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REPORT OF THE STATISTICS COMMITTEE LIAISON WORKING GROUP

Copenhagen, 25-27 May 1981

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REPORT OF THE STATISTICS COMMITTEE LIAISON WORKING GROUP

1. Participants

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H. Becker	Netherlands	B. Lindfors	Sweden
J. Bløndal	Iceland	E. Lund	Denmark
R. Drimman	Canada	D. Sullivan	Ireland
C.A. Goody	UK (England & Wales)	D. Møller	Norway
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P. Gullestad	Norway	D. Salmond	UK (Scotland)
K. Hegar	Germany, Fed. Rep.	K. Tiews	Germany, Fed. Rep.
B.W. Jones	UK (England & Wales)	C. de Verdelhan	France
E. Kroencke	Germany, Fed. Rep.	D. Wallage	UK (England & Wales)
H. Lassen (Chairman)	Denmark	M. Welvaert	Belgium

V. Nikolaev attended the meeting as the ICES Statistician. L.P.D. Gertenbach, Secretary of the Co-ordinating Working Party on Atlantic Fishery Statistics (CWP), FAO; D.G. Cross, EUROSTAT; V.M. Hodder, NAFO; and L. Butcher, OECD, were present as observers. V. Nikolaev was appointed as a Rapporteur for Items 3, 4 and 6 of the Agenda, and D.G. Cross as a Rapporteur for Item 5 of the Agenda.

2. Terms of Reference

At the 68th Statutory Meeting the Council decided (C.Res.1980/2:12), that:

"the Statistics Committee Liaison Working Group should be convened by the Chairman of the Statistics Committee for 3 days in 1981 at ICES headquarters to:

- (i) specify the statistical programme for collection of mariculture statistics and as part of the problem resolve the boundary problem between aquaculture (freshwater) and mariculture (marine environment); the participation should include experts on mariculture production;
- (ii) review the current state of the statistical programmes, their deficiencies, and specifically the problems with reliable and timely reporting;

- (iii) identify any problems which may be encountered at national agencies due to the recommendations passed on the initiative of CWP."

### 3. Adoption of the Agenda

Reference documents and working papers submitted to the Working Group Meeting were checked and their availability to the participants ensured. The previously circulated draft Agenda was adopted.

### 4. Current State of Statistical Programmes (Agenda Item 3)

The Working Group considered the state of data reporting described in reference Tables 1-4 pertaining to national returns on STATLANT 27A and 27B Forms (only the Federal Republic of Germany (preliminary), Scotland and U.S.S.R. having reported so far on 27A Form for 1980), monthly estimates of catches, preliminary annual catch statistics (of which no returns have been received on the so-called Recommendation 12 Form from Portugal and Spain for 1980), and data on fishing craft and fishermen, on which only 5 entities submitted returns for 1979.

The Working Group has again noted with concern that reporting has deteriorated recently, particularly with regard to meeting the deadlines for submission of completed Forms.

The Group was aware of the deteriorating quality of data, particularly the basic nominal catch and monthly catch/effort data, which were to be used by the ICES Assessment Working Groups. This problem was also brought up at the Dialogue Meeting. It was realized, however, that the solution probably lies at the managerial level and not within the statistical programmes themselves.

As last year, in general the most common feeling was that the major reason for delays and/or non-reporting was insufficiency in man-power and budgets. However, some additional factors were affecting the situation in 1981, and certain improvement was foreseen in the near future for some member countries.

#### Belgium

Deadlines were met or nearly met, but in 1981 some technical problems with computer handling of data were experienced. Therefore, STATLANT 27A returns will be submitted in June 1981.

Canada

The system was fully described at NAFO meetings, and there was no Canadian fishery in the ICES Area in recent years.

Denmark

The situation with both man-power and computer facilities has improved. Returns on STATLANT 27A Form may become available in August 1981, though not yet split by Divisions for the North Sea. After some necessary computer programming is completed, returns on 27A Forms for 1981 would be provided with a breakdown by Divisions in the North Sea, and STATLANT 27B returns on monthly catch/effort statistics would be made available.

