

# International Council for the Exploration of the Sea

C.M.1991/D:37

# PROGRESS REPORT 1990/91

by the

#### **ICES Statistician**



#### 1. FISHERY STATISTICS

#### 1.1 Data Reported

Two sets of catch statistics are received and maintained by the ICES Secretariat: 1) data officially reported by national statistical offices and 2) data brought to assessment working group meetings by members.

The official data are reported to ICES on three separate forms:

- The ICES Report of Preliminary Nominal <u>Catches of Selected Species</u> is used for reporting <u>preliminary</u> annual catches by fishing area within 30 days of the end of the year.
- The <u>STATLANT 27A Form</u> is used to report <u>final annual</u> catches by area (sub-area, division or sub-division) within 5 months of the end of the year.
- The <u>STATLANT 27B Form</u> is used to report final monthly catch and fishing effort data by area, gear type, vessel size category and target species within 8 months of the end of the year.

The preliminary data reported on 1) are available for use by the assessment working groups. The STATLANT 27A and 27B data are published annually in *Bulletin Statistique* and are also available to the working groups prior to publication.

The catch data brought to working group meetings by members may or may not correspond to the officially-reported statistics. These unofficial data are maintained in computer files, usually in the form of total international catches by year for each stock, and are used in the stock assessment analyses. The catch data used by the working groups are published in the working group and ACFM reports.

#### 1.2 Adequacy of Data

Catch statistics officially-reported on all three forms by some member countries continue to differ, in some cases substantially, from those provided by scientists to the working groups. There are sometimes perfectly valid reasons why these differences occur; for example, working group data may be collected on a stock basis rather than a strictly area basis. Quite often though, the two sets of data are conflicting and usually the unofficial data are accepted by the working groups and ACFM as being the more accurate estimates. ICES expressed its concern in relation to the large discrepancies between the officially-reported data and working group data in 1986 (C.Res. 1986/4:13).

Table 1 summarises the status of the reporting of preliminary annual catch data for 1990. Seven reporting offices failed to submit these data for 1990 (Finland, France, German Democratic Republic, Ireland, Netherlands, Spain and UK (Isle of Man)), whereas five reporting offices failed to submit these forms for 1989 (Finland, Greenland, Ireland, Spain and UK (Isle of Man)). Ten returns for 1990 were made on or before the 1 February deadline, and this is an improvement compared to only six for 1989.

One problem concerning the preliminary reports for some countries is that ICES Sub-areas or Divisions are grouped, with the result that such data are not of much use to the working groups. For example, France reports by TAC areas whereas the Federal Republic of Germany use other groupings.

Table 2 summarises the status of the reporting of STATLANT 27A and 27B data for 1988-1990. Adherence to the deadline of 31 May for the STATLANT 27A data has been poor. Of the 23 offices submitting data to ICES, the number reporting by, or within a few days of, the deadline was 8 for 1988, 9 for 1989 and 8 for 1990. The number of offices over one year late reporting the 27A data was 4 for the 1988 data (Faroe Islands, Ireland, Spain, and UK (Guernsey)), but zero for 1989. No STATLANT 27A (or STATLANT 27B) report for 1988 has yet been received from the Netherlands (see Section 1.3). At the time this report was written (11 September 1991), final returns for 1989 had not been received from France, Ireland, Norway and Spain. For 1990, final 27A returns have not yet been received from 9 offices (Denmark, France, Federal Republic of Germany, Ireland, Netherlands, Norway, Spain and UK (Guernsey and Jersey). The timeliness of reporting is poor and shows little sign of improving. Within the EC progress is being made towards the introduction of legislation which would require member states to make STATLANT 27A returns by 30 June. This has been approved by the European Commission and the approval of the European Parliament and European Council is now being sought. When implemented, this legislation will considerably improve the timeliness of reporting of these data as most of the present defaulters are EC member states. At a later stage, member states may be required to make their submissions on electronic media using a standard format, and this would be of benefit to ICES.

