

INTERNATIONAL COMMISSION FOR THE CONSERVATION
OF ATLANTIC TUNAS

COMMISSION INTERNATIONALE POUR LA CONSERVATION
DES THONIDES DE L'ATLANTIQUE

COMISION INTERNACIONAL PARA LA CONSERVACION
DEL ATUN ATLANTICO

General Mola, 17-MADRID-1
Spain - Espagne - España

SCRS/73/24

FOURTH MEETING

of the

STANDING COMMITTEE ON RESEARCH AND STATISTICS (SCRS)

Paris, Nov. 19-24, 1973

MEETINGS BETWEEN INTERNATIONAL AGENCY SECRETARIATS AND SELECTED NATIONAL
FISHERY STATISTICAL OFFICES

PRELIMINARY REPORT

1. INTRODUCTION

1.1 It is generally recognized that there is an ever increasing need for the collection and prompt reporting of detailed statistics on catch and fishing effort by national fishery offices to international agencies for use in making forecasts of yields necessary for the determination of rational management policies. As indicated in paragraph 9.3 of a paper prepared by the Secretary of the C.W.P.¹ for presentation at the 1973 Meeting of I.C.E.S., meetings were held in Paris, Madrid and Lisbon between representatives of these countries and the international agencies concerned to discuss national problems in statistical reporting.

1.2 Paris, France - 26th/27th September, 1973. Participants were:

L. Butler (FAO), D. Griffith (ICES), V. Hodder (ICNAF), E. Juste (France), P. Adam and O. Güvenen (OECD).

Madrid, Spain - 28th September, 1973. Participants were:

L. Butler (FAO), D. Griffith (ICES), V. Hodder (ICNAF), B. Draganik (ICSEAF), P. Miyake (ICCAT), P. Adam (OECD) and V. Bermejo, E. Salas and R. Garcia (Spain).

Lisbon, Portugal - 2nd October, 1973. Participants were:

L. Butler (FAO), D. Griffith (ICES), V. Hodder (ICNAF), B. Draganik (ICSEAF), P. Miyake (ICCAT), P. Adam (OECD) and J.C.E. Cardoso, Gaspar, R. Monteiro, M. Lima Dias, V. Valdez, A. Noronha, B. Neves, J.L. Carvalhinha e Sousa (Portugal).

2. NATURE OF THE PROBLEMS

2.1 The representatives of the agencies present at each meeting elaborated upon the current problems associated with the national reporting of the statistical data. In general the problems

¹ Gertenbach, L.P.D., "Progress Report on an interagency cooperation in statistical matters", I.C.E.S. CM 1973/D:11.

covered the following:

- (a) Coverage of national catch and effort data (collection, fleet coverage, etc.).
- (b) The prompt reporting of preliminary catch statistics on selected species to regional agencies as soon as possible after the end of each calendar year for use by Working Groups which usually meet in January and February to assess the status of the various fish stocks.
- (c) The prompt reporting of accurate catch and effort data by species, gear category, vessel tonnage class, statistical areas and month, etc. in accordance with the specific requirements of the regional inter-governmental agencies, as detailed in the Notes for the completion of the various STATLANT forms; these Notes are updated annually.
- (d) The proper application of the appropriate conversion factors when landed products are converted to nominal catches.
- (e) The periodic reporting of fleet statistics (e.g. for compilation of ICNAF List of Fishing Vessels every 3 years).

3. FRENCH STATISTICAL PROCEDURES

3.1 Observations on submission of French statistics

3.1.1 The I.C.E.S. representative pointed out that a high proportion of French catches are taken in the I.C.E.S. area (currently 70 per cent) and, consequently, that a high degree of importance is attached to the adequate reporting of catch data by France, particularly with regard to the provision by I.C.E.S. of scientific advice to the regional regulatory body, NEAFC. No information whatsoever has been received to date on French catches in 1972, and the urgent need for these data was stressed. The timetable involved in the liaison procedure between I.C.E.S. and NEAFC was described, and note was made of the 1973 NEAFC Recommendation that catch data on selected species be provided to I.C.E.S. by 1st February of the year following that to which the data applied.

