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# REPORT OF THE THIRD ANNUAL MEETING OF THE NORTH-EAST ATLANTIC COMMISSION

23-27 June 1986 Edinburgh, UK

# ORGANISATION POUR LA CONSERVATION DU SAUMON DE L'ATLANTIQUE NORD



# NORTH-EAST ATLANTIC COMMISSION

COMMISSION DE L'ATLANTIQUE DU NORD-EST

CHAIRMAN

MR BJOERN SMOERGRAV (NORWAY)

**RAPPORTEUR** 

MR ARNI ISAKSSON (ICELAND)

**SECRETARY** 

DR MALCOLM WINDSOR

#### CONTENTS

REPORT OF THE THIRD ANNUAL MEETING OF THE NORTH-EAST ATLANTIC COMMISSION OF NASCO, 23-27 JUNE 1986, EDINBURGH, UK

		DETABLISHED NOT TO THE PARTY OF
ANNEX	1	LIST OF PARTICIPANTS
ANNEX	2	AGENDA, NEA (86)17
ANNEX	3	SCIENTIFIC ADVICE FROM ICES - ACFM REPORT ON SALMON STOCKS, CNL (86)3, (SECTIONS 1-3 AND 6-8)
ANNEX	4	DRAFT PROPOSAL BY THE EUROPEAN ECONOMIC COMMUNITY FOR A REGULATORY MEASURE FOR THE FISHERY OF SALMON IN THE FISHERIES ZONE OF THE FAROE ISLANDS, NEA (86)5
ANNEX	5	DRAFT PROPOSAL TO THE NORTH-EAST ATLANTIC COMMISSION OF NASCO FOR REGULATORY MEASURES FROM THE DELEGATION OF ICELAND, NEA (86)7
ANNEX	6	DRAFT PROPOSAL BY THE DELEGATION OF NORWAY FOR REGULATORY MEASURE FOR FISHING OF SALMON IN THE FISHERIES ZONE OF THE FAROE ISLANDS, NEA (86)9
ANNEX	7	MICROTAGGED ICELANDIC SALMON CAUGHT IN THE FAROESE FISHERY IN 1984 AND 1985, NEA (86)8
ANNEX	8	NORWAY: NEW SALMON REGULATIONS, NEA (86)6
ANNEX	9	STATEMENT ON THE FAROESE FISHERY BY THE DELEGATION OF DENMARK (IN RESPECT OF THE FAROE ISLANDS AND GREENLAND), NEA (86)10
ANNEX	10	EXPLANATORY NOTE CONCERNING THE FAROESE APPROACH TO THE WORK OF NASCO FROM THE DELEGATION OF DENMARK (IN RESPECT OF THE FAROE ISLANDS AND GREENLAND), NEA (86)15
ANNEX	11	COMMENTS BY THE EUROPEAN ECONOMIC COMMUNITY ON THE "STATEMENT ON THE FAROESE FISHERY" (NEA (86)10) BY THE DELEGATION OF DENMARK (IN RESPECT OF THE FAROE ISLANDS AND GREENLAND), NEA (86)11
ANNEX 1	2	DRAFT REGULATORY MEASURE FOR FISHING OF SALMON IN THE FISHERIES ZONE OF THE FAROE ISLANDS 1986-87 AND 1987-88, NEA (86)14 AND DRAFT RESOLUTION RELATING TO REGULATORY MEASURES FOR THE FISHING OF SALMON IN THE COMMISSION AREA, NEA (86)16

ANNEX	13	DRAFT PROPOSAL BY THE EUROPEAN ECONOMIC COMMUNITY FOR A REGULATORY MEASURE FOR THE FISHERY OF SALMON IN THE FISHERIES ZONE OF THE FAROE ISLANDS, NEA (86)12
ANNEX	14	REQUEST FOR SCIENTIFIC ADVICE FROM ICES, NEA (86)13
ANNEX	15	LIST OF NORTH-EAST ATLANTIC COMMISSION PAPERS

#### NORTH-EAST ATLANTIC COMMISSION

NEA (86)18

REPORT OF
THE THIRD ANNUAL MEETING OF THE NORTH-EAST ATLANTIC COMMISSION

#### NEA (86)18

REPORT OF THE THIRD ANNUAL MEETING OF THE NORTH-EAST ATLANTIC COMMISSION OF THE NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION 23-27 JUNE 1986, SHERATON HOTEL, EDINBURGH, UK.

#### 1. OPENING OF THE MEETING

- 1.1 The meeting opened on 23 June 1986 under the chairmanship of Mr Bjoern Smoergrav (Norway).
- 1.2 A list of participants and observers is annexed (Annex 1).

#### 2. ADOPTION OF THE AGENDA

2.1 The Agenda was adopted as contained in NEA (86)17 (Annex 2).

#### 3. NOMINATION OF A RAPPORTEUR

3.1 The Commission nominated Mr Arni Isaksson (Iceland) as rapporteur.

#### 4. ELECTION OF OFFICERS

4.1 The Commission elected Mr Stefan De Mare (Sweden) as its new Chairman and Mr E John Spencer (EEC) as its new Vice-Chairman. They took office at the conclusion of the meeting.

### 5. REVIEW OF THE 1985 FISHERY

- The chairman of ACFM, Mr Oyvind Ulltang, reviewed the 1985 fishery and part of the ACFM report. This information is covered in CNL(86)3 (Annex 3).
- The report raised a number of questions, primarily regarding unreported catches which appeared for the first time. There was a discussion on the high exploitation rate of the river Imsa stock as presented in the Working Group report.
- 5.3 There was a discussion on discards in the Faroese fishery. Discards were a problem in the 1984-85 season.