The reporting of STATLANT 27B data continues to be incomplete (Table 2). Of the 23 offices, only 13 have submitted data for 1988, 11 for 1989 and 8 so far for 1990. Further returns are expected for 1989 and 1990. The number of returns meeting the deadline of 31 August was 5 for 1988, 6 for 1989 and 8 for 1990.

The incomplete reporting of the 27B data has been a point of major concern for several years and two Council Resolutions at the 1987 Statutory Meeting (C.Res. 1987-/4:6 and 7) and one at the 1990 Statutory Meeting (C.Res. 1990/4:2). Portugal started reporting these data for the year 1987 and has reported for subsequent years. Greenland has reported data for 1988, 1989 and 1990. A letter was sent by the General Secretary to countries not submitting 27B data strongly requesting them to at least make partial submissions. The Statistician met staff at the Faroese statistical office in 1990, and the Faroe Islands have subsequently submitted 27B data for 1989 and 1990. These have been the only recent improvements to the data set. The Statistics Committee Liaison Working Group meeting in January 1992 will consider the continued existence of the STATLANT 27B reporting requirement (C.Res. 1990/2:10).

There has been a problem with differences between STATLANT 27A and STATLANT 27B reports from UK statistical offices up to 1988, particularly regarding catches by UK (Northern Ireland) vessels. These discrepancies should be reduced by a change in the way UK data are treated on the ICES data base for years from 1989 onwards. Statistics for the UK prior to 1989 have been presented separately as landings made into England and Wales, the Isle of Man, Northern Ireland and Scotland by all UK vessels, irrespective of where in the UK the vessels are registered. For 1989 the system has been changed so that statistics given for England and Wales, the Isle of Man, Northern Ireland and Scotland are for landings made by vessels registered in those component parts of the UK, irrespective of where those landings were made. For example, the catch recorded against Scotland will include landings by Scottish vessels into Scotland, into the rest of the UK and into ports outside the UK. Thus catch statistics for component parts of the UK are now treated in exactly the same way as for different nations.

Most countries are now complying with the recommendation made in 1986 (C.Res.1986/4:9) that STATLANT 27A and 27B reports for Sub-areas VII and VIII should be made by Divisions rather than groupings of Divisions. Some countries continue to report by the groupings as follows: Divisions VIIb,c, Divisions VIIg-k and Divisions VIIIa-e. All countries are reminded that the reporting of catches by individual Divisions in these and other Sub-areas is required to obtain the necessary information for use by the working groups.

#### 1.3 Bulletin Statistique

The latest issue is Volume 72 (data for 1987) which was published in May 1990. Volume 73 (data for 1988) has still not been published because no data have been submitted by the Netherlands for that year. Data supplied by all of the other statistical offices have been processed and are ready for publication.

Volume 74 (data for 1989) is currently being prepared for publication but must await STATLANT 27A data for France, Ireland, Norway and Spain, and several sets of STATLANT 27B data.

The Advance Release of Tables 1-6 of <u>Bulletin Statistique</u>, Volume 75 (data for 1990) has been issued as C.M.1991/Gen:4.

#### 2. AQUACULTURE STATISTICS

The status of the reporting of aquaculture production statistics for 1988-1990 on the FISHSTAT AQ form is as shown in Table 3. Reports have been received from 10 offices for 1988, 9 offices for 1989 but only 4 for 1990. Some additional returns are expected for 1989 and 1990.

# 3. DISCREPANCIES IN INTERNATIONAL DATA BASES

Following a Council Resolution last year (C.Res.1990-/3:2), a meeting was held during 22-25 July 1991 with representatives from ICES, FAO and Eurostat to try to resolve discrepancies among the data bases of the three agencies. A report of this meeting is given in Appendix 1. Further progress was made in reducing the large listing of discrepancies for the period 1973-1988 which had been prepared earlier by Eurostat. Many of these discrepancies are due to inconsistencies in the reporting of categories of grouped species, both with time and among agencies, and most of these were resolved. Discrepancies due to other causes are more problematical and most of these cannot be resolved without advice from someone with expert knowledge of national fisheries of some countries.