Finland

No representative was present.

France

The situation and sources of difficulties were the same as reported last year, but log books were introduced on some vessels.

German Democratic Republic

No representative was present.

Federal Republic of Germany

Data for both STATLANT 27A and 27B Forms were inputted and processed simultaneously. Therefore, with submission of 27B returns the deadline was nearly met, while a delay was experienced with 27A returns. However, to remedy the situation, preliminary catch statistics were submitted on schedule.

Iceland

Deadlines, particularly with 27B returns, were met. In 1981, submission of data on magnetic tape was tried, but some problems with adhering to ICES tape specifications delayed the submission slightly. The possibility of using other codes than EBCDIC, e.g. ASCII code, was queried which could expedite returns.

Ireland

There were no major changes in the general statistical programme. Certain computerization procedures have been started, mainly in connection with log books, but the schedule for their implementation was uncertain. Returns

on fishing craft and fishermen were submitted to ICES and EUROSTAT, and preliminary annual catch data were brought to the relevant ICES Working Groups.

#### Netherlands

Deadlines are usually met, but the difficulty is in the timely compiling and processing of data for the last quarter of a year.

#### Norway

As before, submission of preliminary statistics caused no problems, but checking and vetting of final statistics took a long time. With the submission of data for 1980 a delay of 3-4 months was expected due to a change of a computer.

#### Poland

No representative was present, but deadlines were nearly met.

#### Portugal

No representative was present.

#### Spain

No representative was present.

#### Sweden

There were no changes in the general statistical system, improved last year due to the introduction of the log book system and computer processing of data. The 1979 data on fishing craft and fishermen will now be submitted on the basis of the census conducted, but the next census will not be made until 1984.

#### England and Wales

Efforts are in progress to supply 27B returns on computer magnetic tape, but there are still some problems in meeting ICES requirements. As soon as these are overcome, completed 27B Forms could be returned in April each year. The same could apply to the Northern Ireland data. A delay in submitting 27A returns for 1980 results from attempts to bring into much better agreement, than before, catch and landings statistics.

#### Scotland

A paper in 1980 explained most of the changes made in the statistical system. None have taken place since then. The 27A return for 1980 was



submitted in time; with the 27B return certain data processing difficulties were experienced this year, though the submission of data on magnetic tape is now well established.

U.S.S.R.

No representative was present.

The Working Group discussed a problem of discrepancies between catch statistics submitted to various international agencies, e.g. FAO, ICES, NAFO, EUROSTAT. It was agreed that differences stem partly from different sources of data used, e.g. log book returns for STATLANT B Forms vs. landings statistics for STATLANT A Forms. The Group felt that log books provided more accurate statistics on fishing effort and area, whereas landings were a source of more accurate data on nominal catches in terms of volume. The optimum procedure would be to allocate landings (converted to live weight equivalent) to fishing areas by using relevant ratios derived from log book entries, as, for example, was requested by NAFO for a number of years.

Besides different sources of data, other reasons for discrepancies were identified as errors in reporting, varying definitions and policy interpretations (e.g. reporting on joint venture activities), revisions and different deadlines for reporting to each agency. It was generally agreed that the onus is on member states to make data submitted to various agencies consistent. The Group endorsed the CWP conclusion that national statistical offices have the responsibility for ensuring the accuracy and consistency of data submitted to regional agencies and FAO and any revisions to these data.

Some national offices experienced difficulties in adhering to computer magnetic tape specifications for submitting STATLANT returns to ICES. Therefore, the Group requested the ICES Systems Analyst to present at the 69th Statutory Meeting a brief description of tape characteristics which could be acceptable to ICES (versus the standard requirements described in the Notes for Completion of STATLANT Forms), explaining the difficulties any such deviations would cause to the Secretariat. Particular attention should be paid to studying the possibility of using ASCII code. Besides, the following problems should be investigated: higher recording density than 1600 bpi, several files on one tape, the use of labels, the necessity for a blocking factor.

