Session of the CWP	11.8
that the basic standard concepts underlying the present system of STATLANT A	10.10
and B forms remain unchanged	12.10
that the participating agencies of CWP should consult each other on any	12.10
proposed amendments to these concepts, and that such proposals be given careful consideration before their adoption	12.10
that the flag of the vessel should, for the time being, be considered the paramount indication of nationality and should only be overridden when one of the following arrangements between foreign flag vessels and host countries exist:	14.6
(a) the vessels are chartered by the host country to augment its fishing fleet	
(b) the vessels fish for a country through arrangements by joint venture contract, etc. (as opposed to the ad hoc	
practice of vessels selling catches to foreign boats or landing catches at foreign ports), and the operation of such vessels is an integral part of the economy of the	
host country	
that when Governments negotiate joint ventures or other contracts where vessels of one nation land their catches at ports of another country or unload their catches to vessels of another country, and the above criteria are	14.7
applicable, the allocation of nationality to such catches and landings data be specified in the agreements	
that FAO and EUROSTAT, with, where necessary, the cooperation of other agencies, prepare a glossary of fishery statistics and report on progress to the Eleventh	16.3
Session of the CWP	West of the second

that  ${\it FAO}$  obtain the approval of its appropriate governing bodies to dissolve the present Working Party as an  ${\it FAO}$  statutory body.

17.2

# Appendix 13 (continued)

(2)	Proposals	Section No.
,	It was pointed out that during the past ten years only minor changes have been made in the boundaries of these major marine fishing areas. The CWP noted that it is not expected that any major changes would be required in the foreseeable future and it was agreed that any changes should be kept to the basic and essential minimum.	3.2
	The CWP agreed that the chart (C27) appearing in Document CWP-10/16 should be amended to show principally the region of the Northeast Atlantic (Major Fishing Area 27) and to exclude, to avoid confusion, the Northwest Atlantic.	3.4
	The CWP thus reiterated the recommendation contained in the report of the Ninth Session (Sections 6.1.6) that regular fleet tabulations should refer to the end of the calendar year (i.e. 31 December).	4.2.2
	The CWP expressed an interest in this publication and a preference for the tabulation showing by country for each type of vessel the number and total tonnage for each tonnage class. An historical series of the five most recent years with a limited selection of earlier years was considered to be a useful presentation.	4.4.1
,	The CWP agreed that FAO, in consultation with regional agencies, should consider the feasibility of revising Groups 33 and 34. Any proposals for change should be brought to the attention of ICES at its Statutory Meeting in October, 1981, for comment prior to their consideration at the Eleventh Session of the CWP.	6.5
	The CWP further considered FAO proposals to exclude data on aquatic mammals and plants from the national nominal catch figures and from the aggregates in the FAO <code>Yearbook</code> tables, but, instead, to show them for comparison purposes in separate tables. These proposals were agreed to with the understanding that the annual yield of aquatic mammals should be expressed in numbers, and that the published data on seaweed should be expressed on a wet-weight basis in metric tons (tonnes).	6.6
	The CWP agreed that the reporting of annual seaweed production data on a wetweight basis on STATLANT A and B Forms of the regional agencies should be retained. The change in the FAO practice of publishing statistics on aquatic mammals and seaweeds should not affect the existing procedures in regional agencies.	6.7
	The CWP reviewed the diagram on page 4 of CWP-10/20, which was amended as shown in Appendix 7 for general use.	7.1.1
	The CWP noted that there are problems in developing representative factors for certain items, especially for fillets and cured fish.	8.4
	The CWP noted that several terms, e.g. log sheets, logbooks, log records, fishing sheets, etc., are used to designate the forms for collecting data. It was, therefore, agreed that only one term, logbook, would be used for such forms.	11.5

# Appendix 13 (continued)

Proposals (continued)	Section No.
It was, therefore, emphasized by the CWP that while the minimum items in the logbook should be decided based on the needs of the country involved, the implementation procedures should be tailored based on the local conditions of the fishing industry.	11.6
The CWP agreed that the use of forms for the coordination of stock assessment data provided by fisheries research laboratories is outside its terms of reference but it points out that internationally adopted standard concepts, definitions, classifications, etc., should be employed in the design of such regional forms and their notes. This requirement is particularly important when scientists, completing their specialized forms, have to obtain all or part of their data from national statistical offices.	12.6
The CWP felt that administrators should be informed of the merits of timely and comprehensive statistics with regard to management and socio-economic decisions they make.	13.4
With respect to minimizing the problems of late responses, the CWP considered that changing deadlines for submission of completed STATLANT A and B Forms would be ineffective.	13.5
The CWP considered that a register (see Document CWP-10/31) for national focal points was not necessary in the North Atlantic, but that a need for such a register seemed to exist in certain other areas, where this approach to improve communications with national offices should be tried by FAO.	13.6
The CWP considers that the responsibility for reporting catch statistics should still be with the flag state of the catcher. When the catcher is flying a "flag of convenience" the best procedure seems to place the responsibility with the country in whose EEZ the fishing operation takes place. Outside any EEZ the problem must be tackled through the various regional agencies on a case-to-case basis.	14.4
The problem of discrepancies in published statistics can be minimized by cross checking STATLANT and NS Forms. But the general problem lies with the national statistics offices. The CWP concluded that these offices have the responsibility for ensuring the accuracy and consistency of data submitted to regional agencies and FAO and any revisions to these data.	15.3
The CWP reviewed the time that would be required and considered that the most convenient dates for the Eleventh Session would be the period 21-28 July 1982.	18.1
After careful consideration the CWP finally agreed that the Eleventh Session should be held in <u>Luxembourg</u> and expressed its appreciation to EUROSTAT for its kind invitation to provide the necessary facilities.	18.2.1

# Appendix 13 (concluded)

Proposals (concluded)	Section No.
The CWP noted that, although a considerable degree of standardization has been achieved in regional publications with regard to abbreviations used for species, gear, etc., there was no consistency in the use of abbreviations for countries. Consequently, the CWP proposed that the regional agencies should adopt the 3-letter country codes established by ISO (International Organization for Standardization) when it is necessary to use country abbreviations in tabular presentations. The list of 3-letter codes for countries fishing in the Atlantic Ocean is appended (see Appendix 9).	19.1.1
The CWP agreed that all agencies should participate as far as possible, in the FAO project to construct various historical series, by country, by species, by fishing areas, etc. FAO could supplement the tabulated materials with bibliographic lists indicating the sources of additional historical statistics.	19.2.4