3.1.2 The ICNAF representative indicated that all STATLANT statistics have been received from France for 1972 but pointed out that there were some minor deficiencies, the most important being the lack of breakdown of Divisions 3P, 4V and 5Z into subdivisions as required. He also noted that the quantities of fish discarded (fish thrown overboard at sea) were important to the biologists in their assessments of the fish stocks and that efforts should be made to improve the collection of such data.

3.2 Summary of French statistical programme

3.2.1 The fisheries of France comprise three separate entities:

- (a) Grande pêche: Distant water fisheries in the ICNAF area and the Barents Sea involve about 20 large fishing vessels which stay on the fishing grounds for extended periods of time.
- (b) Pêche au large: The fisheries involve about 2,000 vessels normally staying at sea for more than three days and up to two weeks.
- (c) Pêche côtière: Coastal fisheries undertaken by about 10,000 boats.

3.2.2 Grande pêche: A new statistical system has just been established for these fisheries. This involves the maintenance of a logbook by the captain of each fishing vessel, and the resulting data are to be processed by computer. All ICNAF and I.C.E.S. requirements will in future be satisfied by the output of this system. Specifically, data for 1973 are expected to be available during March/April 1974 but will not include a monthly breakdown. Data for 1974 should be available by February 1975 in complete form.

3.2.3 Pêche au large: A similar system is being introduced for these fisheries. It is expected to be fully operational for the year 1974, the data for which will become available in April/May 1975. Regarding the data for 1973, the national submissions should be more detailed than in previous years, as account will be taken of information from logbooks which are being introduced in the main fishing ports, but not computerised at this stage.

The catches of French vessels, operating in tropical waters (mainly for tuna) and sometimes operating out of African ports, will be treated as part of the Pêche au large fleet for statistical purposes. Arrangements have been made for all logbooks to be sent to France and the catches treated as French national production.

3.2.4 Pêche côtière: The design and implementation of a sample survey for catch and effort are being undertaken, and it is expected that by 1975 (1974 data) the programme will be sufficiently established to provide all required data promptly and with adequate precision.

3.2.5 General: The new system should be in operation for all French fishing activity as from 1974, and by May of each following year national totals and all required breakdowns should become available.

4. SPANISH STATISTICAL PROCEDURES

4.1 Observations on Spanish statistics

4.1.1 The ICES representative outlined the sequence of events in the processing by ICES, of scientific advice to NEAFC. The importance of meeting the deadlines for the submission of catch data on forms STATLANT 27A (31st May) and 27B (31st August) was stressed with regard to the early publication of ICES Bulletin Statistique and Statistical Newsletters, and also with regard to the provision of adequately detailed and soundly-based advice to NEAFC. Completed STATLANT 27A forms (giving the area breakdown of 1972 catches) were received from Spain on the 21st September, but STATLANT 27B forms, which give the monthly breakdown of catch and fishing effort, had not yet been received.

Equally important is the accuracy of breakdowns by species and by area. The catch of "unsorted, unidentified" fish (excluding shellfish) reported by Spain for 1970 was 20,000 tons, but for 1972 this figure had risen to 67,000 tons. (Figures for 1971 were not available at the meeting.) Similarly, all of the 1970 catch had been allocated to an ICES fishing area, but 30,000 tons of the 1972 catch (excluding shellfish) were reported under the heading "area not known".

4.1.2 The ICNAF representative observed that all STATLANT statistics have been received from Spain for 1972; annual statistics on STATLANT 21A (deadline the 15th of April) were received in late May and STATLANT 21B (deadline the 15th of June) by early July. He noted that it was becoming more important for national offices to submit the required data promptly to meet the demands of scientists who must advise the Commission in its conservation program. He noted that ICNAF will require from national offices preliminary data on 1973 catches of principal species for consideration at the mid-term meeting of the Assessment Subcommittee in January, 1974.

4.1.3 The ICSEAF representative indicated that there is an urgent need for scientists to have available precise statistical data, especially for hake management, and for ICSEAF to publish the data in its Statistical Bulletin without delay. This Bulletin will contain catch and fishing effort data by divisions, month, size class of vessel, gear, main species caught. These data are normally submitted by national offices to ICSEAF Secretariat on forms STATLANT 47A and 47B, and an acceptable deadline is the 1st of September. However, no statistical data have yet been received from Spain for 1972 or earlier years. It was noted that the new data-processing system being implemented by Spain at present would satisfy all of the ICSEAF requirements, that Spanish scientists would aid the national office in providing, as accurate as possible, species breakdown of the Spanish catches and that these data for 1972 and 1973 would be submitted to ICSEAF as expeditiously as possible.