# 6. ACFM REPORT FROM ICES ON SALMON STOCKS

6.1 There was no further discussion on this item in addition to the discussion reported under the previous item.

#### 7. REGULATORY MEASURES

7.1 Three draft proposals for regulatory measures were submitted.

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- 1. The EEC proposal NEA (86)5 (Annex 4)
- 2. The Icelandic proposal NEA (86)7 (Annex 5)
- 3. The Norwegian proposal NEA (86)9 (Annex 6)
- 7.2 The proposals were introduced by the delegates, and the Icelandic delegate additionally presented information on the reporting of Icelandic tags from the Faroese fishery NEA (86)8 (Annex 7).
- 7.3 The Norwegian representative described conservation measures in Norway, NEA (86)6 (Annex 8).
- 7.4 The representative of Denmark (in respect of the Faroe and Greenland) made statements which are Islands contained in NEA (86)10 (Annex 9) and NEA (86)15 (Annex Comments on the former document by the representative of the EEC are made in NEA (86)11 (Annex The representative of Denmark expressed 11). disagreement with views put forward in the latter document.
- 7.5 The representative of the EEC raised the matter of over-fishing in the Faorese salmon fishery which in his view had occurred during the four fishing seasons 1981/82 to 1984/85 for which catch statistics were given in the 1986 ICES Working Party report under consideration. The representative of Denmark objected to the matter being discussed in a multilateral forum since the quotas for those seasons were fixed bilaterally with the EEC and were not NASCO measures. In its view, the quota agreed bilaterally had another status and background to a NASCO regulatory measure.
- 7.6 Following consultations the Chairman introduced NEA (86)14 and 16 (Annex 12), which were to be considered together. Opposition was expressed to the draft resolution contained in NEA (86)16. The representative of the EEC submitted NEA (86)12 (Annex 13). After consideration of the proposals and after amendments to NEA (86)16 had been proposed by the Chairman, a vote was taken on this document and NEA (86)12. With three votes in favour, one against and one abstention, neither of the proposals was carried.

#### 8. RECOMMENDATION TO THE COUNCIL ON SCIENTIFIC RESEARCH

8.1 The Commission recommended to the Council the questions to ICES regarding the North-East Atlantic Commission area contained in NEA (86)13 as amended (Annex 14).

- 9. OTHER BUSINESS
- 9.1 No other business was discussed.
- 10. DATE AND PLACE OF THE NEXT MEETING
- 10.1 The Commission will hold its next meeting at the date and place of the next meeting of Council.
- 11. CONSIDERATION OF THE DRAFT REPORT OF THE MEETING
- 11.1 It was decided to submit the draft report of the meeting to the members of the Commission for comment.

23 JUNE 1986 **EDINBURGH** 

> NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION THIRD ANNUAL MEETING OF THE NORTH-EAST ATLANTIC COMMISSION 23-27 JUNE 1986, SHERATON HOTEL, EDINBURGH, UK

#### LIST OF PARTICIPANTS

\* Denotes Head of Delegation

## PARTIES - MEMBERS OF THE COMMISSION:

# DENMARK (IN RESPECT OF THE FAROE ISLANDS AND GREENLAND)

\*MR E LEMCHE Representative

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MR K HOYDAL

Representative

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MR A OLAFSSON

Ministry of Foreign Affairs, Copenhagen

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<u>ICES</u>

MR B B PARRISH

General Secretary, International Council

for the Exploration of the Sea,

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MR O ULLTANG

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#### SECRETARIAT

DR M L WINDSOR

Secretary, NASCO

DR P HUTCHINSON

Assistant Secretary, NASCO

(++): Under Article 11, paragraph 2 of the Convention for the Conservation of Salmon in the North Atlantic Ocean, Canada and the United States of America each have the right to submit and vote on proposals for regulatory measures concerning salmon stocks originating in the rivers of Canada or the Unites States of America, repsectively, and occurring off East Greenland.

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23 JUNE 1986 EDINBURGH

## NEA (86)17

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION THIRD ANNUAL MEETING OF THE NORTH-EAST ATLANTIC COMMISSION 23-27 JUNE 1986, SHERATON HOTEL, EDINBURGH, UK.

	AGENDA	PAPER NO
1.	Opening of the meeting	•
2.	Adoption of the agenda	
3.	Nomination of a rapporteur	
4.	Election of officers	NEA (86)3
5.	Review of the 1985 fishery	(00)0
6.	ACFM report from ICES on salmon stocks	CNL (86)3
7.	Regulatory measures	0.12 (00/5
8.	Recommendation to the Council on scientific research	
9.	Other business	•
10.	Date and place of the next meeting	
11.	Consideration of the draft report of the meeting	•

2 JUNE 1986 EDINBURGH

NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

CNL 86(3)

SCIENTIFIC ADVICE FROM ICES

THE REPORT OF
THE ADVISORY COMMITTEE ON FISHERIES MANAGEMENT (ACFM)
(SECTIONS 1-3 AND 6-8)

This paper makes reference to the report of the meeting of the ICES Working Group on North Atlantic Salmon (Copenhagen, 17-26 March 1986). That report is not annexed here but is available on request to the Secretariat.

