



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
 ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE
 ORGANIZACION DE LAS NACIONES UNIDAS PARA LA AGRICULTURA Y LA ALIMENTACION
 00100 Rome, Via delle Terme di Caracalla. Cables: FOODAGRI, Rome. Tel. 5797



WORLD HEALTH ORGANIZATION
 ORGANISATION MONDIALE DE LA SANTÉ
 1211 Genève, 27 Avenue Appia. Câbles: UNISANTÉ, Genève. Tél. 34 60 61

JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX ALIMENTARIUS COMMISSION
Eleventh Session, Rome, July 1976

ALINORM 76/18

REPORT OF THE CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS
Ninth Session, 30 September - 5 October 1974, Bergen, Norway

INTRODUCTION

1. The Codex Committee on Fish and Fishery Products held its ninth session in Bergen, Norway from 30 September - 5 October 1974 by courtesy of the Government of Norway. Dr. O.R. Braekkan, Norway, was in the chair.

2. Mr. K. Vartdal, Director-General of Fisheries of Norway, welcomed the participants on behalf of the Norwegian authorities.

3. The session was attended by government delegations from the following 34 countries:

Argentina	Iceland	Portugal
Australia	India	South Africa (observer)
Belgium	Ireland	Spain
Brazil	Italy	Sweden
Canada	Japan	Switzerland
Cuba	Morocco	Thailand
Denmark	Netherlands	Turkey
Finland	New Zealand	United Kingdom
France	Nigeria	United States of America
Fed. Rep. of Germany	Norway	Uruguay
Ghana	Peru	Yugoslavia
	Poland	

Observers were present from the following four international organizations:

- Association des Industries de Poisson de la CEE (AIPCEE)
- Association of Official Analytical Chemists (AOAC)
- European Economic Community (EEC)
- International Institute of Refrigeration (IIR)

The list of participants including officers from FAO and WHO is contained in Appendix I to this report.

ELECTION OF RAPORTEURS

4. On the proposal of the Chairman, the Committee appointed Mr. D.L. Orme (United Kingdom) and Mlle F. Soudan (France) as rapporteurs to the session.

ADOPTION OF PROVISIONAL AGENDA

5. In order to allow the participants of the session to study the report of the Working Group on "Sardine Defects", the Committee agreed to alter the order of the items to be discussed. It was noted that the Proposed Draft Codes of Practice for Smoked Fish and for Shrimps and Prawns had not been distributed and thus could not be discussed (agenda items 14 and 15).

REVIEW OF WHO ACTIVITIES RELATED TO THE WORK OF THE CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS

6. Reference was made to a review of WHO activities in a paper (ALINORM 74/34 - Part III) prepared for the 10th Session of the Codex Alimentarius Commission held in July 1974. Additional information was given concerning two recent reports of relevance to the Committee ("Fish and Shellfish Hygiene"); Report of a WHO Expert Committee convened in cooperation with FAO, WHO Technical Report Series No. 550 and "Food-Borne Disease; Methods of Sampling and Examination in Surveillance Programmes"; Report of a WHO Study Group, WHO Technical Report Series No. 543).

WE/F4351

7. The International Commission on Microbiological Specifications of Foods (ICMSF) had, with support from WHO, prepared a book "Sampling for Microbiological Analysis, Principles and Specific Applications" to be issued shortly. The ICMSF had also undertaken to revise the book "Microorganisms in Foods", and its new edition would contain new sections on enterotoxins, mycotoxins, viruses and protozoal and helminthic parasites.

8. The WHO Salmonella Surveillance Programme had been expanded to cover not only Salmonella outbreaks but also other foodborne disease outbreaks caused by biological agents.

9. Information collected within the WHO Food Virology Programme would be available for users in the near future. Specific information request forms would be distributed shortly to those concerned. In addition reference was made to recent developments of the Joint FAO/WHO Food Contamination Monitoring Programme and to activities in the field of microbiological standardization of food as well as to joint FAO/WHO work on preparation of a series of manuals and guidelines covering various aspects of food control and inspection.

REVIEW OF THE PROGRESS OF WORK OF THE FAO GOVERNMENT CONSULTATION ON ELABORATION OF CODES OF PRACTICE FOR FISH AND FISHERY PRODUCTS

10. During 1974 the FAO Department of Fisheries completed the revision of the Code of Practice for Frozen Fish by combining the FAO technological code with the hygienic requirements proposed by the Codex Committee on Food Hygiene. The revised draft had been submitted to this Committee at Step 2. The Draft Codes of Practice for Smoked Fish and for Shrimps and Prawns were also completed but due to delays in translation would not be submitted to the Committee until 1975.

11. During the recent meeting (24-26 September 1974) of the Government Consultation (formerly Ad Hoc Consultation) the following Draft Codes of Practice were discussed in detail:

- 1) Lobsters and Crawfish
- 2) Salted Fish.

Both drafts would be amended in accordance with the proposals made by the Consultations and should be ready for consideration by the Committee in 1976.

12. The Government Consultation also discussed a background paper on dried fish. It was decided to have the paper enlarged to include products common in tropical regions and to review the document again in 1975 in order to decide whether a separate Code should be prepared for dried fish or whether it could be included in the Code for salted fish.

13. Following a recommendation made at the Technical Conference on Fishery Products (4-11 December 1973, Tokyo, Japan) FAO had elaborated a background paper on minced fish which was also discussed in detail by the Consultation. As a result of this consideration, the Consultation recommended proceeding with the elaboration of a draft code of practice for minced fish blocks for consideration in 1975.

MATTERS ARISING FROM SESSIONS OF THE COMMISSION AND VARIOUS CODEX COMMITTEES (CX/FFP 74/2)

Matters arising from the 10th Session of the Codex Alimentarius Commission (July 1974 - ALINORM 74/44, paras 177-195, 102-104, 226-229)

14. The Secretariat informed the Committee of the deliberations of the Commission in relation to the work of the Committee. In particular it was noted that at its next session the Committee should consider in conjunction with the Code of Practice for Frozen Fish, the Code of Practice for the Processing and Handling of Quick Frozen Foods (ALINORM 74/25, Appendix V) which had been elaborated by the Joint ECE/Codex Alimentarius Group of Experts on Standardization of Quick Frozen Foods, to ensure that the two Codes were consistent with each other. The Secretariat undertook to make the document available and to request governments to correlate their observations to cover the two Codes.

* At its 9th Session the Joint ECE/Codex Alimentarius Group of Experts on Standardization of Quick Frozen Foods revised the Code of Practice for the Processing and Handling of Quick Frozen Foods. The revised document is contained in ALINORM 76/25, Appendix VII.

15. The Committee further noted the agreement of the Commission to the proposal not to regard certain procedures listed in various methods of examination as methods of analysis. These would thus not need endorsement by the Codex Committee on Methods of Analysis and Sampling.

16. The delegation of Norway, supported by the United Kingdom, expressed reservations about the decision by the Commission that provisions relating to the presentation of products should be mandatory and exclusive.

Relationship with Codex Committee on Food Additives

17. The Committee noted its responsibility with regard to the technological justification for the use of food additives.

Matters arising from the 9th Session of the Codex Committee on Food Additives
(December 1973 - ALINORM 74/12, paras 9, 79-83)

18. The Committee noted that the Committee on Food Additives had endorsed the Food Additives listed for Quick Frozen Fillets of Hake but that for Quick Frozen Shrimps or Prawns some substances had only been endorsed temporarily or not at all. The Secretariat undertook to bring the matter to the attention of Governments and to request them to take into account the observations of the Committee on Food Additives when commenting on the two Draft Standards at Step 7.

19. The delegation of Italy made a general reservation with regard to the use of phosphates in fish products.

Matters arising from the 11th Session of the Codex Committee on Food Hygiene
(June 1974 - ALINORM 76/13, paras 8-10, 80)

20. The Secretariat pointed out that for low acid canned foods the pH limit had been changed to 4.6. The Committee noted that the hygiene provisions in the Standards for Canned Crab Meat, Quick Frozen Fillets of Hake, Quick Frozen Fillets of Flat Fish and Quick Frozen Shrimps or Prawns had been re-endorsed.

Matters arising from the 9th Session of the Codex Committee on Food Labelling
(June 1974 - ALINORM 74/22A paras 16-17, 33-34)

21. The Committee noted the request of the Codex Committee on Food Labelling to re-discuss the question of including storage instructions on the label of quick frozen fish products. It subsequently agreed to deal with the matter at a later session of the Committee after consideration of the Codes of Practice for Frozen Fish and the Handling of Quick Frozen Foods. The Committee further noted that the labelling requirements for Quick Frozen Fillets of Hake would need revision to bring them into line with the labelling requirements endorsed for Quick Frozen Fillets of Cod and Haddock.

Matters arising from the 8th Session of the Codex Committee on Methods of Analysis and Sampling
(September 1973 - ALINORM 74/23, paras 8-12, 68)

22. The Committee noted the request of the Codex Committee on Methods of Analysis to comment on the report of the ad hoc Working Group concerning sampling plans for the determination of net contents in conjunction with the Reports of the Codex Committee on Food Labelling (ALINORMs 72/22 and 74/22) and agreed to deal with the matter at its next session.

CONSIDERATION OF THE NEED FOR A STANDARD FOR QUICK FROZEN BLOCKS OF COD, HADDOCK, HAKE AND OCEAN PERCH

23. The Committee had before it the proposed draft standard (CX/FFP 73/9), comments from four collaborating countries (CX/FFP 73/9.1) and comments on the need for and scope of such standard (CX/FFP 74/14).

24. The Committee had at its previous session discussed in detail the necessity for the standard. A number of delegations considered that because of the large international trade in quick frozen blocks of fish a standard was necessary to provide minimum quality requirements. Blocks were used in making many fish products, and such a standard would help to ensure the quality of the final product, and thus protect the consumer. Other delegations took the view that no standard should be elaborated for an intermediate product which did not reach the ultimate consumer and that end product standards were the best way of ensuring consumer protection.

25. The majority of the delegations were of the opinion that the elaboration of a standard was desirable, and discussion continued on its scope. A number of delegations said that the standard should include minced fish blocks as well as fillet blocks. It was suggested that in order to provide for an enlarged scope the title of the standard might be changed to "white fish blocks". The point was also made that separate defect tables might be necessary for fillet blocks and minced blocks.