4.1.4 The ICCAT representative indicated that, in the past, many problems were experienced in obtaining adequate and accurate statistics from the Spanish National Office. However, due to constant contact and cooperation between the Spanish Marina Mercante and the ICCAT Secretariat, most of the problems are now being solved. These are summarized below:

(a) Timeliness: Delayed reporting of statistics by the Spanish National Office has been a problem in the past. In 1972 Spain started an automatic data processing system which resulted in further delays during the first year of operation. However, it is hoped that when the program starts running smoothly in 1974, such delays will be avoided.

(b) Accuracy in Catch Reporting: There has been some problem with the identification of species and area of catch. Automatic data processing procedures will initially make matters worse. Therefore very careful editing is required before the data is fed into the computer.

(c) Data Coverage: Spanish statistics have given coverage of coastal tuna fisheries but not of distant water fisheries. The ICCAT Secretariat has been assisting the Spanish authorities in establishing a logbook system for the distant water boats as well as obtaining more correct landing statistics. This system was first introduced in 1973, and a large amount of data is presently becoming available. It is strongly recommended that these data be promptly analyzed and made available to the scientists as soon as possible.

(d) Detailed Statistics for Coastal Fisheries: ICCAT has been assisting Spanish scientists in establishing port survey systems (since 1972). The project has been successful. Again it is recommended that the data be made available to scientists promptly.

4.2 Summary of Spanish Statistical Program

4.2.1 For statistical purposes the Spanish fishing fleet is considered as consisting of two fleets:

- (a) Vessels of over 50 tons
- (b) Other vessels.

4.2.2 Vessels of over 50 tons: From 1974 all vessels, of which there are about 3,000 which take over 80% of the total Spanish catch, will be expected to supply on a trip by trip basis details of capture and discards by species along with the related effort and area of activity. The information provided by the completed questionnaires when properly processed will provide all agencies with the statistical data required to carry out their internationally agreed functions.

The establishment of this new programme, which will be able to provide more promptly than in the past, data in greater detail and with greater accuracy, is to be welcomed. It is however to be noted that the successful implementation of such a programme requires additional staff to ensure a high response rate and to edit the received questionnaire to reduce response errors. Also necessary will be the services of systems analysts and programmers to ensure that compilation is carried out in the cheapest and most efficient manner by computer.

4.2.3 Other vessels: No changes in present procedures are foreseen at this time since major effort will be directed towards ensuring the successful implementation of the programme for the larger vessel fleet. Present procedures do however provide for this fleet, catch by species by port of landing, and hence by area of capture. Statistics of fishing effort are not available but consideration may be given at some future time to counting the number of landings.

Tuna landings by the small boat fleet are however already treated exceptionally and a system providing the number of landings as well as catch is already provided.

4.2.4 General: It is to be welcomed that in the not too distant future the requirement of all agencies will be satisfied, except perhaps for the effort of small vessels not engaged in tuna fishing. It might however be stressed that this system, which is necessary for supplying inter-

national agencies accurate and detailed statistics in good time in order to carry out their internationally agreed duties, requires the employment of sufficient staff experienced in the field of fishery statistics, and the allocation of sufficient monies to properly fund the programme.

5. PORTUGUESE STATISTICAL PROCEDURES

5.1 Observations on Portuguese Statistics

5.1.1 The ICES representative stressed the importance of meeting the deadlines for the submission of catch data on forms STATLANT 27A (31st May) and 27B (31 August), with regard to the early publication of ICES Bulletin Statistique and Statistical Newsletters. The gaps in the Advance Release of 1972 statistical data, which resulted from the late submission of the data seriously reduced the value of the importance of timely submission of data for the provision of scientific advice to NEAFC was also stressed, and in that context attention was drawn to the NEAFC resolution calling for the submission of catch figures for 14 selected species by 1st February each year, for the use of ICES Working Groups.

No STATLANT 27B data have been received from Portugal to date, and the 27A statistics were not received until 10th September.

