# **ARCHIVES HISTORIQUES DE LA COMMISSION**

COM (84) 629 **COLLECTION RELIEE DES** 

Vol. 1984/0237

#### Disclaimer

Conformément au règlement (CEE, Euratom) n° 354/83 du Conseil du 1er février 1983 concernant l'ouverture au public des archives historiques de la Communauté économique européenne et de la Communauté européenne de l'énergie atomique (JO L 43 du 15.2.1983, p. 1), tel que modifié par le règlement (CE, Euratom) n° 1700/2003 du 22 septembre 2003 (JO L 243 du 27.9.2003, p. 1), ce dossier est ouvert au public. Le cas échéant, les documents classifiés présents dans ce dossier ont été déclassifiés conformément à l'article 5 dudit règlement.

In accordance with Council Regulation (EEC, Euratom) No 354/83 of 1 February 1983 concerning the opening to the public of the historical archives of the European Economic Community and the European Atomic Energy Community (OJ L 43, 15.2.1983, p. 1), as amended by Regulation (EC, Euratom) No 1700/2003 of 22 September 2003 (OJ L 243, 27.9.2003, p. 1), this file is open to the public. Where necessary, classified documents in this file have been declassified in conformity with Article 5 of the aforementioned regulation.

In Übereinstimmung mit der Verordnung (EWG, Euratom) Nr. 354/83 des Rates vom 1. Februar 1983 über die Freigabe der historischen Archive der Europäischen Wirtschaftsgemeinschaft und der Europäischen Atomgemeinschaft (ABI. L 43 vom 15.2.1983, S. 1), geändert durch die Verordnung (EG, Euratom) Nr. 1700/2003 vom 22. September 2003 (ABI. L 243 vom 27.9.2003, S. 1), ist diese Datei der Öffentlichkeit zugänglich. Soweit erforderlich, wurden die Verschlusssachen in dieser Datei in Übereinstimmung mit Artikel 5 der genannten Verordnung freigegeben.

## COMMISSION OF THE EUROPEAN COMMUNITIES

COM(84) 629 final
Brussels, 15 November 1984

REPORT FROM THE COMMISSION TO THE COUNCIL

on the situation of the herring market (Part 2)

-COM(84) 629 final

## EXPLANATORY MEMORANDUM

During its session of 10 September 1984, the Council requested the Commission to draw up the second part of the report evaluating the market situation of herring in the Community.

Having collected within the Member States the necessary information, the Commission has drawn up this report which is now submitted to the Council.

It deals with the following matters:

- a) the evaluation of the available resources
- b) the quality requirements of the processing industry.

#### REPORT

on

## the situation of the herring market

(Part 2)

On 18 May 1984 the Commission placed before the Council the first part of its report containing a factual analysis of the herring market in the Community.

In the light of the general ideas which emerged during the Council Working Group's discussion, this document is intended to supplement the Commission's original analysis by examining the evaluation of the available resources as the quality requirements of the processing industry.

## I. Evaluation of quantities of herring likely to be available in the four years to come

It is extremely difficult to make reliable forecasts of availabilities of herring because the forecasts depend on efficient stock management and levels of regeneration, which goes to explain why no definitive scientific opinion has been proposed in this respect. Nevertheless, subject to the uncertainty factor inherent in this type of forecasting, three hypotheses can be advanced:

### a) "worst" hypothesis:

This consists in assuming that to the West of Jutland and the North of the Skagerak/Kattegat the authorized percentage of by-catches accounted for by young herring is amply exceeded; the regeneration of the North Sea stock can be expected to decline considerably over a period of two or three years, damaging at the same time certain stocks in the Skagerak/Kattegat.

## b) "best" hypothesis:

Confirmation of this hypothesis requires that the management of the aforesaid stocks be the most efficient possible and that regeneration levels rise steeply; under this hypothesis, the quantities available in the North Sea (IV and VIId) would be around 500 000 tonnes as from 1986.

## c) intermediate hypothesis:

As illustrated in Table 1, this hypothesis implies the satisfactory management of stocks and a steady level of regeneration; based on this assumption, the herring supply would double over the next four years (from 285 000 tonnes in 1984 to 675 000 tonnes in 1988 for VIa north and VIa south, IV and VIId, IIIa and IIIb, c, d).

As for the immediate future, available herring resources in the Community fishing zones could reach 386 000 tonnes in 1985, i.e. an increase of 101 000 tonnes (or 35 %) over 1984.

From 1986 onwards, the expected increase from one year to the next would be around 100 000 tonnes but at this stage the figures must be treated with particular caution in that catches will depend largel y on the recruitment of fish which have not yet been spawned.

The possible market repercussions of the increase in the North Sea stocks will make this zone the focus of particular attention. In the same connection it is impossible to ignore the increasing importance of herring stocks situated in Va and IIa. Although no long-term forecasts have been made for the stocks, enormous quantities of herring may shortly be available for the Norwegian and Icelandic fleets.