26. In view of the changed scope it was decided to retain the standard at Step 2 and to request the delegations of Canada and the USA, consulting other countries as necessary, to redraft the Standard to cover quick frozen blocks of "white fish" and to include provisions for minced fish. The delegations of Japan, Norway, Poland and South Africa indicated their willingness to cooperate in the consultation. The revised draft would be considered at the 1975 meeting of the Committee.

RECONSIDERATION OF DRAFT GENERAL STANDARD FOR QUICK FROZEN FILLETS OF FLAT FISH AT STEP 7

27. The Committee reconsidered the above draft standard (ALINORM 74/18A - Appendix II) and government comments received (CX/FFP 74/5). In line with a decision taken at its 8th session, the Committee agreed to consider only the question of the net contents of glazed products and the revised defect table in the light of further experience gained (ALINORM 74/18A, para 40).

Net Contents of Products covered by Glaze

28. The delegation of the United Kingdom stated that it had tried the paper towel method of measuring known amounts of glaze proposed by the Netherlands (see ALINORM 74/18, para 82) and had obtained better results than with the draining method. Other factors had to be considered however. The presence of polyphosphate gave lower figures and after poor storage high results were obtained. Both methods were considered suitable only for factory control. A disadvantage of specifying the paper towel method was that it would be necessary to define the type of paper towel and give specific details as to how it should be used.

29. It was pointed out that the method presently contained in the standard had been elaborated by the AOAC. The Committee agreed to leave the provision unchanged and eventually to reconsider the matter at a time when the paper towel method was described in greater detail. The delegation of the United Kingdom said it was in the process of investigating the method further and undertook to make the results available.

Defect Table

30. The delegation of Canada stated that it had tested the revised (single) defect table which had been agreed to at the last session of the Committee. It had found that in fillets (not designated as boneless) the pin bones were always present. This statement was supported by a demonstration of a number of X-ray pictures. The Committee decided to amend the definition for the defect "bones" to read: "bones exceeding the size specified in Annex C except for pin bones in fillets not designated as boneless ...".

31. It was agreed that for fillets not designated as boneless, the distinction introduced at the 8th session with regard to size was not necessary. The Committee decided to bring the defect provision with regard to pin bones into line with that for quick frozen fillets of cod and haddock, and agreed that one instance of a defect would be a "single bone greater than 5 mm in any dimension, or an agglomeration of such bones within an area of 3 cm²". For additional instances of defects the original provision (ii) was retained.

32. It was pointed out that in contrast to other standards which had been elaborated or were in the process of elaboration by the Committee the title of the defect table did not indicate that it was optional. Some delegations were in favour of a mandatory defect table so that the standard would be of practical value. Other delegations held the view that, at least for the time being, the table should remain optional, in particular as a considerable amount of time would be required to obtain experience with the (single) table on a world wide basis.

33. The Committee agreed with this view and decided to amend the title to read "Recommended defect table". It was noted that governments when accepting the standard could indicate whether, and for which species, they regarded the defect table as mandatory. As the parasites found in fillets of flat fish were not limited to nematodes the word "parasite" was substituted for "nematode" in the relevant paragraph.

Status of the Standard

34. The Committee agreed to advance the Standard to Step 8 of the Procedure. The Standard with the revised defect table and with minor amendments resulting from general decisions by the Codex Alimentarius Commission and the Codex Committee on Food Labelling is contained in Appendix II to this Report.

CONSIDERATION OF PROPOSED DRAFT STANDARD FOR QUICK FROZEN LOBSTERS, ROCK LOBSTERS, SPINY LOBSTERS AND SLIPPER LOBSTERS AT STEP 4

35. The Committee reconsidered the proposed Draft Standard (ALINORM 74/18A, Appendix IV), Government comments received thereon (CX/FFP 74/10), and a paper "Survey of Trade in Lobsters" prepared by the delegations of Australia and the United States (CX/FFP 74/13). In the text of the Report the term lobster is used to include all the species covered by the Standard.

36. The delegation of Australia in introducing the working document stated that due to difficulties with the mail services in Australia a number of replies to the request for information had not been received in time for inclusion in the paper. It stated further that in its view the Committee should not only consider the species currently important in trade, but should also bear in mind the potential resources available. The Committee thanked the two delegations for their considerable efforts.

Product Definition

37. On the basis of the findings of the survey it was found preferable to enumerate the different families - Nephropsidae, Palinuridae and Scyllaridae - rather than species of certain genera (2.1.1). It was pointed out that the genus *Nephrops norvegicus* should be excluded.

38. The Committee agreed to include an annex to the standard on similar lines to the relevant annex in the Draft Standard for Quick Frozen Shrimps and Prawns in order not to interfere with the established trade in the product labelled "Norway Lobster" (*Nephrops norvegicus*) and similar qualified names.

Process Definition

39. The delegation of Canada pointed out that it would not be possible to check on the "raw" end product whether or not it had been exposed to temperatures above 30°C (2.2.1 (i)). The Committee agreed to redefine the term: " "Raw" - not exposed to temperatures sufficiently high to coagulate the protein at the surface".

40. It was also agreed that limits on the method of cooking should not be prescribed (2.2.1 (ii)). The wording was amended to read: " "Cooked" - heated for a period of time ... ".

41. In order to allow for processes of preparation of raw material prior to quick freezing it was agreed that "After any suitable preparation" should be inserted at the beginning of Sub-section 2.2.2.

Presentation

42. The Committee agreed to revise the provision for the style "Tailshell on" to read "intestinal tract removed and the cavity cleaned" (2.3.3). It was further agreed to delete the word "lobster" in Section 2.3.5, making the style "Meat" and to remove the reference to 2.3.4.

Raw Material

43. The Committee rediscussed the question also considered at its last session of how best to specify the quality of the raw material (3.1). The delegation of Australia presented a display of quick frozen lobster tails prepared from live and dead lobsters. On the basis of the demonstration the Committee agreed to revise the provision for raw material stating that processing should start with the "live" lobster and to require the product to be prepared from lobsters which were alive immediately prior to the commencement of processing. It was considered that the revised wording would permit the processing of deep sea lobsters which might be killed during the harvesting operation, in the preparation and processing commenced immediately they were brought on board.

Food Additives

44. The Committee noted that when next discussing the Standard a complete technological justification for the various substances to be taken up in the list of food additives would have to be given.

45. It was agreed not to provide for sodium hyposulphite (thiosulphate) which being a sulphate and not a sulphite did not have a known effect against blackening. It was suggested that the total limit for sulphites - sodium and potassium salts - should tentatively be set at 30 mg SO₂/kg raw product, but it was generally felt that this could not be decided in advance of technological justification. The delegation of Japan reserved its position with regard to the maximum levels of use of sulphites.

46. The delegation of Brazil stated that in its country trials were under way whereby lobster tails were dipped in dilute solutions of bisulphite (1.2 - 1.5% for 1-2 minutes) to prevent the enzymatic blackening of the membrane on the underside of the tail. This practice might be a necessity for developing fisheries to prevent wastage when tails had to be iced or frozen as intermediate processing treatments. The dipping process as described gave SO₂ levels in the raw product of less than 30 mg/kg. Experience had shown that very low levels of SO₂ remained in the final (cooked) product.

47. The Secretariat pointed out that the hydrophilic colloids including the alginates should be specified and further stated that recommendations for certain substances should preferably be made on the basis of the "List of Additives evaluated for their safety-in-use in food" (first series) (CAC/FAL1-1973).

Hygiene

48. To avoid any misunderstanding with regard to the type of product meant to be covered by the provision the words "heat treated" were replaced by "cooked"(5.3).

The Name of the Food

49. The Committee agreed to re-edit the provision (6.1) taking into account its decision to revise the product definition (2.1.1) by listing various families rather than genera.

Styles

50. The Chairman stated that in his view the decision of the Commission at its 10th Session to make the list of styles exclusive would pose certain difficulties. After a discussion of the advantages and disadvantages of the exclusive list and the open list encompassing the need to take account of new developments in industries and the need to ensure adequate protection of consumers and facilitation of trade by identification of products, the Committee agreed that, even though the problem related to all Codex Committees, a paper setting out the various considerations would assist this Committee in clarifying its views.

51. The delegation of Australia stated that Australia would prepare a paper, in consultation with the United Kingdom and the United States of America. In the light of this paper the Committee might ask the Commission to reopen discussion on the matter in order to seek ways and means of overcoming the difficulties confronting the Committee as instances in the conference room document 74/6 submitted by the delegation of Norway. The delegation of Australia stated that in its opinion the question was a matter of interpretation of the General Principles of the Codex Alimentarius.

52. The Committee decided that the declaration of individual quick freezing should not be mandatory and substituted "may" for "shall" (6.1.4 (ii)).

Size Classification

53. The Committee agreed to enumerate the various lobsters covered by the standard in this provision (6.2) and also that suitable size classifications should be provided.

List of Ingredients

54. After discussion it was agreed that this provision should be amended to bring it into line with other standards (6.3).

Country of Origin

55. In view of the nature of the product the Committee agreed that declaration of the origin of the product should be mandatory and amended the provision accordingly (6.6.1).

Lot Identification

56. It was considered that the nature of the packaging did not require the container to be marked in code or in clear to identify the contents. The relevant clause was deleted from the provision (6.7).

Sampling for Destructive Examination

57. The Committee agreed to a proposal for an expansion of the provision (7.1) by the delegation of the USA prescribing uniform sample unit sizes so that approximately the same quantity of product would be routinely examined for physical defects to assure equitable application of the tolerances for physical defects.

Thawing

58. It was pointed out that in the case of the shell-on product it would not be possible to ascertain whether thawing had been complete. The Committee agreed to limit the thawing procedure to meat only (7.3).

Examination of Physical Defects

59. As the application of tolerances was already described in the provision for "Defects and Tolerances" (3.3.5) the Committee agreed to reword the provision to deal with the actual examination procedure making a cross reference to the expanded provision for "Sampling for Destructive Examination" (7.1.2).

Sensory Examination

60. The text (7.5) was re-edited to make certain that the sensory examination was carried out on the cooked product and not on the raw lobster.

Classification of Defectives

61. It was pointed out that subsection 8.1 (a) and 8.2 contained overlapping provisions. The Committee agreed to combine the provisions taking into account the revision of the defect table.

Lot Acceptance

62. It was suggested that the present text provided for a lot acceptance on a limited number of criteria only, but it was pointed out that the tolerances built into Sampling Plans might not be appropriate to all criteria. It was agreed to leave the provision unchanged.