# 4. COMPUTER FACILITIES, ASSESSMENT PROGRAMS AND DATA BASES

A new computer system was installed at ICES Head-quarters in March 1991. The system is a network of PCs and workstations running under DOS and Unix, and linked by high speed line to Uni.C (the University of Copenhagen Computer Centre). The full set of STATLANT 27A and 27B data held by ICES is stored at Uni.C and will remain there for the foreseeable future. A duplicate set of STATLANT 27A data for the years from 1973 onwards has been held in SPSS on the ND computer system at ICES. This data set will be transferred in the near future to SAS on the new system in house. The ND computer is expected to be removed at the end of 1991.

The number of enquiries for STATLANT 27A data has been steadily increasing and it is hoped that when the SAS implementation is complete that these enquiries will be answered with greater flexibility and speed.

The International Young Fish survey database will remain at Uni.C but will in November be transferred to a different Uni.C computer.

Development work is well under way on a new stock assessment package for ICES. This will include a data base in which catch statistics as used by the working groups will be held. These data will be more disaggregated than data currently held in working group data files; for example most will be held on a quarterly rather than an annual basis and data for different fishing fleets (or gear types) will be held separately. All of the basic data will be held and manipulated within SAS.

# 5. CHANGES IN NATIONAL STATISTICAL SYSTEMS

Some improvements in national statistical systems are apparently in progress, but the Secretariat is not aware of any major changes in the systems in use.

Table 1 Returns of the ICES Report of Preliminary Nominal Catch of Selected Species, 1990 as of 11 September 1991 (Deadline 1 February 1991).

Country	Date received
Belgium	01.02.91
Denmark	11.02.91
Faroe Islands	28.01.91
Finland	-
France	~
German Dem. Rep.	-
Germany, Fed. Rep.	18.01.91
Greenland	25.02.91
Iceland	24.01.91
Ireland	-
Netherlands	-
Norway	08.04.91
Poland	17.04.91
Portugal	28.02.91
Spain	-
Sweden	01.02.91
UK (England & Wales)	11.02.91
UK (Ch. I. Guernsey)	28.01.91
UK (Ch. I. Jersey)	30.01.91
UK (Isle of Man)	-
UK (Northern Ireland)	17.01.91
UK (Scotland)	30.01.91
USSR	30.01.91

Table 2 Returns of STATLANT 27A and 27B forms as of 11 September 1991 (Deadlines: 31 May and 31 August, respectively).

Country	STATLANT 27A			STATLANT 27B		
Country	1988	1989	1990	1988	1989	1990
Belgium	24.05.89	29.05.90	14.05.91	24.05.89	29.05.90	14.05.91
Denmark	13.09.89 <sup>1</sup> 12.12.89	12.10.90		-	-	-
Faroe Islands	17.08.90	17.08.90 <sup>1</sup> 04.12.90	28.01.91 <sup>1</sup> 23.04.91	-	21.01.91	19.06.91
Finland	12.10.89	09.05.90	30.05.91 <sup>1</sup>	18.10.89	30.08.90	-
France	21.11.89	-	-	-	-	-
German Dem. Rep.	06.06.89	21.05.90	05.04.91	06.06.89	21.05.90	05.04.91
Germany, Fed. Rep.	23.11.89	20.11.90	-	23.11.89	20.11.90	-
Greenland	05.05.89	24.09.90	24.05.91	17.09.90	17.09.90	24.05.91
Iceland	28.07.89	13.08.90	22.07.91	-	-	-
Ireland	20.06.90	-	-	14.02.91	-	-
Netherlands	-	10.10.90	_	-	-	-
Norway	24.07.89 <sup>1</sup> 26.03.90	21.09.901	29.07.911	02.01.91	-	-
Poland	03.07.89	20.06.90	04.06.91	15.09.89	17.09.90	09.09.91
Portugal	07.07.89	21.05.90	11.09.91	07.07.89	30.08.90	29.08.91
Spain	22.10.90	-	_	-	-	_
Sweden	01.06.89	09.08.90	08.08.91	01.08.89	31.08.90	13.08.91
UK (Engl. & Wales)	05.06.89	06.06.90	19.06.91	15.01.91	_	-
UK (Ch.I. Guernsey)	01.10.90	05.09.90	-	-	-	-
UK (Ch.I. Jersey)	17.05.89	10.05.90	-	-	-	-
UK (Isle of Man)	28.08.89	28.09.90	14.06.91	-	-	-
UK (N. Ireland)	18.05.89	21.05.90	21.05.91	-	-	-
UK (Scotland)	30.06.89	08.06.90	19.03.91	22.09.89	09.11.90	-
USSR	07.06.89	06.06.90	08.07.91	12.07.89	30.07.90	30.07.91