#### ACFM REPORT NORTH ATLANTIC SALMON

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#### 1. REQUEST FOR SCIENTIFIC ADVICE

The advice below and the appended report of the Working Group on North Atlantic Salmon respond to questions posed by ICES and the Council of the North Atlantic Salmon Conservation Organisation (NASCO). ICES requested: a) estimates of nominal catches (tonnes) salmon in home waters; b) estimates of the catch of salmon in numbers by sea age for recent years; c) an assessment of the impact of non-tagged, adipose fin-clipped salmon on the detection of coded wire tags; and d) an evaluation of the concept of "Safe Biologial Limits" in terms relevant to Atlantic salmon. NASCO posed questions in relation to the areas of its Commissions: questions are listed for each of the Commission areas in Appendix I of the Working Group report. Every question posed is addressed below together with a summary of scientific advice. The Working Group report should be consulted for detailed reponses to ICES and NASCO requests. In this text, all tables and numbered figures referred to are found in the Working Group report.

#### 2. NOMINAL CATCHES OF SALMON IN HOME WATERS

Nominal catches of salmon in home waters (in tonnes round fresh weight) for 1960-85 are presented, by country, in Table 1. The total provisional reported catch in 1985 was 5,864 tonnes, similar to the 1984 total catch of 5,624 tonnes but lower than annual catches in the early 1980's (6,200-8,000 tonnes). In 1985, for the first time, an estimate of unreported catch was provided (3,070 tonnes). No attempt was made to estimate unreported catches for earlier years.

#### 3. CATCH IN NUMBER BY SEA AGE AND WEIGHT FOR RECENT YEARS

Estimates of national salmon catches, in terms of numbers and weight by sea age, are given in Table 2 for the 1980-85 period. Data were provided from nine countries for one or more years in the recent time period. Sea age was generally assigned as either 1 sea-winter (1SW) or multi sea-winter (MSW). For each country, age and catch estimation procedures were described.

- 6. QUESTIONS OF INTEREST TO THE NORTH-EAST ATLANTIC COMMISSION OF NASCO
- 6.1 Description of Salmon Fisheries in the North-East Atlantic Commission Area and Assessment of Exploitation and Fishing Mortality rates

The only high seas fishery still operating in the area is the Faroese fishery. Details of the catch in numbers for the area, catch per unit effort, and the 1985 sampling and survey program are outlined in the report of the Special Study Group on the Norwegian Sea and Faroese Salmon Fishery (ICES, Doc. C.M. 1986/M:8). Exploitation and fishing mortality rates in the Faroese fishery and in Norwegian and Scottish home waters were estimated from salmon tagging experiments in the River Imsa in Norway and the North Esk River in Scotland (Tables 22-24). The River Imsa results for 1981-84 indicated that exploitation of 1SW salmon in the Norwegian Sea is zero or very low (i.e., exploitation rates (6%). Home-water exploitation, however, is high both for 1SW

salmon (66-99%) and 2SW salmon (89-100%). Exploitation rates for 2SW fish in the Faroese Norwegian Sea fishery ranged between 25-43% and were thus lower than those for 2SW fish in home waters. However, the number of 2SW salmon caught in the Faroese fishery can be as high as in home waters because greater quantities of fish are available. Results from the North Esk tagging studies indicated that exploitation rates in the Faroese high seas fishery during 1983-84 ranged between 13-14%, while in the North Esk and in other Scottish home waters, exploitation of 2SW salmon varied between 31-70% (Table 24).

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Based on both recent and previous estimates of exploitation levels, ACFM again noted that exploitation rates for salmon in North-East Atlantic home-water fisheries vary widely from a few percent to over 90%. Very little information was presented on freshwater exploitation rates and no conclusion could be drawn on the extent of variation in this aspect or its possible impact on stocks in the North-East Atlantic Commission area.

# 6.2 <u>Composition of Catches in the Faroese Salmon Fishery in the 1984/85 Fishing Season</u>

In 1984/85, the nominal catch of salmon in the Faroese fishery was 662 tonnes (Table 21). Estimated monthly and seasonal catch data, in numbers by age group, are presented in Table 26. Most of the catch (87%) was composed of 2SW fish. From a special sampling program, discards were estimated to be 13.5% (or 20,300 fish) of the total number caught. Recoveries of tagged smolts released since 1978 indicate that salmon from Norway, Sweden, Scotland and England are found well mixed in the same fishing area. The number of recoveries of Norwegian tags relative to the number released (Table 27) strongly indicates that Norwegian-origin fish are the largest contributor to the Faroese fishery.

## 6.3 <u>Catches of Salmon in the North-East Atlantic Commission Area</u> by Year and Season, and River and Sea Components

Catches of salmon taken at the Faroes from 1982 to 1985 are shown by calendar year and by fishing season in Table 21. Catches in the Commission Area have been sub-divided into river, estuary and marine categories where feasible (Table 29). In the absence of a suitable definition to split brackish water catches into river and sea components, ACFM was unable to report estuarine catches in the categories requested by NASCO.

# 6.4 Contribution of Hatchery-Reared Salmon and Fish Farm Escapees to the Faroese Salmon Fishery

Farming of Atlantic salmon has increased to 35,000 tonnes in 1985, of which 29,000 tonnes were produced by Norway. Based on direct observations at sea and discriminant analysis of fin measurements and scale reading, it was concluded that 4% to 7% of the Faroes salmon catch in the 1984/85 fishing season consisted of reared fish. It was not possible to distinguish the escapees from fish farms from other reared fish.

## 6.5 Natural Mortality in the Marine Phase

Estimates of natural mortality rates for Atlantic salmon in the marine phase were reviewed. For the period 14 to 24 months after leaving the river, estimated natural mortality percentages varied from 2% to 14% (Table 30). Very little new information was presented.