When discussing statistics on fishing craft and fishermen, the FAO Senior Fishery Statistician, Mr L.P.D. Gertenbach, described problems encountered during the preparation of the new FAO publication on fishing fleets for 1970-1978. The Group agreed that a regularly updated publication of this type is very useful to a wide range of potential users. Unification of fleet registers between FAO and EUROSTAT was welcomed. The Group recommended that FAO investigate the possibility of releasing the next volume in 1982. While confirming its previous recommendation on excluding Table 9 from Bulletin Statistique, the Group agreed that ICES should continue to collect and publish fleet statistics until the second volume of fleet statistics is released by FAO. The ICES Statistician drew attention to the fact that for 1979 only 5 countries (i.e. Belgium, France, Ireland, the Netherlands and Norway) submitted data on fishing craft and fishermen, necessary for compiling Table 9, and appealed to national statistical offices to submit the missing data as soon as possible, since Volume 64 of Bulletin Statistique was scheduled for release in the autumn of 1981.

5. Recommendations passed on the initiative of the CWP (Agenda Item 4)

Some participants reported on problems encountered when implementing ISSCFG and ISSCAAP 3-Alpha identifiers within national statistical systems. It was confirmed by the Group that 3-Alpha identifiers were intended for publication purposes, and not for data files on catch statistics. Their general purpose was to achieve uniformity at the level of international or supra-national agencies, while leaving options open for national offices to use whatever internal coding they preferred, provided conversion was undertaken prior to reporting of data to agencies. Simultaneously it was hoped that internationally agreed identifiers and codes could simplify the task of national offices intending to amend the existing or to introduce a new statistical system of collecting, recording and reporting fisheries data, by providing them with the already internationally accepted criteria of codification.

Regarding the problem of proper conversion factors for landed products (into the live-weight equivalent), the general feeling was that the most important matter was for national research laboratories to establish the authenticity of existing factors or to derive revised contemporary factors. England and Wales reported that a major comprehensive study on existing

conversion factors was being undertaken; the Federal Republic of Germany and the Netherlands also informed that a programme of reviewing the conversion factors has been started. Since these were estimated to take at least three years to complete, the Group agreed that regular updating by FAO of the published national lists of conversion factors for Atlantic commercial fisheries should take place at intervals greater than three years. It was felt useful, if at least preliminary results of the above-mentioned studies became available at the time, to have a contribution submitted to the Statistics Committee Meeting at the 69th Statutory Meeting drawing comparisons between some "old" and "new" conversion factors, describing differences arising and their effects on the nominal catch data reported. Such a contribution could be a background on which to encourage others into similar activities.

The Group noted that, although log-books were originally introduced for collecting data for stock assessment purposes, at present they were used for a variety of purposes, including enforcement. Though achievement of a high degree of standardization was thought not to be practicable, the Group agreed that prevention of unrestricted proliferation of different formats and codes of log-books was highly desirable, not only from the viewpoint of a skipper, but also for inspection and assessment purposes. It was felt that the attention of administrators and managers should be brought to this aspect of the log-book problem, and the forthcoming Dialogue Meeting was thought to provide an appropriate forum for that.

On the flag-state concept, the Working Group confirmed the implied interpretation that the responsibility for reporting catch statistics should still be with the flag state of the catcher, while the flag state of the catch processor, if different from that of the catcher in case of transshipments, should report import statistics.

The Group considered problems experienced with stock boundaries in some areas, e.g. East Greenland - Jan Mayen - Norwegian Sea capelin stocks, herring and sprat stocks in the Baltic assessed by Sub-divisions. It was agreed that attention of Fish Committees should again be drawn to the

problem of the major commercial stocks' boundaries at the forthcoming 69th Statutory Meeting. The Group felt that, should Fish Committees consider the corresponding changes and modifications in the existing statistical boundaries between ICES fishing areas to be feasible, last year's proposal to establish a study group to investigate all aspects of the problem of boundaries (e.g., including economic zones, statistical rectangles, etc.) would be worthwhile to pursue again.