<sup>1</sup> Preliminary.

Table 3
Returns of the FISHSTAT AQ form as of 11 September
1991 (Deadline: 30 June).

Country	1988	1989	1990
Belgium	28.06.89	16.07.90	19.08.91
Denmark	-	-	-
Faroe Islands	<b>-</b> '	-	-
Finland	01.09.89	13.09.90	08.07.91
France	18.01.90	-	-
German Dem. Rep.	22.06.89	03.07.90	-
Germany, Fed. Rep.	-	03.09.90	-
Greenland	-	-	-
Iceland	13.09.89	27.09.90	-
Ireland	06.03.91	-	-
Netherlands	-	-	-
Norway	02.01.91	-	-
Poland	-	-	-
Portugal	-	02.07.90	-
Spain	-	-	-
Sweden	17.07.89	06.08.90	09.08.91
UK (Engl. & Wales)	-	-	-
UK (Ch. I. Guernsey)	-	-	-
UK (Ch. I. Jersey)	-	-	-
UK (Isle of Man)	-	-	-
UK (N. Ireland)	20.06.89	21.05.90	21.05.91
UK (Scotland)	18.02.91	18.02.91	-
USSR	-	-	-

<sup>1</sup> Preliminary.

# **APPENDIX**

# AD-HOC INTER-AGENCY CONSULTATION ON DISCREPANCIES IN INTERNATIONAL DATA-BASES

1. An Inter-Agency Consultation on Discrepancies in International Data-Bases was held at the ICES Headquarters in Copenhagen on 22-25 July 1991. The participants were:

Mr M. Perotti (FAO)
Dr R. Grainger (ICES)
Mrs E. Christiansen (ICES)
Mr D. Cross (Eurostat)
Miss S. Bos (Eurostat)

- 2. This meeting continued the discussions on the discrepancies between the FAO, ICES and Eurostat databases for the catch statistics of the NE Atlantic. (Similar meetings have been held at the ICES Headquarters in June and October 1990.)
- 3. The basic document used in the discussions remained a listing of the discrepancies produced by Eurostat in June 1990 although this was supplemented by a similar listing with data for a further year (1988). While the discussions centred on the discrepancies for a number of countries which had not been treated at the earlier meetings, some attention was paid to the progress achieved for those countries which had received earlier detailed study. It was found that there was general satisfaction with the progress achieved so far, that FAO had implemented most of the agreed changes, and that, while pressure of work and changes in the computer system had delayed ICES's implementation of the agreed changes, these changes were well in hand.