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6.6 Plan and Coordinate a Program of Research to Examine Data for Salmon Originating in Selected Rivers as a Basis for Advising Whether Rates and Patterns of Exploitation are Within Safe Biological Limits

Three approaches were examined to the problem of estimating the spawning escapements giving optimum production:

- determine optimum parr densities for habitats of different productivity and estimate the egg production required to produce these densities;
- 2) monitor a river and determine the number of smolts arising from a known parent egg deposition; and
- 3) manipulate the stocks of adult salmon in one or more rivers to produce known and varied egg depositions and monitor the resultant smolt production.

In all of these approaches, the establishment of a target escapement or egg deposition was considered necessary to serve as a baseline for reviewing rates and patterns of exploitation. However, problems were noted with all three approaches, and it would be difficult to plan general research programs to address what are, in fact, a wide variety of local problems. A number of European rivers were identified where research programs on rates and patterns of exploitation are underway or being planned. There was no obvious need for coordination of these studies because of their diverse natures other than the recovery of tags internationally as is carried out at present.

Feasibility of Regulating the Faroese Salmon Fishery by
Limitation of Fishing Effort so as to Achieve the Same Rate
of Fishing Mortality as Would Result on Average from a
Given Catch Level in Tonnes. The Relative Effectiveness of
Effort Regulation as Opposed to Annually Adjusting a Total
Allowable Catch (TAC) in Achieving the Same Fishing Mortality Rate

Based upon experiences in fisheries where effort regulation of some type had been implemented, an evaluation was made of the possible impacts of:

- a) number of hooks per vessel;
- b) type and quality of bait;

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- c) number and size of vessels;
- d) duration of line fishing time;
- e) cooperative fishing operations; and
- f) vessel effort quotas.

It was concluded that it is technically feasible to regulate the number of hooks used and the number and size of vessels taking part in the fishery. It is, therefore, feasible to regulate fishing effort. Limitations on some dimensions of fishing effort are likely to result in expansions in others, however. Examination of catch rate data at the Faroes (Table 31) shows example, allow scope for increase in efficiency of effort utilization by modifying the distribution of effort within a adopted, methods would need to be devised to monitor resultant scheme.

As abundance of salmon at the Faroes cannot be predicted, there is no basis for estimation of a TAC which would achieve a particular target fishing mortality within a particular season. The only comparison which can be made, therefore, is between a TAC fixed for several years at a level expected, on average, to result in a target fishing mortality, and effort regulation. As abundance of salmon at the Faroes is likely to vary from year to year, a fixed TAC will result in a variable mortality from year to year. With regard to an effort regulation, variability in abundance will be reflected in variability in catch while mortality remains stable. However, catchability of salmon is also likely to vary and this will result in variable mortality for the same nominal effort level. As the variations in abundance and catchability at the Faroes are not known, ACFM could not determine whether a fixed TAC or a fixed effort level would lead to a more constant fishing mortality. In the case of catch, as well as effort, regulation, exploitation rates experienced in the fishery would need to be monitored to determine whether a particular target level was, in effect, being achieved.

In summary, it is feasible to regulate the Faroese salmon fishery by limitation of fishing effort, but its effectiveness relative to a fixed TAC in achieving a particular target fishing mortality cannot be determined without further research. Annual adjustment of a TAC to achieve the same fishing mortality in each year cannot be accomplished as abundance of salmon at the Faroes cannot be predicted.

# 6.8 <u>Biological Effects of Alternative Minimum Size Regulations</u> <u>for Salmon (including No Minimum Size) for the Faroese</u> <u>Fishery</u>

Due to a publication oversight, this question posed by NASCO was inadvertently omitted from the terms of reference in the Procès-Verbal. Hence, no advice is provided on the feasibility of employing a size limit in the Faroese salmon fishery nor of the impact of possible size limits on non-catch fishing mortality. Previous analyses provided estimates of losses to home water stocks corresponding to the catch of various sea ages in the Faroese fishery. In recent years, Faroese catches of salmon during their first year at sea have been low and, hence, home water losses due to catches of small salmon have also been low. ACFM offers to consider the question of the biological effects of alternative minimum size regulations (including no minimum size) for the Faroese salmon fishery at its May 1987 meeting.

# 7. IMPACT OF NON-TAGGED ADIPOSE FIN-CLIPPED SALMON ON THE DETECTION OF CODED WIRE TAGS

Difficulties have been encountered in detecting microtagged salmon of USA-origin caught in fisheries of other countries. Concern was expressed that if the frequency of microtags in fish examined for detection is low, insufficient effort will be exerted on average, and some microtags will go undetected. A suggestion was tendered that adipose fin clipping should be limited in use to only those salmon marked with microtags. The use of adipose fin clipping for purposes other than identification of salmon marked with some other tag was reviewed. Such uses included identifying hatchery fish from wild salmon, identifying fish reared and released by private institutions to quantify their contributions to the runs, and wide-spread use in small-scale experiments to estimate parr densities, movements and other factors in natal streams. Reduction in the use of adipose fin clips only to tagged salmon would represent a major change from past practices. Existing evidence does not indicate a need restrict adipose fin clips to fish also marked with other tags. However, it is apparent that fish with microtags should also be fin clipped; otherwise it is likely that the probability of detection in fisheries will be greatly diminished.

# 8. PROVISION OF ADVICE FOR MANAGEMENT OF STOCKS "WITHIN SAFE BIOLOGICAL LIMITS"

Criteria were proposed to define safe biological limits in terms relevant to Atlantic salmon. The criteria suggested that safe biological limits would be exceeded if:

- a) egg deposition for a stock was less than required to maintain or recover that stock to a desired level;
- b) hatchery supplementation was required to maintain a stock;
- c) consistent declines in catches occur in the North Atlantic; and
- d) insufficient genetic diversity for spawners occurred in a river.