The Liaison Working Group considered a paper by EUROSTAT: "Measure of Fishing Effort for Mid-water Trawls", informing of a proposal by a recent meeting of an EC Commission Working Group, convened to discuss the contents of a fishing log-book, to record the fishing effort measure for mid-water trawls as "the number of hours fishing and with the sonar switched on". It was agreed that the first priority measure of fishing effort for mid-water trawls, recommended by the 9th Session of the CWP and adopted by the member-agencies of the CWP, as "the number of hours during which the trawl was in the water and fishing" might not be adequate enough for pelagic fisheries in which searching is a substantial part of the fishing operation.

However, one should not lose sight of the situations where mid-water trawls are used off-bottom, i.e. more or less demersally, with the vertical echo-sounder and not the sonar. Besides, it was felt that the wording "... and with the sonar switched on" might be ambiguous, since in some countries and fisheries the sonar could be switched on as soon as a vessel has left a harbour and switched off only when calling back into the harbour.

Therefore, no easy single solution exists to the problem. The Group recommended that the advice of the Fish Capture Committee should be sought as to the best method of recording fishing effort for mid-water trawls, so that it could be taken into account at the 11th Session of the CWP in July 1982.

6. Statistical Programme for Collection of Mariculture Statistics  
(Agenda Item 5)

The Liaison Working Group was informed that the ICES Mariculture Committee required statistics on mariculture in order to assess the relevance of technological developments, to compare success with the research input and to assist the formulation of advice where mariculture affected resource management. Although the initiative on aquaculture statistics had been taken by ICES, this subject is under consideration by other international organizations. The ICES initiative was therefore welcomed and wide use would be made of the resulting statistics.

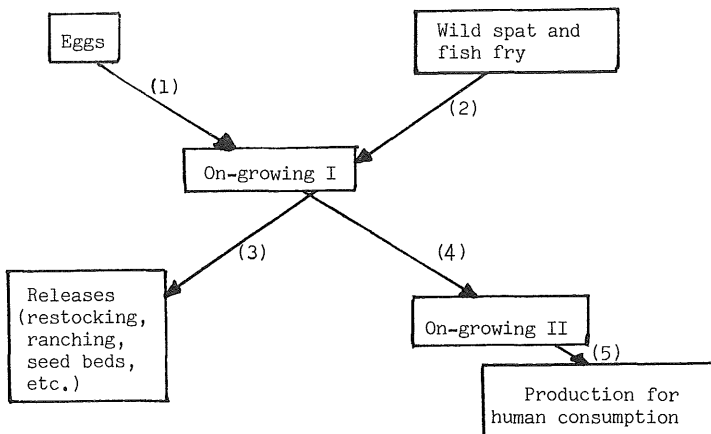
The Working Group had difficulty to obtain a definition for aquaculture that would cover all the situations in Member States and therefore decided that the definition should give general guidance to the national reporting offices who would then have to make an assessment of the national situations in deciding the data to be included. This definition is as follows:

Aquaculture is the managed production of aquatic organisms by husbandry in an aquatic environment.

Many types of aquaculture were recognised by the Group but these could be grouped into four major categories.

1. Production of eggs and juveniles in closed systems.
  - 1.1. for rearing to consumption
  - 1.2. for releasement
  - 1.3. eggs, larvae/fingerlings
2. Fattening and growing of fish, mollusc, crustaceans, seaweeds etc. in enclosures or on rafts.
  - 2.1. end product - human consumption
  - 2.2. fresh/salt water
3. Molluscs farming on cultured beds (end product - human consumption).
4. Sea and fresh water ranching.
  - 4.1. fingerlings released in fresh water
  - 4.2. smolts released.

The Group then proceeded to a discussion of the level of production to be used in recording aquaculture statistics and acknowledged the existence of a "flow-chart" for aquaculture.