# **GENERAL CONCLUSIONS**

### STATLANT NS1 questionnaires.

4. These questionnaires were the only formal method by which national authorities informed the international agencies of revisions to the data for earlier years. However the revisions notified on this questionnaire were of little use to ICES and Eurostat because they referred only to aggregates for the NE Atlantic (FAO Major Fishing Area 27) and did not give the essential breakdown by ICES Division and Sub-division. It was agreed that, while FAO would provisionally accept these revisions, final acceptance would be dependant on the national authorities supplying the detailed breakdown of the data required by ICES and Eurostat. FAO would make sure that ICES and Eurostat received copies of the STATLANT NS1 questionnaires and then Eurostat (for EC Member States) and ICES (for other ICES member countries) would contact the national authorities for the detailed statistics required. The national authorities would be informed that, without detailed revisions, the original data would be retained on the ICES, FAO and Eurostat data-bases.

#### Tuna statistics

- 5. ICES reported that the ICCAT Secretariat had informed ICES that supplying ICCAT tuna data by ICES division and sub-division would be at best a very time-consuming task and in many cases technically impossible. ICES then pointed out that, on reflection, the earlier decision to accept the ICCAT tuna statistics when they differed from the ICES data submitted on STATLANT 27A questionnaires (assigning much of the data to 'ICES division unknown') would result in a loss of detail. A closer look at the data should be taken before deciding on any generalised approach.
- 6. The participants then looked at the data for France, Spain and Portugal and found that there was no generally discernable pattern data within any of the time series. There was, for example, no general trend for ICCAT data (tuna experts best estimates) to be larger or smaller than ICES data (from national statistical sources). It was therefore agreed that Eurostat would compile tables with data from the two sources, send them to the national authorities with a proposal that the subject of tuna data be discussed at the next meeting of Eurostat's Working Group "Fishery Statistics" in December 1991.

# Discrepancies in French, Portuguese and Spanish catch statistics.

7. Since the last meeting FAO, ICES and Eurostat had looked at the data for France and Spain and had all concluded that there was no possibility, with the expertese currently available to the secretariats of those organisations, to reconcile the serious discrepancies in the data for the Demersal Percomorphhs and the Elasmobranchs. It was also noted that similar problems existed for the Portuguese data. The recommendation of the previous meeting was repeated that expert national assistance should be sought to reconcile these discrepancies which threaten the credibility of all the data for those countries. This work was considered essential and accordingly FAO and Eurostat should study the possibility of financing this work through a study contract.

# Data for the Channel Islands

8. Eurostat reported that ICES's treatment of the data for the Channel Islands (according to the historical data the same country code as for England and Wales) made the use of ICES data to up-date the Eurostat data base and the subsequent exercise to detect discrepancies with the FAO data more difficult. Eurostat asked ICES to implement the decision in principle to accept data in the detail submitted by the member countries and offered to supply ICES with the data for the Channel Islands (Guernsey and Jersey separately) for as long a time series as possible. ICES accepted this proposal and undertook to implement this change at the earliest possible opportunity.

#### Marine mammal data

9. It was pointed out that although ICES had a Marine Mammals Working Group it had no data for these species on the computer. FAO had such data and Eurostat accepted the FAO data (obtained from the IWC and the Marine Mammals Research Institute in the UK). Eurostat offered to make these data (aggregates for the NE Atlantic) available to ICES in an approporiate format. ICES recognised the importance of these data and proposed that the collection of such data on the STATLANT 27A questionnaire should be included on the agenda of the next meeting of the ICES Statistics Committee (and, subsequently, of its Liaison Working Group).

# Elasmobranch data

10. It was noted that some countries (and notably France) have for a number of years been providing data for species of elasmobranchs in far greater detail than requested on the STATLANT 27A questionnaires. FAO and ICES have agreed that these species be added to the questionnaire when next printed and Eurostat offered to extract the data for previous years from the French returns for incorporation into the ICES data-base.