The existing state of knowledge on which to assess situations against these criteria was given preliminary consideration. Difficulties were identified in using the proposed criteria due to such factors as the mixed-stock nature of Atlantic salmon fisheries, the extensive artificial enhancement of Atlantic salmon, the significant influence that abiotic events (particularly temperature) can have on smolt production and hence abundance, and the limited ability to generalise ecological requirements ascertained from a small number of well-studied river systems to salmon stocks in rivers located at different latitudes, with different temperature regimes and productivity levels.

# NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION NORTH-EAST ATLANTIC COMMISSION

#### NEA (86)5

DRAFT PROPOSAL BY THE EUROPEAN ECONOMIC COMMUNITY FOR A REGULATORY MEASURE FOR THE FISHERY OF SALMON IN THE FISHERIES ZONE OF THE FAROE ISLANDS

- 1. Catches of salmon in the fisheries zone of the Faroe Islands shall not exceed 450 metric tonnes for the fishery season 1 October 1986 to 31 May 1987.
- 2. All salmon caught shall be landed and shall count against the above limit.
- 3. The salmon fishery may only be conducted by vessels registered in the Faroe Islands.

### NORTH-EAST ATLANTIC COMMISSION

NEA (86)7

DRAFT PROPOSAL TO THE NORTH-EAST ATLANTIC COMMISSION OF NASCO FOR REGULATORY MEASURES FROM THE DELEGATION OF ICELAND

- To ban fishing for salmon stocks subject to the Convention beyond 12 nautical miles from baselines from which the breadth of the territorial sea is measured.
- To prohibit the use of drift nets.

#### NORTH-EAST ATLANTIC COMMISSION

#### NEA (86)9

DRAFT PROPOSAL BY THE DELEGATION OF NORWAY FOR REGULATORY MEASURE FOR FISHING OF SALMON IN THE FISHERIES ZONE OF THE FAROE ISLANDS

The North-East Atlantic Commission of the North Atlantic Salmon Conservation Organization -

having regard to Article 2, paragraph 2 (b), Article 8, subparagraph (b), and Article 9 of the Convention for Conservation of Salmon in the North Atlantic Ocean -

proposes the following regulatory measure for fishing of salmon in the fisheries zone of the Faroe Islands in the 1986-87 season:

- The total allowable catch of salmon for the season shall be set at 500 tonnes, including discards.
- 2. The fishing season shall be from 1 December 1986 to 30 April 1987.
- 3. The minimum size of salmon retained on board the fishing vessels shall be 60 cm.
- The Faroese authorities will
  - (a) consider regulations aimed at minimising the proportion of undersized fish in the catches, and
  - (b) study the measures which might be taken to increase the survival rate of discards.

The Faroese delegation will at the fourth annual meeting of the Commission inform it of the implementation of the foregoing.

#### **BACKGROUND**

It is the view of the Norwegian Government that a sustained effort should be made to halt the apparent over-exploitation of the stocks originating in Norwegian rivers. Reference is made to the background information given in documents NEAC (84)3 and NEAC (85)6.

Such an effort should include two major elements, viz. a reduction in interception fisheries in the Norwegian Sea and further measures to reduce the fishing on mixed stocks in Norwegian home waters.

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The draft proposal for regulatory measures in the Faroese fisheries is designed to effect the reduction in the Norwegian Sea interception fisheries.

Previously, the Government has committed itself to certain measures which are:

- (a) to extend the prohibition zone for drift net fisheries, now in force east of Lindesnes, to Utsira further north on the west coast of Norway (59 18.4 N) as from 1986;
- (b) to maintain the prohibition zone for drift net fisheries in force from the Norwegian-Soviet border to North Cape.

These measures are still valid. More important, however, is that on 11 April 1986, the Norwegian Government decided to implement extensive regulations in respect of salmon fishing in Norwegian home waters. These measures will be set in force during 1987 and 1988. The main mesaures to be implemented are:

- (a) Total ban of the drift net fishery;
- (b) Total ban of the use of monofilaments in salmon nets;
- (c) Introduction of a licence scheme for anchored gear in the sea;
- (d) Shortening of the fishing period for anchored gear;
- (e) Further work on shortening and adjusting the fishing period in the rivers.

Reference is made to NEA (86)6.

These measures will considerably reduce the fishing pressure on salmon in Norwegian home waters, especially in the mixed stock fisheries.

The objective which the Norwegian authorities have in mind is to restore and enhance the salmon stocks originating in Norwegian rivers. Depending on the sacrifices we are now ready to make, greater quantities may be available for the fishermen in some years.

FARĎE ISLANDŠ ICELAND GREENLAND Released at Miðfjarðará Released at Selá BAFFIN

Microtagged Icelandic Salmon Caught in Faroese fishery in 1984 and 1985 NEA (86)8

23 JUNE 1986 EDINBURGH

# NORTH ATLANTIC SALMON CONSERVATION ORGANIZATION

NORTH-EAST ATLANTIC COMMISSION

NEA (86)6

NORWAY: NEW SALMON REGULATIONS

THE GOVERNMENT INTRODUCES STRICTER REGULATORY MEASURES IN RESPECT OF SALMON FISHING

The Government has decided to implement extensive regulations in respect of salmon fishing in the sea and in rivers.

The background to this is that our salmon stocks are threatened today, primarily because of overexploitation. Despite a number of previous regulations and extensive cultivation efforts, our salmon stocks have steadily diminished. There is too much pressure on the stocks, and the fishing carried on today is not sound practice from a biological point of view. In addition, types of gear are used which cause considerable injury to the fish. In conjunction with other unfortunate conditions, these factors have led to the current situation, in which we do not fully exploit the valuable potential represented by the salmon. A great deal of the production potential of the watercourses is not being utilized.