ANNEX A (new)

63. The Committee had earlier during the session revised the product definition (2.1.1) and had agreed that "Norway Lobster" - *Nephrops norvegicus* - should not be covered by the standard. At the same time it had decided to include an Annex clarifying the position with regard to Norway lobster or other names for the species to avoid a possible impediment in trade of the product (see also para 38).

Annexes A and B (old)

64. An informal working group consisting of representatives of major producing and importing countries considered the definition of defects, size of sample unit and sample acceptance plan in the light of the deliberations of the Committee on the Standard. The Group presented the Committee with a proposal for a list of definitions of various defects of lobster, and defect tables for whole or split shell-on tails and for tail meat and meat.

65. The Committee noted that in addition to providing definitions for each defect, the main changes made had been the deletion of algae or calcareous growth on shell as a defect, the inclusion of new defects, opacity and shell fragments, and the imposition of a zero tolerance for discolouration.

66. The Committee agreed with the proposals of the Working Group and thanked the participants for their efforts. Governments were requested to test the new defect tables and to inform the Committee of their experiences and, if applicable, make supplementary proposals.

Status of the Standard for Quick Frozen Lobsters, Rock Lobsters, Spiny Lobsters and Slipper Lobsters

67. The Committee agreed to submit the amended proposed draft standard to the Commission at Step 5 of the Procedure. The amended standard is attached to this Report as Appendix III.

CONSIDERATION OF DRAFT STANDARD FOR CANNED CRAB MEAT AT STEP 7

68. The Committee reconsidered the draft standard (ALINORM 74/18A, Appendix V) in the light of Government comments received thereon (CX/FFP 74/3) and a revision of the standard prepared and distributed during the session by the delegations of Canada, Japan and the USA. The main amendments referred to hereunder originate from proposals made by the three delegations.

Scope

69. An editorial change was made to make it clear that the standard would not apply when parts of the crab other than the meat were included.

Presentation

70. The word "shall" was substituted for the word "may" in the opening sentence thus making the requirement mandatory. Similar reservations (see paragraph 50) were expressed on the problems which the change might cause especially concerning development of new products.

71. With respect to different styles of pack the Canadian proposal was accepted with the omission of the references to limits for merus meat and flakes. The delegation of Japan expressed its reservations. The Committee recognized that some of the terminology used in describing styles of pack might not be familiar to the consumers in some countries.

Essential Composition and Quality Factors - Raw Material

72. The wording was changed to conform with other standards.

Processing and Canned Product

73. The Committee agreed to accept the amendments presented by the delegations of Canada, Japan and the United States.

Food Additives

74. The Committee noted that the Committee on Food Additives had endorsed the use of disodium diphosphate at the proposed limit provided that phosphorus derived from phosphoric acid used for pH adjustment was covered by the same limit. It further noted the endorsement of the use of citric acid to be governed by GMP.

75. With regard to the use of aluminium sulphate (maximum level in the final product 180 mg/kg as aluminium) the delegation of the United States of America undertook to make available information explaining the technological necessity. Suggestions were further made for the inclusion in the list of food additives of calcium disodium EDTA (275 mg/kg) and monosodium glutamate (0.5g/kg). The justification for EDTA was contained in the written comments of the USA and Belgium would provide technological justification for monosodium glutamate. The delegation of Japan reserved its position with regard to the use of EDTA.

Hygiene

76. The Committee noted that the Committee on Food Hygiene had re-endorsed this section and had increased the limit for the pH in relation to the heat treatment of certain products to 4.6.

Weights and Measures

77. The Committee agreed to a proposal to amend the title of the provision from "Net Contents" to "Fill of Container" and also made a consequential change by specifying the amount of "Drained Crab Meat" instead of "Broth or Free Liquid". A differentiation was made between the fill for wrapped (64%) and unwrapped (70%) crabmeat.

Labelling

78. The Committee noted that the Committee on Food Labelling had endorsed the various labelling provisions of the standard (ALINORM 74/22A, para 17).

Presentation

79. The Committee agreed to bring the declaration of the various styles in line with the new names given to the different forms of presentation in subsection 2.2. A few delegations had reservations with regard to the use of the names of the different styles as they considered them not to be meaningful to consumers in their countries.

Net Contents

80. The Committee discussed at length the question of declaration of net content. A number of delegations held the view that drained weight should be declared on the label in addition to a declaration of the net weight of the contents of the container.

81. Other delegations were opposed to the declaration of drained weight on the basis that the juices exuded when the product was cooked made it very difficult to estimate the actual drained weight.

82. The Committee agreed to provide for a declaration of net weight and the drained weight requirement of section 6.1.3. It was considered that this requirement did not contravene the net weight provision in the Recommended International General Standard for the Labelling of Prepackaged Foods (subsection 3.2). The delegation of Japan reserved its position on this decision.

Lot Identification

83. It was agreed that from the embossing or marking of the container the species packed should be identifiable rather than the content of the container.

Determination of Broth or Free Liquid

84. In line with the decision taken with regard to "Fill of Container - Drained Crabmeat" (6.1.3) and "Net Contents" (7.4) it was agreed to delete the method of determination of broth or free liquid and to insert instead a description of the determination of drained crab meat (8.2).

Classification of "Defectives"

85. The provision was brought in line with the amendments made in the Section on Essential Quality Factors with regard to the canned product (3.4).

Lot Acceptance

86. The changes made in the provision on net contents (7.4) were reflected in a revised text for the lot acceptance requirements.

Status of the Standard

87. The Committee agreed to submit the amended draft standard to the Commission at Step 8 of the Procedure. The amended standard is attached to this Report as Appendix IV.

CONSIDERATION OF PROPOSED DRAFT STANDARD FOR CANNED MACKEREL AND JACK MACKEREL AT STEP 3

88. The Committee reconsidered the above proposed draft standard (ALINORM 74/18A, Appendix VI) in the light of Government comments received thereon (CX/FFP 74/4).

Scope

89. As agreed to at its previous session the Committee reconsidered the question of the scope of the standard (ALINORM 74/18A, paras 117-119). The Committee had a thorough discussion on the merits of developing a single (general) standard to cover both mackerel and jack mackerel or of developing two parallel standards covering mackerel and jack mackerel respectively. The delegation of Japan suggested the need for two standards principally because of the necessity for different defect tables. Other delegations preferred a single standard with, if necessary, two defect tables.

90. It was decided to elaborate a general standard. The square brackets around jack mackerel were thus deleted.

91. Following expansion of the list of packing media (3.2.1) the scope was amended to allow for the product also to be packed in marinade or aspic. Similar changes were made throughout the standard.

Product Definition

92. It was suggested that if families rather than species were listed, there would be fewer problems. It was pointed out however that differences in classification of species would cause problems. It was agreed that the provision should relate to species of the genera *Scomber*, *Scomberomorus*, *Rastrelliger*, *Acanthocybium*, *Grammatorcynus*, *Auxis* and *Gasterochisma* of the family Scombridae and species of the genera *Trachurus* of the family Carangidae. Governments should be asked to comment specifically on the suitability of the species within the genera and to see if any additions were necessary. Any requests for additions should be accompanied by information on the volume of production and trade.

93. The Committee decided to specify that a pack should not contain a mixture of species and inserted a sentence in the product definition to this effect.

Presentation

94. After a full discussion of the provision (2.2) and taking into account the various written government observations and the problems of principle involved (see paras 50 and 51) the Committee accepted a suggestion that the product should be presented as whole or in various cut forms, with or without bone or skin and might be packed with or without packing media and/or seasoning ingredients and could also be smoked.

Packing Media

95. The Committee agreed to include marinade and aspic in the list of packing media (3.2).

Optional Ingredients

96. It was agreed to expand the list of optional ingredients to comprise salt, spices and spice oils and extracts, herbs, vegetables (for decorative purposes) and vegetable seasonings, vinegar and wine (3.3).

Processing

97. It was pointed out that the complete removal of the kidneys and pectoral fins was not feasible for all species. The Committee agreed to amend the first sentence of the provision (3.4) to read: "The head (including gills), tail and viscera (excluding kidneys) shall be completely removed; where possible the kidneys, blood and pectoral fins and scuties shall also be removed ...".

Final Product

98. The Committee agreed to reword the provision as proposed by the delegation of Canada in its written comments, with the minor amendments made during the meeting (3.5).

Food Additives

99. The delegation of Japan stated its objection to the use of CMC which it considered to be more of cosmetic value than technologically justified. It was pointed out that CMC was contained in the list of approved additives and that its use assisted in maintaining the appearance of the products in tomato sauce during transport. The Committee decided to retain the provision. It was also agreed to include gellifying agents which would have to be specified by governments.

100. The delegation of Nigeria reserved its position with regard to the use of smoke flavours.

Hygiene

101. The Committee agreed to follow a proposal in the written comments by Venezuela to include a provision for the destruction of all spores of *Clostridium botulinum* (new 5.4).

Name of the Food

102. The Committee noted the comments made by Brazil and several other delegations concerning the problems they would experience because of the custom of designating species within a family by different local names. It was agreed that the use of local designations would be acceptable provided that they did not mislead the consumer.

Form of Pack and Style

103. The Committee agreed to revise the provision (6.2) to read: "Presentations - Except where the product is in the form of whole dressed fish the method of presentation shall be adequately described on the label. The packing medium if present, shall be declared".

List of Ingredients

104. The delegation of the USA pointed out what it regarded to be an inconsistency, namely that in the body of the standard a differentiation was made between ingredients (3.3) and food additives (4), but that in the labelling section ingredients included food additives. The Committee decided to leave the provision unchanged.

Country of Origin

105. Several delegations proposed and the Committee agreed to make the declaration of the country of origin mandatory.

106. The delegation of Nigeria proposed to include in the labelling section a provision requiring the catching area to be indicated in order to verify whether the fish had been caught in a polluted zone. The Committee considered the proposal not to be practicable, but noted that if need be, through the identification of the lot, it should be possible to trace the origin of the raw material.

Net Contents

107. The delegation of Switzerland suggested the inclusion of a provision for drained weight. It was pointed out that this required a method for drained weight determination to be developed and that, because of the nature of the product, there were difficulties with methodology. This was particularly true where the packing media had widely different characteristics. It was decided to request governments to comment upon the practicability of a drained weight requirement.