# Degree of tolerance in discrepancies

- 11. It was agreed that the process of eliminating discrepancies should not be too rigid. Emphasis should be placed on the major species and on developing long time series. It was considered less important if agencies varied their allocation of data between the more general 'catch-all' items (eg 'Groundfish nei', 'Finfish nei')
- 12. It was also agreed that in the next run of the discrepancy programs, Eurostat should allow a tolerance of, say, 10 tonnes before discrepancies are listed and should allow for the fact that FAO's data rfor 1973 are rounded to the nearest 100 tonnes.
- 13. The discussions completed a first review of the discrepancies. Specific attention to be given to certain data and contacts required with the national authorities are noted below.
- 14. It was agreed that the next stage would be for all the corrections currently agreed to be entered in the ICES and FAO data-bases. It was recognised that ICES, with the changes currently underway with its computer system, might experience some delays in achieving this but it is hoped that it will be possible for Eurostat to obtain copies of the ICES and FAO data-bases before the end of 1991 so that a further run of the discrepancy excercise may be done. A possible time for a further Inter-Agency Consultation might be in January 1992 immediately before or after the proposed meeting of the ICES Statistics Committee Liaison Working Group.

. 1

# SPECIFIC ITEMS STILL TO BE CLARIFIED.

# Finland

- 15. ICES is to contact the Finnish authorities to confirm that the tables submitted to the last meeting of the ICES Liaison Working Group (in which recreational catches are eliminated from the catch data) may be used to correct the ICES data-base.
- 16. ICES is to ask for clarification of the situation for pollan and whitefishes nei (see table below).

Year	Whitefishes nei NE Atlantic Finland	Pollan(=Powan) NE Atlantic Finland
1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988	1 986 0 0 0 1 487 1 996 2 177 2 371 2 410 2 305 1 784 1 672 1 470 1 187 1 240	0 2 100 1 982 2 012 1 967 0 0 0 0 0 0

#### Denmark

17. ICES will contact Danish scientists for confirmation that data attributed to 'Demersal Percomorphs nei' prior to 1981 may be reattributed to 'Greater Weaver'

# Norway

18. Norway has made many revisions to data using the Statlant NS1 questionnaires. Contacts will have to be taken to obtain the area breakdown required by ICES.

# Poland.

19. FAO has received a finer breakdown of freshwater species than ICES. ICES should contact the Polish authorities to obtain this finer breakdown by sub-division.

# United Kingdom

20. ICES should make sure that FAO receives a copy of the UK data reworked by ICES in the manner agreed with the UK authorities (Catches by English vessels in all ports, etc.)

# OTHER MATTERS

- 21. Eurostat reported that the Regulation on landing statistics had been approved by the EC Council in May 1991 and that monthly landing statistics should begin to be submitted to Eurostat in June 1992.
- 22. The two draft Regulations converting the Statlant 27A and 21A questionnaires into Community law were approved by the EC Commission in June 1991 and the approval of the European Parliament and the European Council was now being sought.
- 23. In the framework of the negotiations between the EC and EFTA it is anticipated that EFTA countries will be applying the Community landing statistics regulation (with appropriate modifications). These countries have also expressed an interest in the two proposed regulations on catch statistics. It is apparent that EFTA countries will be playing an increasingly important rôle in the work of Eurostat's Working Group 'Fishery Statistics'.
- 24. ICES accepted that the species names used in its publications and on the STATLANT questionnaires required attention and largely accepted FAO's proposals for a harmonisation of the nomenclature.
- 25. Modification to the list of species items on the STATLANT 27A questionnaires in line with the proposals of the ICES Statistics Committee were accepted.
- 26. It was agreed that the Inter-Agency Consultation on Atlantic Fishery Statistics would be held at the ICES Statutory Meeting in La Rochelle (France) in September. The first session would be on Thursday 26 September (all day). A second session, if required, could be held on Friday 27 September from 11.30 13.00h. The report of the AHIC would be presented to the ICES Statistics Committee at its meeting on Monday 30 September. Items for discussion at the AHIC included:

Review of recommendations of CWP-14
Agenda for CWP-15
Arrangements for CWP-15
High-seas fisheries
Reporting by non-member countries
Discrepancies in data-bases
Recreational fisheries
Marine/freshwater boundaries
Definition of aquaculture