The production would only be recorded at the stage where the products passed from the aquaculture sector either as releases (to conditions outside the influence of husbandry) or as a product for direct human consumption i.e. transactions (3) and (5) on the above graph. This would exclude products sold between aquacultural establishments (e.g., fry sold by a hatchery to a growing-on establishment) and products passing from one stage in the life cycle within the same enterprise.

The Group considered that the production should be recorded in two parts as indicated in the above flow-chart: "Production for human consumption" (expressed in metric tonnes live weight equivalent) and "Releases", called "Other final output" on the questionnaire (expressed in number of organisms). This presentation of the production in two broad categories minimized the possibility of double counting which was a real fear with the other alternatives discussed by the Group, where organisms reported in one of the production categories could appear in the other category either in the current reporting year or in subsequent years.

It was decided by the Group that the questionnaire should record mariculture and freshwater aquaculture with, if possible, the reporting offices distinguishing between the two. This decision was influenced by the fact that many species of interest to the ICES Mariculture Committee were farmed in both environments (e.g., salmonids and eels) and that the other organisations interested

in these statistics (notably FAO, OECD and EUROSTAT) had interests not restricted to the marine environment. Mariculture was defined as aquaculture conducted in marine waters, or using waters extracted from marine areas, with a national authority being asked to determine the most appropriate delineation between marine and freshwater areas. Although the ICES mariculture statistics should concentrate on mariculture within the Northeast Atlantic, in recognition of the fact that certain member countries practised aquaculture in other regions, it was decided that the questionnaire should give these countries the opportunity to submit data for these other areas.

In considering the items to be recorded on the questionnaire, it was accepted that, while the area under culture, or the volume of cages, was a better measure of the extent of aquaculture, at the initial stages at least, it would be preferable to limit the requirements to a knowledge of the number of enterprises. It was also accepted that, while the value of the production was an important parameter, it would be difficult to collect and, indeed requests for such information from individual enterprises could jeopardise the collection of the remaining data.

Conforming to the conventions accepted in other ICES statistics (and, generally, in the STATLANT Programme) it was agreed that the weight unit selected would be the live weight equivalent for fish and shellfish (and the wet weight equivalent for aquatic plants).

It was also noted that, whereas the Mariculture Committee's current statistics were usually of an un-official or quasi-official nature, the aquaculture statistics submitted to ICES by national authorities reporting to the ICES Statistics Committee would be official statistics. Initially there would probably be a scarcity of official statistics, but it was believed that the situation would improve.

In considering the form of the questionnaire the Group considered that while the proposed STATLANT AQ questionnaire in the document by D. G. Cross was a sound basis, changes were obviously necessary as a result of the current discussion. Particular attention was drawn to the need for revision of definitions and an elaboration of the instructions in order that the national authorities would be able to translate the national situation into the required data. The format of the questionnaire, modified according to the above discussions is shown in Table 1.

It was further decided that, initially at least, it would be preferable to allow the national authorities to select the species to be recorded. These species could be selected from a list of cultured species annexed to the questionnaire. This list would also indicate those stages in the life cycle of certain of the organisms for which individual entries would be preferred. This list would be based largely on the products indicated on the current Mariculture Committee's questionnaire (with the possible elimination of the conditions under which the culture occurred) supplemented by a list of freshwater species, advice on which FAO was asked to seek from EIFAC.

The Group agreed that the questionnaire should be integrated into the STATLANT system. Accordingly returns would be requested annually with a reference period of 1 January - 31 December and a deadline of 31 May of the following year. It was agreed to recommend that the first submission of data to ICES should be for the year 1981.

The Group proposed that, while the form in which the mariculture data would be published could only be finally determined by the Council once the questionnaire was in use, the ICES Statistician should be requested to investigate the best means of publication (in the Bulletin Statistique ?) and the likely cost. This investigation should also take into account the plans of the other international organisations to publish data extracted from the same questionnaire, and the matter should be discussed at the ad hoc Interagency Consultation on Atlantic Fishery Statistics at Woods Hole and, further, at the 11th Session of the CWP. The Statistics Committee at the 69th Statutory Meeting should give initial considerations to this matter.