On the basis of the foregoing hypotheses the available herring resources in the years to come would make it possible for catches to reach levels high enough to satisfy Community requirements in quantitative terms. Since this increase would mainly result from the rise in North Sea catches, the correspondence between available resources and the quantitative requirements of the Community market should be examined.

## II. Quality requirements of the processing industry within the EEC

## Quality requirements of the processing industry

The first part of the report underlined the importance of the processing industry as an outlet for the herring market (1). The quality standards required by the industry vary according to the destination of the product. However, since eating habits vary from one Member State to another and some of the biological characteristics of herring fluctuate regularly (see point 2 below), these standards must be regarded as relative in nature.

In this connection, table 2 outlines the requirements of the Community processing industry as they emerge from the survey carried out by the Commission departments.

Generally speaking, where products such as canned fish, maatjes and smoked and salt herring are concerned, the processing sector uses large herring with a high fat content.

By contrast, the manufacture of some marinated products requires smaller herring with firm white flesh and a lower fat content. More precisely, since in some cases the product is presented in a transparent jar of limited capacity, the herring used must be of irreproachable quality, visually attractive to the consumer and of size 2 or 3. Furthermore, herring with an excessively high fat content cannot be used lest the marinade become cloudy.

The quality of the product, in particular its consistency, also depends on how the herring has been handled on board ship (protection against sunlight, wetting and fast chilling, careful handling) and on the freshness of the product; fish which has been properly preserved retains its qualities of freshness when it has been handled appropriately.

In this connection, the practice in several Member States consists in placing the herring immediately after capture in tanks of iced water, which, according to the specialists, rules out any danger of it going rancid (see table 3).

## 2. Biological characteristics of herring

The main biological characteristics of herring are its fat content, size, colour and consistency.

#### 2.1. Fat content

#### 2.1.1. General characteristics

Fat content is the most difficult characteristic to measure since it varies greatly according to size, age, season, year, quality of food, migration zone and presentation of the fish. However, not-withstanding this fact, it is generally agreed that:

- the fat content diminishes considerably after the spawning season, which itself varies according to the stock and its habitat.

<sup>(1)</sup> Report on the state of the herring market, IIb.

- a certain correlation exists firstly between fat content and size (particularly in the case of young herring) and secondly between fat content and age (herring which has not reached recruitment age contains less fat than adult herring)
- differences in fat content of 3 to 4 % from one year to the next for the same stocks are not unusual. Thus the fat content of whole herring fluctuates in overall terms betwenn 4 % and 25 %. In addition, the fat content is not distributed evenly throughout the fish so that a herring presented in fillets or flaps will contain less fat than a whole herring.

Annex 4 illustrates the fat content of herring by age and size.

#### 2.1.2 Characteristics linked to the stock as to the fishing area

- North Sea and Skagerak/Kattegat herring
The fat content of North Sea and Skagerak/Kattegat herring is
considered to be almost identical. This herring reaches recruitment
age after a period of between 3 and 5 years. Its fat content varies
throughout the year roughly as follows:

Fishing ground	Period of the year				
	1.1 - 31.3	1.4 - 31.5	1.6 - 31.7	1.8 - 31.12	
North Sea Skagerak Kattegat	10 - 15 %	4 ~ 10 %	18 - 25 %	12 - 20 %	

Source : Danish herring-processing industry

#### - Baltic herring

Owing to the poorer quality of food and the lower temperature of the water, Baltic herring of recruitment age (after 2 to 2 1/2 years) has an average fat content which is 3 % to 4 % less than that of North Sea and Skagerak/Kattegat herring. Its flesh is therefore slightly firmer.

#### 2.2. Size

Baltic and Skagerak/Kattegat herring is generally smaller than North Sea herring (\*).

In their present structure the North Sea stocks contain higher quantities of herring of size 1 than of sizes 2 and 3.

However, in the opinion of several scientific bodies, the regeneration of stocks has led to a significant increase in the availability of small herring in the North Sea.

<sup>(\*)</sup>The Skagerak/Kattegat herring stocks are composed of local populations, of Baltic "Rügen" herring but also of young North Sea herring. When the latter reach adulthood they migrate back towards the North Sea.

#### 2.3. Colour

In the vast majority of cases the flesh of the herring is white. However, some stocks may contain herring with dark flesh, particularly in the Irish Sea. In the opinion of the Irish processing industry, such herring has a very low fat content and is not used by the processing industry. According to information supplied to Commission staff, it would appear that certain processing operations serve to bleach the flesh of herring.

## 2.4. Consistency

According to information supplied by certain processors, Baltic herring has a more delicate consistency than North Sea herring. However, this view has not been confirmed by scientific circles.

#### 2.5. Freshness

The freshness of herring does not constitute one of its biological characteristics; it is the result of various factors such as the remoteness of fishing grounds (and therefore the structure of the fleet) but even more so of the way in which the fish is handled and preserved on board ship. It should be noted that since herring is a relatively fragile fish it must be processed rapidly if it is to be presented fresh.