108. The delegation of the Federal Republic of Germany suggested that the weight of fish put into the can should be declared for the benefit of the consumers. Several delegations felt that such a weight declaration would be inappropriate to a standard for the end product and would, in any case, be of little value. The delegation of the Federal Republic of Germany observed that the requirement presently figured in its national regulations and that it was thought to be of value. Governments were requested to comment also upon this matter.

Determination of Net Contents

109. In order to allow for a more accurate assessment of net contents, in particular of oil and sauce packs, the procedure for the cleaning and drying of the empty container was revised.

Classifications of Defectives

110. The Committee agreed to relate the defectiveness of samples to the final product requirements and tolerance allowances.

Defect Table

111. The Committee agreed to attach to the standard the defect table proposed by the delegation of Canada for canned mackerel and also a (revised) version of the table proposed by the delegation of the United States for canned mackerel and jack mackerel. Governments were requested to test the applicability of the different tables and to make suggestions for additional defects e.g. with regard to fillets.

Status of the Standard

112. The Committee agreed to return the Standard to Step 3 of the Procedure for a further round of government comments and to allow for testing of the proposed defect tables. The revised document is given in Appendix V to this Report.

CONSIDERATION OF ELABORATION OF STANDARD FOR SARDINES AND SARDINE TYPE PRODUCTS AT STEP 2

113. The "evergreen" sardine question had inspired Mr. Petter Haram (Norway) to write a musical composition reflecting the passions moved at the various sessions and the Committee were treated to a recital. The Committee expressed its appreciation of the recital.

114. This set the mood for the consideration of the report of a working group (CX/FFP-LIM I + Revised Annex II) set up by the eighth session of the Committee which had studied various questions about the defects and their relative values associated with the different species and types of pack of sardines and sardine type products. The Group had met in Nantes from 14-21 September 1974 by courtesy of the Government of France, at the Institut scientifique et technique des pêches maritimes. The Committee expressed its thanks to Mlle F. Soudan for hosting the meeting, and to the participants in the working group.

115. The Chairman of the Working Group (Dr. Blackwood - Canada) introduced the report. He said that the Group had considered the various defects individually, in the light of replies to the questionnaire which was based upon a system of major and minor defects as developed by Norway. The draft defect table prepared by France for sardines in oil which provided for a point rating system was also considered. Both systems were used when examining samples of various products provided by some producing countries. The purpose of this product inspection was not only to assess the individual defects but also to evaluate the most desirable features of the two proposed inspection systems as to their flexibility and applicability to all products. Time had not permitted consideration of specific defects relating only to products in brine or "own juice".

116. The Committee after some discussion decided:

- (i) To request the Secretariat to revise the Standard taking into account relevant decisions taken on other standards;
- (ii) to advance the Standard to Step 3 of the Procedure and attach to the Standard for practical consideration by governments the defect table for sardines and sardine type products elaborated by the Working Group (Rev. Annex II to CX/FFP-LIM.1);
- (iii) to consider at its next session a proposal made by the delegation of Uruguay and supported by the delegations of Argentina, Peru and Turkey, to add species of the genera *Engraulis* and *Anchoa* to the list from which the product could be prepared.

The Secretariat was requested to redistribute relevant government observations made to previous sessions of the Committee (CX/FFP 73/12).

117. The revised Proposed Draft Standard is attached as Appendix VI to this Report.

CONSIDERATION AT STEP 3 OF THE PROPOSED DRAFT CODE OF PRACTICE FOR FRESH FISH

118. The Committee considered the above Proposed Draft Code of Practice (CX/FFP 73/4) in the light of Government comments received (CX/FFP 74/11 and the Conference Room Document 74/3, October 1974, submitted by the Netherlands and Japan). In view of the length of the document it was agreed that an Ad Hoc Group consisting of representatives from the delegations of the Netherlands, Ireland, the USA and representatives from WHO and FAO, consider in detail the various comments submitted and select for the Committee's consideration only those of the most substantial and controversial nature.

119. The Committee discussed at considerable length the presence of parasites in fish and products thereof. It was agreed that although most types of parasite found were harmless to man, the presence of parasites in fish and fish products was objectionable to the consumer.

120. The end product specifications, Section V of the Code, were also discussed in detail and it was agreed to amend the draft text in order to give appropriate emphasis to the presence of parasites and to chemical pollutants.

121. It was also agreed to delete the provision (4.2.6) recommending maximum dimensions for fish pens on board ships.

122. The Committee agreed to advance the Proposed Draft Code to Step 5 of the Procedure with the proviso that any substantial changes made by the Committee on Food Hygiene would be further considered by the Committee at its next Session. It was further agreed to propose to the Commission to omit Steps 6-8 of the Procedure.

CONSIDERATION AT STEP 3 OF THE PROPOSED DRAFT CODE OF PRACTICE FOR CANNED FISHERY PRODUCTS

123. The Committee considered the above Draft Code of Practice (CX/FFP 73/3) in the light of government comments received (CX/FFP 74/12 and Conference Room Document 74/4, October 1974, submitted by the Netherlands and Japan).

124. In consideration of the length of the document the same procedure of an Ad Hoc Group as for the consideration of the Draft Code of Practice for Fresh Fish was adopted. Representatives from the delegations of the Netherlands, Ireland, Japan, United States and representatives from WHO and FAO participated in the discussion. The comments that were submitted by the governments were regarded as of an editorial nature and were dealt with by the Group.

125. The Committee accepted the Ad Hoc Group's report and agreed to advance the Proposed Draft Code to Step 5 of the Procedure with the proviso that any substantial changes made by the Committee on Food Hygiene would return for further consideration by the Committee at its next session. It was further agreed to propose to the Commission to omit Steps 6 to 8 of the Procedure.

CONSIDERATION AT STEP 2 OF THE PROPOSED DRAFT CODE OF PRACTICE FOR FROZEN FISH

126. The Committee considered the above Proposed Draft Code of Practice as contained in document CX/FFP 73/5 and agreed that it should be sent to governments for comments at Step 3 of the Procedure. When commenting on the Code, governments should take into account the Draft Code of Practice for the Processing and Handling of Quick Frozen Foods (ALINORM 76/25, Appendix V) in order to ensure that there was no conflict between the provisions of the two codes.

CONSIDERATION OF PAPER ON INTERNATIONAL TRADE IN FISH FINGERS OR FISH STICKS

127. The delegation of Australia reported upon the survey conducted jointly by Australia and Canada on battered and breaded fish products (CX/FFP 74/9). It was proposed on the basis of the information contained in the paper that a case existed for the elaboration of a standard for breaded fish portions to be considered by the Committee as and when workload permitted.

128. The Committee agreed to ask the FAO Government Consultation of Codes of Practice to include amongst its priorities a code of practice for breaded fishery products.

129. It was also agreed that a standard for breaded fish portions should be prepared and presented to the 1975 session of the Committee. The delegation of the UK undertook to prepare a draft.

130. The delegation of the USA observed that priority should be accorded to the elaboration of a standard for quick frozen blocks which, as had been agreed, would be before the Committee at Step 2 in 1975. The Committee reconfirmed its decision to proceed with the standard for blocks and to consider the priority to be accorded the standard for breaded fish portions at its next session in the light of the UK draft.

OTHER BUSINESS

Use of Spanish Language

131. The delegations of Peru and Argentina reiterated the request that Spanish be one of the working languages of the Committee. It was pointed out that a large number of documents had been made available in Spanish and it was further noted that the question of simultaneous Spanish translation could not be dealt with by the Committee.

Timely Distribution of Documents

132. The Chairman made a plea for stricter adherence to deadlines for comments. Late coming observations caused undue strain on the Secretariat and the translation services and further hampered timely distribution of the working documents in advance of the session to allow for proper consideration within countries.

Working Groups

133. The delegations of Canada and the United States considered that the principle of dealing with specific matters in informal working groups had proved useful and would continue to do so. The effectiveness of this manner of working had been clearly demonstrated by the meeting in Nantes on the sardine defect table. The Committee agreed to consider the matter on a case by case basis. The Committee also agreed with the view that more widespread testing of proposed provisions was essential for meaningful progress.

Date and Place of next Meeting

134. The Committee was informed that the next session would take place tentatively in the first week of October taking into account the dates set for the meeting of the Committee on Food Hygiene (May 1975) and the Codex Alimentarius Commission (February 1976).

SUMMARY STATUS OF WORK

Standard/Code	Step	To be dealt with by	Document
Canned Pacific Salmon	9	Governments	CAC/RS 3-1969
QF Gutted Pacific Salmon	9	Governments	CAC/RS 36-1970
Canned Shrimps or Prawns	9	Governments	CAC/RS 37-1970
QF Fillets of Cod and Haddock	9	Governments	CAC/RS 50-1971
QF Fillets of Ocean Perch	9	Governments	CAC/RS 51-1971
Canned Tuna and Bonito in Water or Oil	9	Governments	CAC/RS 70-1974 1/
Canned Crab Meat	8	11th C'ssion	ALINORM 76/18 IV
Canned Mackerel and Jack Mackerel	3	10th FFP	ALINORM 76/18 V
Canned Sardines and Sardine-type Products	3	10th FFP	ALINORM 76/18 VI + CX/FFP 75/9
QF Fillets of Flat Fish	8	11th C'ssion	ALINORM 76/18 II
QF Fillets of Hake	7	10th FFP	ALINORM 74/18 V
QF Shrimps or Prawns	7	10th FFP	ALINORM 74/18A III
QF Lobsters, Rock Lobsters, Spiny Lobsters and Slipper Lobsters	5	11th C'ssion	ALINORM 76/18 III
QF Blocks of Cod, Haddock, Hake and Ocean Perch	2	10th FFP	CX/FFP 75/5 1/
QF Breaded Fish Portions	2	10th FFP	CX/FFP 75/8
Code of Practice for Fresh Fish	5	11th C'ssion	CX/FFP 75/3 1/
Code of Practice for Canned Fish	5	11th C'ssion	CX/FFP 75/4 1/
Code of Practice for Frozen Fish	3)	CX/FFP 73/5 2/
Code of Practice for the Processing and Handling of Quick Frozen Foods	8) 10th FFP	ALINORM 76/25 VII =CX/FFP 76/10 1/
Code of Practice for Smoked Fish	2	10th FFP	CX/FFP 75/6 1/
Code of Practice for Shrimps and Prawns	2	10th FFP	CX/FFP 75/7 1/
Code of Practice for Salted Fish - Background paper on Dried Fish		Exp.Consult./ 11th FFP	
Code of Practice for Lobster and Crawfish		Exp.Consult./	
Code of Practice for minced Fish Hoocles		11th FFP	
Code of Hygienic Practice for Molluscan Shellfish	3	FH Cttee '75	ALINORM 76/13 IV 3/

- 1/ To be distributed in due time.
- 2/ Distributed in 1974 prior to 9th Session.
- 3/ Elaborated independently by the Food Hygiene Committee.