7. Other business (Agenda Item 6)

11th Session of the CWP

The CWP Secretary reported on the forthcoming change in the status of the CWP and on the relevant responses received from its member-agencies.

A list of subject matters to be considered at the 11th Session of the CWP (Annex I) was submitted to the Group with a request to inform the ICES Secretariat of any proposed amendments or additions to it, so that the provisional Agenda for the 11th Session could be prepared at the ad hoc Interagency Consultation on Atlantic Fishery Statistics at Woods Hole (see Annex II).

STATLANT Newsletter

Mr D.G. Cross reported on a proposed bulletin published under the auspices of the CWP. The aim of the STATLANT Newsletter was to improve the flow of information of fishery statistics, and more general fishery matters that could have implications for fishery statistics, between the international organizations and their national correspondents and between national organizations. The Group discussed the matter, using as an example a mock-up of the STATLANT Newsletter, and the following remarks were made:

The publication schedule should preferably not be very strict (i.e. either quarterly or half-annually), but rather decided upon in each particular case on the basis of contributions then available.

The distribution should be broader than only to those national and international bodies concerned with fishery statistics of the Atlantic, and, in the case of ICES, should preferably include also members of the Statistics Committee and of its Liaison Working Group, as well as Chairmen of Fish Committees. It was realized, however, that this would involve additional costs, thus preventing the free of charge distribution by an agency responsible for the release. Therefore, the problem of broader distribution should be solved and decided upon by each agency itself.

The list of forthcoming meetings should, wherever possible, contain an indication of access (e.g. open to the public, limited to participants from member countries, designated members only, etc.). In all cases it would

be useful to indicate the convener or the person in charge, so that any inquiries could be sent directly to him.

In the list of recent publications, it would be useful to have a brief outline of contents, if not explicitly clear from the title, or, in the case of well-known series, a notification of any substantial changes from the previous issues.

The Group agreed to request the editor to prepare a real trial No. 1 issue before October so that it could be discussed and considered more specifically at the 69th Statutory Meeting (and, if possible, at the September Meeting of NAFO). Mr D.G. Cross agreed to undertake this task, simultaneously indicating the need for a feed-back from national statistical offices. Such a trial release would provide broader and more concrete responses from both international agencies and national offices to be discussed further at the 11th Session of the CWP.



ANNEX I

Representatives from the Secretariats of CWP organisations present in Copenhagen, 25 May 1981, agreed that at least the subjects listed below should be considered at the 11th Session of the CWP to be held in Luxembourg, 21-28 July 1982:

- a) Review of the details of the interagency STATLANT programme;
- b) Interagency co-operation and their collaboration with national offices - with particular stress on the reduction of data discrepancies;
- c) Fishing areas for statistical purposes with particular reference to the distinction between marine and inland water areas;
- d) A review of current progress in the fields of fishing fleet, fishing gear and fishing effort statistics;
- e) A consideration of the possibility to improve statistics on fishermen;
- f) The development of statistics on landed quantities and their values;
- g) Aquaculture statistics - objectives and the introduction of a standard questionnaire;
- h) A review of the progress made in the implementation of the recommendations and proposals made by the CWP at its 10th Session, 1980;
- i) The introduction of a periodically issued STATLANT NEWSLETTER.

In October 1981, at Woods Hole, the interim ad-hoc interagency consultation shall inter alia draw up the provisional agenda and coordinate plans and participation for the 11th Session of the CWP to be held in Luxembourg, 21-28 July 1982.

AD-HOC INTERAGENCY CONSULTATION ON ATLANTIC FISHERY STATISTICS

2 and 3 or 3 and 4 October 1981, Woods Hole, USA

DRAFT AGENDA

1. Procedural arrangements.
2. Administrative arrangements for CWP-11.
3. Progress reports on the implementation of CWP-10 proposals and recommendations.
4. The introduction of a periodically published STATLANT NEWSLETTER.
5. Agency representation at CWP-11.
6. The provisional Agenda for CWP-11 with annotations.
7. Allocation, preparation and distribution CWP-11 documents.