Norway nevertheless has a good chance of increasing the economic value of salmon fishing by means of a salmon management programme that is biologically appropriate, a sharp reduction in the exploitation pressure and fishing methods that are more justifiable from an environmental point of view.

The measures apply to all salmon fishing, in rivers as well as in the sea.

The measures to be implemented are:

- A prohibition against fishing for salmon, sea trout and sea char with drift-nets will be instituted as from the 1989 season.
- 2. Prohibitions may be instituted against salmon fishing in certain rivers in which the problem is particularly acute.

3. A licensing scheme is being drawn up for anchored gear in the sea with a view to implementation as from the 1988 season.

The annual protective season for the use of pound nets and stationed lift nets is to be extended to 1 June except in the county of Finnmark, where the annual protective season for the use of pound nets will run to 15 May. The annual protective season for fishing with a trolling-line in Finnmark will run to 1 May.

- 4. There will be a prohibition against the use of monofilaments and similar types of netting yarn as from the 1988 season. This does not apply to drift-nets.
- 5. Further work is being done on shortening and adjusting the fishing period in the rivers as from the 1988 season.
- 6. A proposition is being presented to the Odelsting to obtain statutory authority to prescribe that mackerel nets be submerged for parts of the year, except in the case of professional fishermen.
- 7. The question of further reductions in salmon fishing off the Faroe Islands will be taken up.

Regulations relating to the annual protective season and the use of pound nets and bend nets for catching anadromous salmon in the sea.

Pursuant to sections 13, 40 and 64 litra j of the Act of 6 March 1964 relating to Salmon Fishing and Inland Fishing, cf. the Royal Decree of 24 September 1965, the Directorate for Nature Management laid down the following regulations on 24 April 1986.

§ 1

The annual protective season for fishing for anadromous salmon in the sea is extended to 31 May.

The following exemptions from the above shall apply:

- 1. Fishing with pound nets and stationed lift nets may begin on 15 May.
- In the county of Finnmark, fishing with trolling lines may begin on 1 May.

§ 2

It is prohibited at all times to use guide nets of the monofilament type or guide nets made of netting yarn finer than no.8 in bend nets and pound nets. It is however permitted to use leading nets of the monofilament type having a minimum mesh of 18 cm measured from knot to knot.

§ 3

Anyone violating these regulations is liable to a penalty.

§ 4

These regulations enter into force immediately. From the same date the regulations relating to this subject laid down on 17 April 1980 with amendments of 7 May 1982 no. 943 and 27 February 1981 are repealed.

The Regulations of 2 May 1986 concerning the prohibition of the use of drift-nets for catching salmon, sea trout and sea char in the sea.

- 1) Pursuant to § 67 of the Act of 6 March 1964 relating to Salmon Fishing and Inland Fishing, the use of drift-nets for the purpose of fishing for salmon, sea trout and sea char in the sea is prohibited.
- 2) These regulations enter into force as from 5 August 1988. From the same date the following regulations are repealed:
- a) The Regulations of 24 November 1978 relating to the allocation of licenses to use drift-nets for the purpose of fishing for salmon, sea trout and sea char, as subsequently amended on 12 December 1980 and 10 December 1982.
- b) The Regulations of 30 April 1979 relating to the conditions on which licenses may be granted for fishing with drift-nets for salmon, sea trout and sea char.
- c) The Regulations of 7 February 1969 relating to the prohibition of the use of drift-nets within the baselines for the purpose of fishing for salmon, sea trout and sea char, with subsequent amendments, the latest being that of 10 December 1982.
- d) The Regulations of 10 December 1982 relating to the zone in which it is prohibited to use drift-nets for the purpose of fishing for salmon, sea trout and sea char.
- e) The Regulations of 25 March 1977 relating to the regulation of the use of drift-nets for the purpose of fishing for salmon.

### NORTH-EAST ATLANTIC COMMISSION

NEA (86)10

# STATEMENT ON THE FAROESE FISHERY BY

THE DELEGATION OF DENMARK
(IN RESPECT OF THE FAROE ISLANDS & GREENLAND)

The Faroese Home Government is very conscious about conservation and we have perfectly well understood the concern expressed by the States of origin that uncontrolled interception of salmon could have considerable effects on the well being of spawning stocks and general stock levels in the rivers of origin.

On this understanding we took an active part in the establishment of NASCO, thus expressing the will to cooperate with other countries and establish an orderly process recognising the legitimate rights of all Parties.

Already in the seventies we accepted the closedown of our fisheries of West Greenland, which at its best rendered 260 tonnes.

Since 1982 we have, in bilateral negotiations, accepted a reduction in catches around Faroes, which in 1986 was 48% of the 1981 level.

The political acceptance of this was to a large extent based on a rather simple picture of two fisheries, the fisheries in the rivers and the high seas interception fisheries and on the assumption that the interception fisheries had a quantifiable effect on the situation in the rivers.

But what becomes increasingly more evident with each report we get from ICES, is that the real picture is completely different from the simple picture we believed in.

The effect of the high fisheries seems not to be seas quantifiable on the European side, at least, no information is forthcoming on the effect on target spawning biomass, escapement or egg densities. On the contrary, the information available suggests higher exploitation rates at the entrance of the rivers, so we have, in reality another interception fishery close to the shore which, to a large extent, is uncontrolled and from which the catches are not reported. The size of the unreported catch stresses this point. In 1985 the reported catch of European salmon was 4330 in home waters and the unreported catch estimated (and which safely can be assumed to stem from European waters) was 3070, and this is a minimum estimate for several reasons, i.a. that some countries have not given any information.