LIST OF PARTICIPANTS
LISTE DES PARTICIPANTS
LISTA DE PARTICIPANTES

ARGENTINA
ARGENTINE

Mario A. Boffi
Secretario Commercial
Argentine Embassy
Box 14039
104 40 Stockholm 14,
Sweden.

AUSTRALIA
AUSTRALIE

J.B. Donnelly
Principal Executive Officer
Department of Agriculture
Canberra A.C.T.
Australia

D.G. James
Section Leader
Division of Food Research
Csiro Hobart
Tas 7000, Australia.

BELGIUM
BELGIQUE
BELGICA

Dr. W. Vyncke
Division Head
Fisheries Research Station
Stadhuis
B-8400 Oostende, Belgium

R.J.L. van Havere
Inspecteur des denrées alimentaires
Ministere de la sante publique
et de la famille
Cite Administrative
Quartier Vesale 4
B-1010 Bruxelles, Belgium.

BRAZIL
BRESIL
BRASIL

C.A.M. Lima dos Santos
Director
Division of inspection of fish
and fishery products
National dept. of Inspection
of Animal Products
Ministry of Agriculture
Ed. Gilberto Salomao 13^oA
SCS -Brasilia-DF, Brasil

Joao J. Bosco Quardros Barros
Sanitary Engeneer
Director of Fish Association
PO.Box 53 - Niteroi
RJ Brazil 2400

Egon Nort
Food Technologist
Chief of fish technology Unit-Sudepe
Praca 15.nov. no. 4
ZC-00 Rio de Janeiro - GB
Brazil

Paulo Alberto Silveira Soares
Diplomat - 2nd secretary
Brazilian Embassy
Banergrt. 8
Stockholm, Sweden.

CANADA

C.M. Blackwood
Director, Inspection Branch
Fisheries and Marine Service
Dept. of Environment
Ottawa, Canada.

C.H. Ashdown
Representative -
Fisheries Association of B.C.
Room 401
100 West Pender street
Vancouver B.C., Canada

B.G.R. Barton
Commercial Officer
Canadian Embassy
Postuttak,
Oslo 1, Norway

R.M. Bond
Chief Inspection Policy and
Regulations Fisheries and Marine Service
Dept. of the Environment
Ottawa, Canada

J.P. Hennessey
Chief, Inspection Branch
Fisheries and Marine Service
Dept. of Environment
St. John's, Newfoundland
Canada

R. McNeill
Chief, Inspection Branch
Fisheries Service
Department of Environment
P.O. Box 550, Halifax, N.S.
Canada

R. Poirier
Chief of Inspection
Environment Canada
Fisheries and Marine Service
114^e, Route de l'Eglise
P.O. Box 10,030, Ste-Foy, P.2
Canada

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APPENDIX I

CANADA Cont.

H.D. Pyke
Manager Standards and Quality
Control
National Sea Products Limited
P.O. Box 867-Lunenburg N.S.
Canada

D.D. Wilson
Chief Inspection-Pacific Region
Fisheries Service
Dept. of Environment
1090 West Pender Street
Vancouver B.G., Canada

CUBA

Manual Blanco
Chemical Engineer
Instituto Nacional de la Pesca
La Habana, Cuba

Sara Docambo
Chemical Engineer
Instituto Nacional de la Pesca
La Habana, Cuba.

DENMARK

DANEMARK
DINAMARCA

P.F. Jensen
Director, Inspection Service for
Fish Products
Fiskeriministeriets Industritilsyn,
Dr. Tværgade 21
DK-1302 Copenhagen K. Denmark

E.L. Dyekjær
Civilingeniør, President of AIPCEE
Dyekjærshus
DK 6700 Esbjerg
Denmark

K. Hoydal
Laboratorieførstander
Torshavn, Faroe Islands
Denmark

M. Pryds
Civil Engineer
Den Kongelige Grønlandske Handel
Strandgade, 1004 Copenhagen
Denmark

J. Sieverts
Civil Engineer
Bornholms Konservesfabrik A/S
Sigurdsgade 39
DK 2200 Copenhagen N
Denmark

FINLAND
FINLANDE
FINLANDIA

Dr. J.J. Laine
Head, Section of Food
R & D at Raisio Factories
SF-23120 Mietoinen,
Finland

FRANCE
FRANCIA

F. Soudan
Chef du Service de Technologie et
des Contrôles
Institut Scientifique et
technique des Pêches maritimes
B.P. 1049
Nantes, France.

Dr. Y. Lagoin
Vétérinaire
Ministère de l'Agriculture
Direction des Services Vétérinaires
Paris, France

P. Maze
Directeur FRIGE-FOOD
Zil St. Herblains, 44800 Nantes
Syndicat Importeur et Fabricants
Produits Surgelés
3 Rue Lojelbach
75017 Paris, France.

GERMANY Fed. Rep. of
ALLEMAGNE, Rép. F. d. d'
ALEMANIA, Rep. Fed. de

H. Hesse
Diplom. Volkswirt
Bundesministerium für Ernährung
Landwirtschaft und Forsten
5300 Bonn, Fed. Rep. of Germany

Dr. K. Gerigk
Director and Professor
Bundesgesundheitsamt
Berlin 33, Fed. Rep. of Germany
Postbox

Dr. W. Krane
Chef-Chemiker
"Nordsee" Deutsche Hochseefischerei GmbH
D 285 Bremerhaven
Klussmannstr. 3, Fed. Rep. of Germany

GHANA

V.N. Dowuona
Deputy Chief Fisheries Officer
Fisheries Department
P.O. Box 630,
Accra, Ghana

ISLANDE
ISLANDIA

Dr. S. Peturson
Iceland Fisheries Laboratories
Department of Bacteriology
Skulagata 4
Reykjavik, Iceland

INDIA
INDE

O.P. Dhamija
Joint Director
Export Inspection Council of India
Ministry of Commerce
13/37, Arya Samaj Road
New Delhi-5 India

IRELAND
IRLANDE
IRLANDA

C.J. McGrath
Inspector of Fisheries
and Engineer
Department of Agriculture and
Fisheries
Agriculture House, Kildare st.
Dublin, Ireland.

ITALY
ITALIE
ITALIA

Dr. G. Verardi
Asst. Head Chemist
c/o Ministero Sanità-
D.G. Igiene Alimenti e Nutrizione
P.le Marconi, 25
00144 Rome, Italy

Dr. A. Luciano
I. Dirigente
Ministero Marina Mercantile
Roma, Italy

JAPAN
JAPON

T. Imai
Technical Officer
Ministry of Agriculture and Forestry
Fishery Marketing Division
Fishery Agency
Kasumigaseki, Chiyoda-ku
Tokyo, Japan

T. Hanagata
Assistant Manager, Japan
Suisan Kanzume Packers' Association
Naigai Bldg., 2-2-2 Marunouchi
Chiyoda-ku
Tokyo, Japan.

M. Ito
Director of Japan Suisan Kanzume
Packers' Association
Ito Food Products Co. Ltd.
2-62 Saiwaicho, Shimizu-aty
Shizouka-ku Japan

M. Nonaka
Manager of Processing Group
Northern Seas Fishery Division
Taiyo Fishery Co. Ltd.
1-5-1 Marunouchi,
Chiyoda-ku
Tokyo, Japan

MOROCCO
MAROC
MARRUECOS

A. Cherrat
Secrétaire Général de la
Fédération des Industries de la
Conserve au Maroc
Rue 10, no. 7 - Longchamp
Casablanca, Morocco

NETHERLANDS
PAYS-BAS
PAISES BAJOS

Dr. K. Büchli
Public Health Officer
Ministry Public Health
Dr. Reyersstraat 10
Leidschendam, Netherlands

Dr. J.J. Doesburg
Institute for Fishery Products/TNC
Dokweg 37
Ijmuiden, Netherlands

B.P.G. van Klinken
Commodity Board for Fish and
Fishery Products
Wassenaarseweg 20
Den Haag, Netherlands

D. Tielenius
Govt. official
Ministry of Agriculture and
Fisheries
1^e V.d. Boschstraat 4
Den Haag, Netherlands

D.M. van Ijsselstein
Commission for the Dutch Food
and Agric. Industrie
Burg s'Jacobplein 1
Rotterdam, Netherlands

NEW ZEALAND
NOUVELLE ZELANDE
NUEVA ZELANDIA

C.R. Ensor
Vetérinary Adviser
Ministry of Agriculture and
Fisheries
N.Z. High Commission
New Zealand House, Haymarket
London, SW1 Y4 TO, England

J.S. Campbell
General Manager
Fishing Industry Board
P.O. Box 9232
Wellington, New Zealand

NIGERIA

S.O. Talabi
Head, Technology Branch
Fed. Dept. of Fisheries
P.m. B. 12529
Lagos, Nigeria

A.O. Oyejola
Senior Quality Inspector
Nigerian Standards Organisation
Federal Ministry of Industries
Lagos, Nigeria

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APPENDIX I

NORWAY
NORVEGE
NORUEGA

Dr. O.R. Braekkan^{x)}
Government Vitamin Laboratory
Norwegian Fisheries Research
Institute
P.O. Box 187
N-5001 Bergen, Norway

E. Heen
Director
Norwegian Fisheries Research
Institute
P.O.Box 187
N-5001 Bergen, Norway

S. Myhre Andersen
Chief Chemist
A/S Nestle-Findus
9600 Hammerfest
Norway

F.J.Grahl
Chief Inspector
Directorate of Fisheries
P.O.Box 185
N-5001 Bergen, Norway

P. Haram
Counsellor
Ministry of Fisheries
Oslo-Dep.
Oslo 1, Norway

T. Kvande-Pettersen
Manager
Industrilaboratoriet
N-6500 Kristiansund
Norway

H. Pedersen
Managing Director
The Norwegian Cannery Association
P.O.Box 327
N-4001 Stavanger, Norway

J. Race
Chief of Section - Norwegian Codex
Alimentarius Council
Statens Ernaeringsra
Pilestredet 57, Box 8139
Oslo-Dep. Oslo 1, Norway

S. Skilbrei
Chief Inspector
Directorate of Fisheries
P.O.Box 185
N-5001 Bergen, Norway

J. Strømme
Technical Manager
Frionor Norwegian Frozen Fish Ltd
Drammensveien 20
Oslo 2, Norway

O.C.Sundsvold
Director
The Official Norw. Quality Control
Institute for Canned Fish Products
P.O.Box 324
N-4001 Stavanger, Norway.