## 3. Conclusions

- All together, the foregoing considerations prompt a number of observations :
- a) For all of the herring preparations, with exception of marinated products: herring caught in all the Community fishing grounds appears suitable for almost all presentations referred to in table 2.
- b) As regards marinated products:
  - certain specific presentations require very small fish with low fat content; the Baltic herring seems to be the more suitable in these limited cases;
  - for all the other preparations of marinated products, the Skagerak/Kattegat herring is much used; now the biplogical characteristics of this herring, described above, suggested that it can be at least partly replaced by North Sea herring. This latter indeed, provided that the various stocks of the zone are fished in phase with their spawning seasons, possesses the qualities as regards fat content and size required by the processing sector throughout the major part of the year (July to February). It should be borne in mind that marinated products are manufactured in the Federal Republic of Germany during the period from August to February.

Lastly, the survey has shown that in the vast majority of cases the industry's requirements are determined not only by the quality of the product but also by the cost of available supplies.

# ESTIMATED AVAILABLE QUANTITIES OF HERRING (EEC-share - in tonnes)

## INTERMEDIATE HYPOTHESIS

Year Fishing zone	1981	1984	1985	1986	1987	1988
1. West Scotland VIa North VIa South, b,c	45 262 26 135	70 500	<b>41</b> 000	50 000	60 000	70 000
2. North Sea IV and VIId	46 081	155 000	275 000	350 000	<b>4</b> 25 <b>00</b> 0	500 000
3. Skagerak and Rattegat IIIa	36 921	24 700	35 000	50 000	60 000	70 000
4. Baltic IIIb, c, d	37 271	34 900	35 000	35 000	35 000	35 000
Total	191 670	285 100	386 000	485 000	580 000	675 000

#### HERRING REQUIREMENTS OF COMMUNITY INDUSTRY

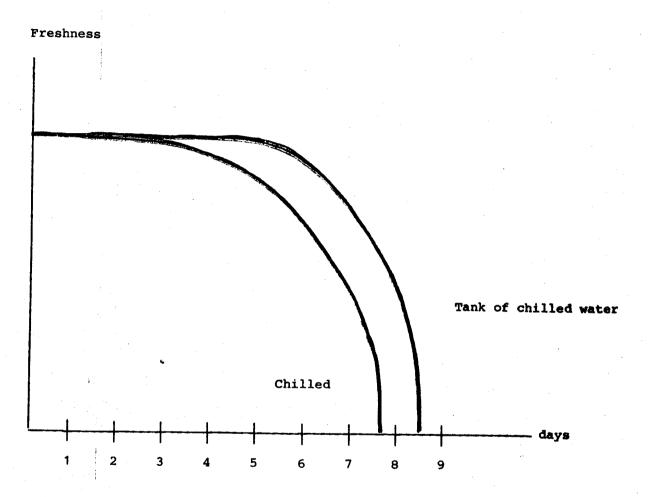
Products	Preserves	Marinated products (2)	Maatjes NL	Smoked herring	Salted herring
Qualities required	whole fish, fillets,				
• freshness	flaps,fresh or frozen	fresh fish (3) whole or in flaps	Fresh or as salted fillets	Fresh or frozen	fresh or frozen
. size	mainly 1-2	2-3	1 - 2	1	1 - 2
• fat content (4)	10% - 20%	8 - 16%	18% - 25%	12 % mini- mum to 18 %	minimum 15 %
<ul> <li>consistency and other</li> </ul>			·		·
qualities	firm (1)	firm white flesh (2)	firm	<b>-</b>	-
• EEC zones	all	Preference for Skagerak- Kattegat and Baltic (3)	all except Baltic	All	All

<sup>(1)</sup> Preference of German industry for herring frozen on board ship as claimed to be firmer in consistency

<sup>(2)</sup> In the case of marinated products marketed in a jar, the size and colour of the product are visible to the purchaser

<sup>(3)</sup> In the UK frozen fish is also used (West of Scotland and North Sea)

<sup>(4)</sup> Seasonal variations in fat content to be considered for each zone



Source : Fiskeriministeriets Forslægslaboratorium

Fat content (%) of herring by age and length (North Sea)

	Young herring		Adult herring		
	14 cm	19 cm.	Winter/spring spawningseason	Autumn spawningseason	
January	4.2	8.5	9.1	15.0	
February	3.5	4.6	5.4	(12)	
March	2.1	2.8	3.1	(8)	
April	1.8	5.4	3.0	(7)	
May	-	(11)	7.6	11.8	
June	10.8	(17)	18.9	20.8	
July	12.1	(22)	23.7	21.5	
August	-	23.0	22.0	18.2	
September	7.2	19.6	19.5	14.0	
October	6.8	17.0	18.4	18.0	
November	6.4	15.0	14.9	18.8	
December	_	11.5	12.0	17.1	

Source : Danmarks Fiskeri- og Havundersøgelse