It must be obvious to everyone that it is very difficult for the Faroese Home Government to defend the halving of the salmon fisheries in the Faroese fisheries zone, when the grave suspicion exists that the sacrafices accepted do not benefit the salmon stocks, but rather just increase the size of unreported catches.

#### NORTH-EAST ATLANTIC COMMISSION

#### NEA (86)15

EXPLANATORY NOTE CONCERNING THE FAROESE APPROACH
TO THE WORK OF NASCO
FROM THE DELEGATION OF DENMARK (IN RESPECT OF
THE FAROE ISLANDS AND GREENLAND)

- 1. The Faroese representatives have found it necessary to make a statement which explains their approach to the work of NASCO.
- As Article 66 of the Law of the Sea Convention (LSC) is is continuously being invoked by other Parties it is considered relevant to explain the Faroese understanding of this article and its connection with NASCO.
- 3. LSC Article 66 contains 5 paragraphs, the first of which states that, "States in whose rivers anadromous stocks originate shall have the primary interest in and responsibility for such stocks."

This main principle is clarified and modified in the following paragraphs, which recognise the existence and legitimacy of non-river state fisheries (paragraph 2), establish the general rule that salmon should be fished inside the limits of the exclusive economic zones, without however precluding the possibilities for confirmation of high seas fisheries.

### Article 66, paragraph 4 states:

"In cases where anadromous stocks migrate into or through the waters landwards of the outer limits of the exclusive economic zone of a State other than the State of origin, such State shall co-operate with the state of origin with regard to the conservation and management of such stocks."

Furthermore, according to paragraph 5:

"The State of origin of anadromous stocks and other States fishing these stocks shall make arrangements for the implementation of the provisions of this article, where appropriate, through regional organizations."

In Accordance with Article 66, paragraph 5, Parties bordering upon the North Atlantic have in 1982 agreed how such regional cooperation should be organised in their area.

NASCO is basically an agreement on how the Law of the Sea principles on anadromous stocks should be applied in our area.

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5. In the NASCO Convention which applies to salmon stocks which migrate beyond the North Atlantic EEZs in throughout their migratory range, we agreed upon where salmon fishing should be allowed: not on the high seas, the Faroese zone up to 200 miles, in West Greenland up to 40 miles, while the other Parties found it best for them to limit themselves to 12 miles. The ban on high seas fishing caused hardship to some fishermen, including some Faroese. An organisation was established with the objective through consultation and cooperation for conservation, restoration, enhancement and management of relevant salmon stocks.

Three regional commissions were established, the West Greenland and the North-East Atlantic Commissions with the function to:

- (a) provide a forum for consultation and cooperation,
- (b) propose regulatory measures for fishing in the area of one Party of salmon originating in the rivers of other Parties,
- (c) recommend scientific research.

In Article 9 the Parties agreed to define which factors should be taken into account when proposing regulatory measures:

- (a) the best available information including ICES advice,
- (b) measures taken and other factors, both in and outside the Commission area, affecting stocks,
- (c) conservation efforts of States of origin, including measures referred to in Article 15, paragraph 5(b),
- (d) the extent to which salmon feed in the EEZ of Parties (the 'grazing fee' principle),
- (e) relative effects of harvesting salmon at different stages of their migration routes,

- (f) contribution of Parties other than states of origin to conservation i.a. by limiting their catches,
- (g) interests of communities particularly dependent upon salmon fisheries.

The Faroese consider all these factors important, but from a policy point of view very much weight must be attached to point (c) which provides a linkage between measures taken in host states and river states, joining efforts to improve salmon management. Article 15, paragraph 5 (b) refers to commitments by a Party concerning adoption or maintenance in force for specified periods in time within its territory or area of fisheries jurisdiction of measures relating to the management of relevant salmon stocks.

The Faroese authorities have adopted the NASCO convention and have taken active part in the work of NASCO on the basis that it expressly recognises the rights of the Faroese to harvest salmon feeding in their waters, and that it forms a framework for cooperation between river states and host states pursuing their common interests in optimising the yield of a resource which occurs inside the jurisdiction of both sides.

Cooperation requires a cooperative attitude from both sides. The obligation of host states to cooperate with river states implies logically a similar obligation for the river states to cooperate. In the NASCO convention we have agreed upon the rules which shall apply to this cooperation. The Faroese representatives hope that all relevant Parties will make efforts to play the game according to these rules. It is important to try to reach agreement both on mutually acceptable principles fixing quotas or other conservation measures for host states, on concerted action to improve the state of the stocks, and on how the burdens and benefits of such action should be apportioned between the Parties cooperating within this organization.

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#### NORTH-EAST ATLANTIC COMMISSION

#### NEA (86)11

COMMENTS BY THE EUROPEAN ECONOMIC COMMUNITY ON THE "STATEMENT ON THE FAROESE FISHERY" (NEA (86)10) BY THE DELEGATION OF DENMARK (IN RESPECT OF THE FAROE ISLANDS AND GREENLAND)

The Faroese Home Government's commitment to conservation is noted. However, the Faroese salmon fishery causes concern to the Community on a number of grounds, inter alia the fact that it represents a new burden on the stocks and is still running at a high level corresponding to a major reduction of returns to the states of origin.

The loss of salmon fishing opportunities at Greenland in the mid-Seventies was felt by a number of other countries in addition to the Faroes.

The Faroese authorities accepted to limit their catches in the 1985/6 season to 550 tonnes. This is indeed some 48% of the 1981 Faroese catch figure of 1125 tonnes - a catch figure attained through an unregulated fishery. However, the catch limits applying in the 1981/2, 82/3, 83/4 and 84/5 seasons as a result of bilateral arrangements appear not to have been respected. The percentage reduction in the Faroese catch has therefore so far been smaller than was agreed.