PERU
PEROU

Dr. G.S. Burga
Executive Manager, Empresa Publica
de Certificaciones Pesqueras
P.O.Box 271
Callao (4) Peru.

Mario Miñano Q.
Chemistry Engineer
Ministerio Pesqueria
Lord Cochane 351 - Mira Flores
Lima, Peru

Juán M. Neyra G.
Fish Engineer
Empresa Publica de Servicios
Pesqueros
Sinchi Roca 2728-Lince
Lima-Peru

J.M. Sagawa
Laboratories
Empress Publica de Cartificaciones
Pesqueras
P.O.Box 271
Callao (4) Peru

POLAND
POLOGNE
POLONIA

Dr. Z.S.Karnicki
Chief, Fish Processing
Technology Dept.
Sea Fisheries Institute
al. Zjednoczenia 1
Gdynia, Poland

A. Kornecka
Senior adviser
Quality Inspection Office
Stepinska 9
Warsaw, Poland

PORTUGAL

H.P.Pereira
Secretaria Estado das Pescas
Instituto Portugues de Conservas
de Peixe
Av. 24 de Julho, 76
Lisboa, Portugal

Dr. L. Torres
Instituto Portugues de Conservas
de Peixe
Av. 24 de Julho, 76
Lisboa, Portugal

x) Chairman-Président-Presidente

SPAIN
ESPAGNE
ESPANA

Dr. R. Conty
Veterinario
Jefe del Servicio Veterinario de
Inspeccion de Alimentos
Direccion General de Sanidad
Plaza Espana
Madrid, Spain

J.L. Fernandez Espinosa
Jefe Servicio Inspeccion y
Normalizacion Exportaciones
Ministerio de Comercio
Paseo Castellana 16
Madrid 1, Spain.

SWEDEN
SUEDE
SUECIA

G. Krogh
Veterinarian
The National Food Administration
Fack
S-10401 Stockholm, Sweden

B. Beckman
Secr. of Organisation
Svenska Västskustfiskarnas
Centralförbund
Box 4092
S-40040 Göteborg 4, Sweden.

K. Borg
Assistant
The National Food Administration
Codex Secretariat
Fack
S-10401 Stockholm, Sweden

A.A. Folkving
Chief of Section
Box 16384
S-10327 Stockholm 16
Sweden

G. Liljegren.
Food Technologist
Svenska Konservkontrollen
Fack
S-40025 Göteborg 52, Sweden

SWITZERLAND
SUISSE
SUIZA

H.U. Pfister
Head of Codex Section
Swiss Health Service
Haslerstrasse 16
3003 Berne, Switzerland

Dr. G.F. Schubiger
Case Postale 88
CH-1814 La Tour de Peilz
Switzerland

THAILAND
THAILANDE
TAILANDIA

Bung-orn Kasemsarn
Chief, Fishery Technology Laboratory
Department of Fisheries
Bangkok, Thailand.

TURKEY
TURQUIE
TURQUIA

Dr. Z. Tolgay
University of Ankara
Faculty of Veterinary Medicine
Dept. of Food Control & Technology
Ankara, Turkey.

Dr. N. Tolgay
University of Ankara
Faculty of Veterinary Medicine
Dept. of Parasitology
Ankara - Turkey

UNITED KINGDOM
ROYAUME - UNI
REINO UNIDO

D.L. Orme
Principal
Ministry of Agriculture
Fisheries and Food
Great Westminster House
Horseferry Road
London SW1P 2 AE, United Kingdom

I.M.V. Adams
Principal Scientific Officer
Food Science Division
Ministry of Agriculture Fisheries
and Food
Great Westminster House,
Horseferry Road
London SW 1, 2 PE, United Kingdom

Dr. J.J. Connell
Assistant Director
Torry Research Station
P.O. Box 31
135 Abbey Road
Aberdeen AB 98 DG, United Kingdom

J.R. Crook
Director
U.K. Association of Frozen Food
Producers
c/o Associated Fisheries & Food Ltd.
P.O. Box 96 Brighton St. Hull
United Kingdom

D. Stoker
Senior Executive Officer
M.A.F.F. Great Westminster House
Horseferry Road
London SW 1 2 PE, United Kingdom

D.A. Threadgill
Senior Scientific Officer
Laboratory of the Government Chemist
Cornwall House, Stamford Street
London SE 1, United Kingdom

UNITED STATES OF AMERICA
ETATS UNIS D'AMERIQUE
ESTADOS UNIDOS DE AMERICA

J.W.Slavin
Associate Director
National Marine Fisheries Serv.
Page Building No.2
3300 Whitehaven Street N.W.
Washington D.C. 20235 U.S.A.

L.M.Beacham
Assistant to Director
Bureau of Foods for Int.
Standards - HFF-40
Food and Drug Admin. 200 "C" Street S.W.
Washington D.C. 20204, U.S.A.

J.R. Brooker
Fishery Products Inspection &
Safety Program
National Marine Fisheries
Service/NOA
U.S. Dept. of Commerce
Washington D.C. 20235 U.S.A.

R.P.Farrow
Vice President and Director
Washington Laboratory
National Canners Association
1133 20th St. NW.
Washington D.C. 20036, U.S.A.

J.W.Farquhar
Vice President - Research
Technical Services
American Frozen Food Institute
919 18th Street NW.
Washington D.C. 20006, U.S.A.

D.E.Gates
Ass't Executive Director
Tuna Research Foundation
215 Cannery St. Terminal Island
California 90731, U.S.A.

F.Jermann
Dir. R & D Bumble Bee Sea Foods
Castle & Cooke
P.O.Box 60
Astoria, Oregon 97103, U.S.A.

R.E.Martin
Director, Science and Technology
National Fisheries Institute
1730 Pennsylvania Ave. NW.
Washington D.C. 20006, USA

C.L.Stinson
Prospect Harbor
Maine 04669, U.S.A.

J.L.Warren
Chairman, Maine Sardine Council
Battery Street Eastport.
Maine 04631, U.S.A.

D.R.Whitaker
Industry Economist
National Marine Fisheries Service
Page Building No.2
Washington D.C. 20235, U.S.A.

URUGUAY

N.B.Anthonisen
Consul
P.Box 26
N-5001 BERGEN, Norway

YUGOSLAVIA
YUGOSLAVIE

S.Banjad
Engineer
Food Technologist
"Jugoriba" Export - Import
41000 Zagreb, Nehajska 15.

OBSERVER COUNTRIES
PAYS OBSERVATEURS
PAISES OBSERVADORES

SOUTH AFRICA
AFRIQUE DE SUD
SUDAFRICA

A.M. Lewis
Group Technical Manager
Irvin and Johnson Ltd.
P.O.Box 1628
Cape Town 8000
South Africa

S.P.Malherbe
Head, Food Inspection Division
South African Bureau of Standards
Private Bag x191
Pretoria 0001
South Africa

R.R. de Villiers
Director, Department of Biological
Sciences
South African Bureau of Standards
Private Bag x191
Pretoria 0001
South Africa.

INTERNATIONAL ORGANIZATIONS
ORGANISATIONS INTERNATIONALES
ORGANIZACIONES INTERNACIONALES

A.I.P.C.E.E.

E.L.Dyckjær
President of AIPCEE
Dyckjærshus -Danmark
DK 6700 Esbjerg, Denmark

A.O.A.C.

L.M. Beacham
Ass't to Director, Bureau of Food
for International Standards HFF-40
Food and Drug Admin. 200 "C" St. SW
Washington D.C: 20204, U.S.A.

E.E.C.

G.Castille
Administrateur Principal
200 Rue de la Loi
1040 Brussel, Belgium

J.Ten Have
CEE
Council of Ministers
170 Rue de la Loi
Brussel, Belgium

I.I.R.

C.Karsti
Scientific Adviser
Fiskeridirektoratet
N-5001 Bergen, Norway

SECRETARIAT
SECRETARIA

FAO

W.L. de Haas
Food Standards Officer
FAO/WHO Food Standards Programme
00100 Rome, Italy

R. Garm

Fishery Industry Officer
Fishery Production and
Marketing Branch
Fishery Industries Division
Fisheries Department
00100 Rome, Italy

WHO

Dr. L. Reinius
Food Hygienist
Veterinary Public Health
Division of Communicable Diseases
World Health Organization
1211 Geneva 27
Switzerland

DRAFT GENERAL STANDARD FOR QUICK FROZEN FILLETS OF FLAT FISH

(advanced to Step 8)

1. SCOPE

This standard shall apply to quick frozen fillets of edible species of the order Pleuronectiformes (Heterosomata) offered for direct consumption without further processing. It does not apply to the product indicated as intended for further processing or for other industrial purposes.

2. DESCRIPTION

2.1 Product Definition

(a) Quick frozen fillets of flat fish are obtained from fish of any edible species of the order mentioned above.

(b) Fillets are slices of fish of irregular size and shape which are removed from the carcass by cuts made parallel to the backbone and sections of such fillets cut so as to facilitate packing.

2.2 Process Definition

The product shall be subjected to a freezing process and shall comply with the conditions laid down hereafter. The freezing process shall be carried out in appropriate equipment in such a way that the range of temperature of maximum crystallization is passed quickly. The quick freezing process shall not be regarded as complete unless and until the product temperature has reached -18°C at the thermal centre after thermal stabilization. The product shall be maintained at a low temperature such as will maintain the quality during transportation, storage and distribution up to and including the time of final sale.

The recognized practice of repacking quick frozen products under controlled conditions followed by the re-application of the quick freezing process as defined is permitted.

2.3 Presentation

The product shall be presented in one of the following styles:

- (a) skin-on; or
- (b) skinless; or
- (c) skin-on, on light side only.

The fillets may be presented as boneless, provided that boning has been completed.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Quick frozen fillets of flat fish shall be prepared from sound fish of the designated order which are of a quality such as to be fit to be sold fresh for human consumption.