5.1.2 The ICNAF representative noted that all STATLANT statistics for the ICNAF Area for 1972 have been received from Portugal with no significant deficiencies. In the past the nominal catches reported by Portugal consisted entirely of cod; however, for 1972 some supplementary data on catches of other species (redfish, American plaice and other flounders) were received. He noted that it was becoming more important for national offices to submit the required data promptly to meet the demands of scientists who must advise the Commission in its management policy, and that ICNAF will require preliminary data on 1973 catches on principal species for consideration at the mid-term Meeting of the Assessment Subcommittee in January 1974.

Biological data from Portuguese fisheries in the ICNAF Area are very deficient, and efforts should be made to improve the sampling program.

5.1.3 The ICCAT representative pointed out some of the problems in tuna statistics submitted by Portugal:

- (a) Species separation - Portuguese catch data (except for Angolan waters) have been presented only in two categories, i.e. tunas (albacore, yellowfin, bluefin and bigeye combined) and other tuna-like fishes. The species composition of these groups is essential.
- (b) Detailed statistics - Catch and effort data as well as biological data by area and month have not been submitted with the exception of catches for Angolan waters. The establishment of logbook or port-survey systems together with a biological sampling program in Azores and Madeira areas would fulfil the ICCAT requirements.

5.1.4 The ICSEAF representative indicated the urgent need to have complete Portuguese catch and effort data for the ICSEAF Area. As of September 1973 the Secretariat had received 1972 catch data from Angola (inshore fishery data only). However, 1972 data are lacking for the Portuguese fleets based and landing in the ports of Mozambique and Metropolitan Portugal. It is important that Portuguese fishery statistics be as complete as possible and be submitted to ICSEAF promptly, by the national statistical office. The previous year's data should be available not later than 1st September of each year for inclusion in the ICSEAF Statistical Bulletin to be published annually.

5.2 Summary of Portuguese Statistical Program

5.2.1 The fisheries of Portugal can be classified as follows:

- (a) Metropolitan Portugal and adjacent islands (Azores and Madeira).

- (i) Distant water fisheries
- (ii) Coastal fishery.

(b) Overseas Portugal (Angola, Mozambique, Cape Verde and Sao Tome Islands).

- (i) Fishing by large vessels from Metropolitan Portugal
- (ii) Large local vessels (purse seiners, shrimp trawlers)
- (iii) Artisanal fishery.

5.2.2 At present the National Institute of Statistics (NIS) compiles landing statistics for all of the fisheries. Detailed statistics of catch and effort are, or soon will be, available from the Fisheries Development Board (FDB) for fleets a(i) and b(i) based on reports received directly from vessels. For fleet a(ii) a sampling scheme has been developed by the Institute of Marine Biology (IMB) to provide catch and effort data. Lastly, for fleet b(ii) and part of fleet b(iii), catch and effort data are available from the Overseas Ministry (OM). These arrangements are transitional (see 5.2.3), and during this period all requests for statistics should be addressed to Capt. J.C.E. Cardoso.

5.2.3 At present all four national agencies (NIS, FDB, IMB and OM) are cooperating in the design of a comprehensive and integrated statistical system which is intended to provide the statistical requirements of the international agencies. For fleets a(i), b(i) and b(ii), detailed catch and effort data will be collected on an individual vessel basis, whereas for fleets a(ii) and b(iii) proper sampling schemes will be designed and implemented. The entire statistical system will be designed for automatic data-processing.

5.2.4 The implementation of the system briefly described above is necessary if Portugal is to be able to satisfy its commitments to international agencies in the prompt provision of accurate statistical data in the detail required. The proposed program is a heavy one and its successful implementation requires the employment of sufficient staff experienced in the field of fisheries statistics and the provision of sufficient funds to finance the program.

6. CONCLUSIONS

- (a) The representatives of all three countries visited were fully aware of the requirements of the international agencies and of their responsibility to satisfy these requirements.
- (b) They were also fully aware of the deficiencies in their present fishery statistical systems.
- (c) They all indicated that they had computer-oriented statistical systems at various stages of development, whose objectives are to supply the international agencies, in good time, with all the required statistics.
- (d) The representatives of the various international agencies welcomed the proposed developments, expressed the need for their early implementation by the national fishery statistical offices concerned, and urged that sufficient staff and funds be made available to make the systems operational as soon as possible.