The effect of the Faroese high seas fisheries on the states of origin has been quantified by ICES; every tonne caught is estimated to represent a loss of 1.6 tonnes to the home waters fisheries.

The Community's marine and estuarine salmon fisheries cannot be called interceptory fisheries in the classic sense of that word; they are simply one element of the states of origins' legitimate fisheries and are not, conceptually, distinct from the river fisheries. It is for the states of origin to decide on the relative roles of their marine, estuarine and riverine fisheries. The Community does not accept that its marine or estuarine fisheries are "to a large extent uncontrolled" or that the catches from these fisheries are unreported. The indication as to unreported catches in the ICES working party report has not been explained and it is not known on what basis these can "safely be assumed to stem from European waters". In any case, this figure cannot engage the responsibility of the Community. The working party report is silent as to possible unreported

catches in the Faroese fishery. At all events, a reduction in the interceptory fisheries benefits the stocks whether or not any of the home water catches go unreported.

These comments are made from the viewpoint of the Community. It is, however, possible that they would be echoed by the numerous other states of origin represented in the North-East Atlantic Commission.

### NORTH-EAST ATLANTIC COMMISSION

#### NEA (86)16

DRAFT RESOLUTION RELATING TO REGULATORY MEASURES FOR THE FISHING OF SALMON IN THE COMMISSION AREA

The North-East Atlantic Commission of the North Atlantic Salmon Conservation Organization -

having regard to Article 9, in particular subparagraphs (a), (c) and (d), of the Convention for the Conservation of Salmon in the North Atlantic Ocean -

agrees to seek to find a rationale for calculating future catch limits or other regulatory measures for the fishing of salmon in the Commission area in accordance with Article 8, subparagraph

#### NORTH-EAST ATLANTIC COMMISSION

#### NEA (86)13

### REQUEST FOR SCIENTIFIC ADVICE FROM ICES

With respect to Atlantic salmon in the North-East Atlantic Commission area:

- describe the fisheries for salmon in the North-East Atlantic Commission area, to assess the total exploitation exerted upon the stocks and to estimate the fishing mortality so generated:
  - (i) for homewater fisheries divided into freshwater and marine components,
  - (ii) for sea fisheries beyond 12 miles;
- (b) estimate the quantity, age composition and homewater origin of the landings and discards of salmon taken in the Faroes in the 1986/87 fishing season;
- present the catch statistics of the North-East Atlantic Commission salmon fisheries on an annual basis, and on a seasonal basis where the season overlaps the end of the year, distinguishing between freshwater and marine components;
- (d) estimate the contribution of hatchery-reared fish and fish farm escapees to the Faroese and the homewater fisheries;
- (e) assess natural mortality of salmon in the marine phase;
- (f) analyse the distribution of catches by season and area in the Faroese fishery in relation to country of origin;
- (g) consider the biological effects of alternative minimum size regulation for the Faroese fishery;
- (h) describe the historical evolution of homewater fisheries in terms of gear used divided into riverine and marine components;
- (i) assess the effects of predation on marine mortality;
- (j) consider the effects of existing, new and proposed conservation measures on the exploitation of homewater stocks;
- (k) assess the efficacy of present methods of minimising discards and mortality therefrom in the Faroese fishery.

THIRD ANNUAL MEETING OF THE NORTH-EAST ATLANTIC COMMISSION 23-27 JUNE 1986, SHERATON HOTEL, EDINBURGH, UK

# LIST OF NORTH-EAST ATLANTIC COMMISSION PAPERS

PAF	PER NO	TITLE
NEA	(86)1	Provisional agenda
NEA	(86)2	Draft agenda
NEA	(86)3	Election of officers
NEA	(86)4	Draft report of the third annual meeting of the North-East Atlantic Commission
NEA	(86)5	Draft proposal by the EEC for a regulatory measure for the fishery of salmon in the fisheries zone of the Faroe Islands
NEA	(86)6	Norway: New Salmon Regulations
NEA	(86)7	Draft proposal to the NEAC for regulatory measures from the delegation of Iceland
NEA	(86)8	Microtagged Icelandic salmon caught in the Faroes fishery in 1984 and 1985
NEA	(86)9	Draft proposal by the delegation of Norway for a regulatory measure for the fishing of salmon in the fisheries zone of the Faroe Islands
NEA	(86)10	Statement on the Faroese fishery by the delegation of Denmark (in respect of the Faroe Islands and Greenland)
NEA	(86)11	Comments by the EEC on the "Statement on the Faroese Fishery" NEA (86)10 by the delegation of Denmark (in respect of the Faroe Islands and Greenland)
NEA	(86)12	Draft proposal by the EEC for a regulatory measure for the fishery of salmon in the fisheries zone of the Faroe Islands
NEA	(86)13	Request for scientific advice from ICES
NEA	(86)14	Draft regulatory measure for the fishing of salmon in the fisheries zone of the Faroe Islands in 1986/7 and 1987/88

	(86)15	Explanatory note concerning the Faroese approach to the work of NASCO from the delegation of Denmark (in respect of the Faroe Islands and Greenland)
NEA	(86)16	Draft resolution relating to regulatory measures for the fishing of salmon in the Commission area
NEA	(86)17	Agenda
NEA	(86)18	Report of the third annual meeting of the North-East Atlantic Commission
CNL	(86)3	Report of the Advisory Committee on Fisheries (ACFM)

#### NOTE:

This list contains all papers submitted to the Commission prior to and at the meetings. Some, but not all, of these papers are included in this report as annexes.

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