3.2 Final Product

- 3.2.1 (a) The fillets shall be free from foreign matter and all internal organs and shall be reasonably free from ragged edges, tears and flaps, fins or part fins, significantly discoloured flesh, blood clots, parasites and, where appropriate, skin, scales, bones and black membrane (belly wall).
- (b) After cooking by steaming, baking or boiling as set out in Annex A the product shall have a flavour characteristic of the species and shall be free from any objectionable flavour and odour, and its texture shall be firm and free from abnormal conditions such as chalkiness and milkiness.

- (c) The final product shall be free from small fillet pieces unless their presence is necessary to make up the weight of the pack. A piece weighing less than 25 g is classed small. The maximum number of small fillet pieces permitted is one per pack except as provided for in sub-section 6.1.1.
- (d) The final product shall be free from deep dehydration (freezerburn) which cannot easily be removed by scraping without unduly affecting the quality and appearance of the final product.

Note: A recommended table of physical defects for optional use with consignments of the final product with an AQL of 6.5 is appended as Annex B.

4. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in Section.. of the Codex Alimentarius have been endorsed by the Codex Committee on Food Additives.

<u>Additive</u>	<u>Maximum level of use</u>
Monophosphate, monosodium or monopotassium (Na or K orthophosphate)	5 g/kg of the final product expressed as P ₂ O ₅ , singly or in combination
Diphosphate, tetrasodium or tetrapotassium (Na or K pyrophosphate)	
Triphosphate, pentasodium or pentapotassium or calcium (Na, K or Ca tripolyphosphates)	
Polyphosphate, sodium (Na hexametaphosphate)	
Ascorbate, potassium or sodium salts	1 g/kg of the final product expressed as ascorbic acid

5. HYGIENE (endorsed ALINORM 76/13, para 10)

It is recommended that the product covered by the provisions of this standard be prepared in accordance with the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969).

6. LABELLING (endorsed ALINORM 74/22(A) para 16)

In addition to Sections 1, 2, 4 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969) the following specific provisions apply, subject to endorsement by the Codex Committee on Food Labelling.

6.1 Name of the Food

- 6.1.1 The name of the food shall be the name according to the law, custom or practice in the country in which the product is to be distributed. Fillets cut from blocks which may possibly contain a number of small pieces in excess of the number permitted in sub-section 3.2.1(c) may be labelled as fillets of provided that such labelling is customarily used in the country where the products are to be sold and provided the product is identified to the consumer so that he will not be misled.
- 6.1.2 The label may, in addition, include reference to the presentation as skin-on or skinless and/or boneless, as appropriate. This shall be included if the omission of such labelling would mislead the consumer.

6.1.3 In addition, there shall appear on the label either the term "quick frozen" or the term "frozen" (*) whichever is customarily used in the country in which the food is sold, to describe a product subjected to the freezing process as defined in sub-section 2.2.

6.2 List of Ingredients

6.2.1 A complete list of ingredients shall be declared on the label in descending order of proportion. The provisions of sub-sections 3.2(b) and 3.2(c) of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969) shall also apply.

6.3 Net Contents

6.3.1 The net contents shall be declared by weight in either the metric system ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the food is sold.

6.3.2 Where products have been glazed the declaration of net contents of the product shall be exclusive of the glaze.

6.4 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the food shall be declared.

6.5 Country of Origin

The country of origin of the product shall be declared if its omission would mislead or deceive the consumer.

6.6 Lot Identification

Each container shall be permanently marked in code or in clear to identify the producing factory and the date of production, that is, the date the final product was packaged for final sale.

7. METHODS OF SAMPLING, EXAMINATION AND ANALYSIS

7.1 Sampling for Destructive Examination

Sampling of lots for examination of the product shall be in accordance with the FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (CAC/RM 42-1969) (AQL - 6.5).

7.2 Thawing

The sample to be examined for physical defects is thawed by enclosing it in a film type bag and immersing in an agitated water bath held at approximately 20°C (68°F). The complete thawing of the product is determined by gently squeezing the bag occasionally so as not to damage the texture of the fish, until no hard core or ice crystals are felt.

7.3 Determination of Net Contents of Products Covered by Glaze

The method of analysis described hereunder is an international referee method which is to be endorsed by the Codex Committee on Methods of Analysis and Sampling.

As soon as a package is removed from low temperature storage open immediately and place the contents under a gentle spray of cold water. Agitate carefully so that the product is not broken. Spray until all ice glaze that can be seen or felt is removed. Transfer the product to a circular No. 8 sieve, 20 cm (8 inches) in diameter for samples weighing less than 900 g (2 pounds) and 30 cm (12 inches) for those more than 900 g (2 pounds). Without shifting the product incline the sieve at an angle of approximately 17-20° to facilitate drainage, and drain exactly 2 minutes (stop watch). Immediately transfer the product to a tared pan and weigh (Methods of Analysis of AOAC 18.001).

(*) "frozen": This term is used as an alternative to "quick frozen" in some English speaking countries.

7.4 Organoleptic Examination

Organoleptic examination shall be made only by trained persons and shall take place after the sample has been cooked by a method set out in Annex A.

7.5 Examination for Physical Defects

The sample may be examined for physical defects according to Annex C.

8. CLASSIFICATION OF DEFECTIVES

A container which fails to meet the quality requirements for the final product (3.2.1(a), (c) and (d)) shall be considered as "defective".

9. LOT ACCEPTANCE

A lot will be considered as meeting the requirements of this standard when:

1. The total number of "defectives" does not exceed the acceptance number (c) of the appropriate Sampling Plan (AQL - 6.5) in the Sampling Plans for Prepackaged Foods (CAC/RM 42-1969).
2. The average net contents of all containers examined is not less than the declared net contents.

ANNEX A

COOKING METHODS

Steaming

Steam the sample in a closed dish over boiling water for about 35 minutes if frozen, or for about 20 minutes after thawing the product. The dish should be covered and should be kept in a water bath at +60°C (+140°F) during testing.

Baking

Place the sample in a baking pan lined with aluminium foil. Cover the pan with a sheet of aluminium foil and crimp the foil around the edges of the top of the pan. Place the pan and contents in a pre-heated oven maintained at 230°C (450°F) until cooking is completed. This requires about 20 minutes.

Boiling in Bag

Place the thawed sample into a boilable film-type pouch and seal. Immerse the pouch and its contents into boiling water and cook until the internal temperature of the fillet sample reaches 70°C (160°F) which requires about 20 minutes. Remove the boiled product from the pouch and drain.

ANNEX B

DEFINITION OF DEFECTS IN QUICK FROZEN FILLETS OF FLAT FISH

- | | |
|------------------------------|--|
| Bones - | Bones exceeding the sizes specified in Annex C except for pin bones in fillets not designated as boneless. Cartilagenous material and rudimentary pin bones which are not perceptible after cooking shall not be considered bone defects. |
| Blood clots - | Any lump or mass of clotted blood greater than 5 mm in any dimension. |
| External fins or part fins - | Part fins are two or more rays connected by a membrane. |
| Skin - | A piece of skin larger than 3 cm ² on fillets presented as skinless, or any such piece of dark skin on fillets presented as skin on light side only. |
| Belly wall - | Any piece of the black membrane lining the belly wall that is larger than 3 cm ² . |
| Discolouration - | Any significant discolouration larger than 5 cm ² , including naturally occurring dark pigmented spots on the skin of the light side, in fillet packs designated as skin on light side only. |
| Parasites - | <ol style="list-style-type: none"> a. <u>Nematodes</u> - Each nematode with a capsular diameter greater than 3 mm or each worm not encapsulated, greater than 1 cm in length, or each worm which is objectionable by virtue of its dark colour or any other characteristic. b. <u>Other Parasites</u> - (to be elaborated in the light of government comments) |

ANNEX C

RECOMMENDED DEFECT TABLE - QUICK FROZEN FILLETS OF FLAT FISH

This table and the maximum allowable number of instances of defects are based on an AQL of 6.5. The defect table is not to be applied to individual packs but to consignments in association with the appropriate Sampling Plan. Instances of defects are assigned for the indicated occurrences in one kilogramme of product.

Type of Defect	One Instance	Additional Instance
Bones		
- fillets not designated as boneless	A single bone greater than 5 mm in any dimension, or an agglomeration of such bones within an area of 3 cm ²	Each additional occurrence, or an agglomeration of such bones covering an area greater than 3 cm ²
- fillets designated as boneless	A single bone greater than 5 mm in any dimension	Each additional occurrence
Blood clots	A clot greater than 5 mm in any dimension	Each additional occurrence
External fins	A fin or part fin 3 cm ² or less	Each additional occurrence and, for each fin or part fin over 3 cm ² , every additional complete 3 cm ²
Skin (fillets designated as skinless or skin on light side only)	A piece greater than 3 cm ² up to and including 5 cm ²	Each additional occurrence and, for each piece over 5 cm ² , every additional complete 5 cm ²
Belly wall (black membrane)	A piece greater than 3 cm ² up to and including 5 cm ²	Each additional occurrence and, for each piece greater than 5 cm ² , every additional complete 5 cm ²
Discolouration	A significant discolouration of the flesh greater than 5 cm ² up to and including 10 cm ²	Each additional occurrence and, for each significant discolouration over 10 cm ² , every additional complete 5 cm ²
Parasites	A parasite with a capsular diameter greater than 3 mm or a worm not encapsulated, greater than 1 cm in length, or a worm which is objectionable by virtue of its dark colour or any other characteristic	Each additional occurrence

Maximum Allowable Tolerances for Defects: A sample of one kg is considered defective if it contains

- (a) more than 4 instances of bone defects; or
- (b) a total of more than 7 instances of defects for fillets presented as skin on; or
- (c) a total of more than 8 instances of defects for fillets presented as skinless or skin on light side only.

PROPOSED DRAFT STANDARD FOR QUICK FROZEN LOBSTERS, ROCK LOBSTERS
SPINY LOBSTERS AND SLIPPER LOBSTERS
(advanced to Step 5 of the Procedure)

1. SCOPE

This standard applies to quick frozen raw or cooked lobsters, rock lobsters, spiny lobsters and slipper lobsters and to tails, claws and meat therefrom offered for direct consumption. It does not apply to speciality packs where the flesh of the lobsters, rock lobsters, spiny lobsters or slipper lobsters constitutes only a portion of the edible contents.

2. DESCRIPTION

2.1 Product Definition

2.1.1 Quick frozen lobsters, rock lobsters, spiny lobsters and slipper lobsters are obtained from the genus Homarus of the family Nephropsidae and from the families Palinuridae and Scyllaridae.

2.1.2 Lobsters, rock lobsters, spiny lobsters and slipper lobsters of different varieties shall not be packed together.

2.2 Process Definition

2.2.1 The lobsters, rock lobsters, spiny lobsters and slipper lobsters can be:

- (i) "Raw" - not exposed to temperatures sufficiently high to coagulate the protein at the surface
- (ii) "Cooked" - heated for a period of time such that the thermal centre of the product reaches a temperature adequate to coagulate the protein.

2.2.2 The product, after any suitable preparation, shall be subjected to a freezing process and shall comply with the conditions laid down hereafter. The freezing process shall be carried out in appropriate equipment in such a way that the range of temperature of maximum crystallization is passed quickly. The quick freezing process shall not be regarded as complete unless and until the product temperature has reached -18°C (0°F) at the thermal centre after thermal stabilization. The product shall be maintained at a low temperature such as will maintain the quality during transportation, storage and distribution up to and including the time of final sale.

The recognized practice of repacking quick frozen products under controlled conditions followed by the re-application of the quick freezing process as defined is permitted.

2.2.3 The product shall be quick frozen either in mass or in individual units. If individually quick frozen, the units shall be packed in such a way as to maintain their individual separation until the time of final sale.

2.3 Presentation

Lobsters, rock lobsters, spiny lobsters and slipper lobsters shall be presented in one of the following styles:

2.3.1 Whole.

2.3.2 Whole, split. Split into two approximately equal halves down the centre line of the back. Clean with viscera removed.

2.3.3 Tail shell on. Intestinal tract removed and the cavity cleaned.

2.3.4 Tail meat. Shell off, intestinal tract removed.

Each piece comprising:

- (a) the whole of the tail; or
- (b) a piece obtained by dividing the meat in a tail longitudinally into two pieces; or
- (c) a piece obtained by dividing the meat in a tail transversely into not more than four pieces

2.3.5 Meat. The meat, without shell, of any part of the lobster, rock lobster, spiny lobster or slipper lobster.

ALINORM 76/18
APPENDIX III

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material

Quick frozen lobsters, rock lobsters, spiny lobsters and slipper lobsters shall be prepared from clean, sound lobster of species of the designated families which are alive immediately prior to the commencement of processing and of a quality suitable for human consumption.

3.2 Optional Ingredients

Water utilized either for glazing, cooking or for freezing may contain:

- (a) Salt
- (b) Lemon Juice
- (c) Sugars (to be listed)
- (d) Vinegar

3.3 Final Product

3.3.1 Appearance

Easily separated without thawing when labelled as individually quick frozen. Colour generally uniform and characteristic of the species and habitat or areas from which harvested;

- in the case of the raw product, the flesh shall be white or pink as appropriate and translucent rather than opaque;
- in the case of the cooked product, the flesh shall be white or pink as appropriate with no translucence indicating undercooking;
- in the case of products in the shell, the shell shall be firm and unbroken as appropriate for the style of presentation;
- tail meat and meat shall be [practically] free from shell, intestinal tract, viscera, blood or other extraneous material;
- all forms of presentation shall be free from foreign material and [practically] free from dehydration (freeze-burn), blackening or other abnormal discolouration.

3.3.2 Odour and Flavour

After thawing and, where applicable, cooking in accordance with Annex E, lobsters, rock lobsters, spiny lobsters and slipper lobsters shall have a good characteristic odour and flavour and shall be free from objectionable odours or flavours of any kind.

3.3.3 Texture

The meat of lobsters, rock lobsters, spiny lobsters and slipper lobsters shall be relatively firm and not mushy or gelatinous. Texture will be assessed only after thawing in accordance with the procedure as set forth in this standard in subsection 7.3 or where appropriate after cooking.

3.3.4 Glazing

Lobsters, rock lobsters, spiny lobsters and slipper lobsters may be glazed either individually or in bulk. When glazed the coating of ice shall cover the lobster so as to minimize dehydration and oxidation. The water used in glazing shall be of potable quality. Standards for potability shall be not less than those contained in the "International Standards for Drinking Water", World Health Organization. Any ingredient or additive as listed in 3.2 and 4 respectively used for glazing shall fulfill the hygienic requirements of section 5.

3.3.5 Defects and Tolerances

Lobsters, rock lobsters, spiny lobsters and slipper lobsters in the various styles of presentation shall comply with the definition and essential quality factors as set forth in this standard, subject to tolerance allowances as set out in Annex C.

4. FOOD ADDITIVES

The following additives in quick frozen lobsters are subject to endorsement by the Codex Committee on Food Additives:

<u>Salts</u>	<u>Maximum level</u>
Triphosphate, pentasodium or pentapotassium or calcium (Na, K or Ca tripolyphosphates)	5 g/kg of the final product expressed as P ₂ O ₅ , singly or in combination
Polyphosphate sodium (Na hexametaphosphate)	
<u>Preservatives</u>	
Sulphite, bisulphite or metabisulphite, sodium or potassium	√307mg SO ₂ /kg raw product, singly or in combination
<u>Thickening Agents</u>	
Hydrophilic colloids Alginates	(Governments to indicate which specific substances should be listed and at what level in the glazing water)

5. HYGIENE

5.1 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969) and the hygiene provisions of the Code of Practice for Frozen Fish, subject to endorsement by the Codex Committee on Food Hygiene.

5.2 To the extent possible in good manufacturing practice, the product shall be free from objectionable matter.

5.3 When tested by appropriate methods of sampling and examination, the cooked product:
a. shall not contain any pathogenic microorganisms; and
b. shall not contain any substances originating from microorganisms in amounts which may represent a hazard to health.

6. LABELLING

In addition to Sections 1, 2, 4 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969) the following specific provisions apply subject to endorsement by the Codex Committee on Food Labelling.

6.1 Name of the Food

6.1.1 The product shall be designated:

- (i) Lobster if derived from the genus Homarus;
- (ii) Rock Lobster, Spiny Lobster or Crawfish if derived from species of the family Palinuridae;
- (iii) Slipper or Bay or Sand Lobster if derived from species of the family Scyllaridae.

6.1.2 The style of presentation shall be declared as follows:

- (i) whole: lobster, rock lobster, spiny lobster, crawfish, slipper lobster, bay lobster, sand lobster;
- (ii) whole, split: split lobster, split rock lobster, split spiny lobster, split crawfish, split slipper lobster, split bay lobster or split sand lobster;
- (iii) tail: [lobster tail], rock lobster tail, spiny lobster tail, crawfish tail; slipper lobster tail, bay lobster tail, sand lobster tail;
- (iv) tail meat: lobster tail meat, rock lobster tail meat, spiny lobster tail meat, crawfish tail meat, slipper lobster tail meat, bay lobster tail meat, and sand lobster tail meat. (If tail in one piece, product may be designated lobster tail meat (whole), rock lobster tail meat (whole), spiny lobster tail meat (whole), crawfish tail meat (whole), slipper lobster tail meat (whole), bay lobster tail meat (whole), sand lobster tail meat (whole)).

(v) claw meat: lobster claw meat, lobster meat;

(vi) meat: lobster meat, rock lobster meat, spiny lobster meat, crawfish meat, slipper lobster meat, bay lobster meat, sand lobster meat.

6.1.3 If cooked the word "cooked" shall appear on the label.

6.1.4 (i) In addition there shall appear on the label the term "quick frozen" or "frozen"* whichever is customarily used in the country of sale to describe a product subjected to the freezing process as defined in sub-section 2.2.2.

(ii) Lobster, rock lobsters, spiny lobsters and slipper lobsters in any style of presentation may be individually quick frozen, and in such case the labelling may be "individually quick frozen" or "individually frozen".

6.1.5 In addition to the specified labelling designations above, the usual or common trade names of the variety may be added so long as it is not misleading to the consumer in the country in which the product will be distributed.

6.2 Size Classification

If quick frozen lobsters, rock lobsters, spiny lobsters, crawfish, slipper lobsters or tails therefrom are labelled according to size, all lobsters in the container so designated must be within the declared size range subject to the tolerance provided in Annex C.

6.3 List of Ingredients

No specific label declaration shall be required to indicate that rock lobsters, spiny lobsters, crawfish or slipper lobsters have been glazed unless the glazing water contains additives or other ingredients, in which case they shall be declared in the list of ingredients on the label in descending order of proportion. The provisions of subsection 3.2(b) and 3.2.(c) of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969) shall also apply.

6.4 Net Contents

6.4.1 The net contents shall be declared by weight in either the metric system ("Système International" units) or avoirdupois or both systems as required by the country in which the food is sold.

6.4.2 Where products have been glazed the declaration of net contents of the product shall be exclusive of the glaze.

6.5 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the food shall be declared.

6.6 Country of Origin

6.6.1 The country of origin of the food shall be declared.

6.6.2 When the food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposes of labelling.

6.7 Lot Identification

Each container shall be permanently marked in code or in clear to identify the producing factory and the date of production.

7. METHODS OF SAMPLING, ANALYSIS AND EXAMINATION

The methods of analysis and sampling described hereunder are international referee methods, which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling.

7.1 Sampling for Destructive Examination

Sampling of lots for examination of the product shall be in accordance with the FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (CAC/RM 42-1969) (AQL = 6.5).

* "Frozen": This term is used as an alternative to "Quick Frozen" in some English speaking countries.

- (i) The sample unit size for non-destructive examination of deglazed lobsters, rock lobsters, spiny lobsters, crawfish, slipper lobsters, bay lobsters, sand lobsters and tails of lobsters, rock lobsters, spiny lobsters, bay lobsters or sand lobsters of styles 6.1.2 (i), (ii) and (iii) for tolerances for physical defects in accordance with Annex C shall be 20 whole lobsters or lobster tails.
- (ii) A sample unit of 3 lobsters, rock lobsters, spiny lobsters, crawfish, slipper lobsters, bay lobsters or sand lobsters or the tails thereof shall be taken from each 20 that have been non-destructively examined for physical defects, for destructive sensory examination, for flavour and odour. If discoloured or damaged lobsters or lobster tails are found in the 20 then 2 of the 3 lobsters or tails selected for destructive examination may be those evidencing discolouration or damage.
- (iii) The sample unit size for examination of tail meat, claw meat or meat of styles 6.1.2 (iv), (v) and (vi) shall be 500 grams (1 lb) of meat or 1 unit of tail meat.

7.2 Determination of Net Contents of Products Covered by Glaze

A method for the determination of net contents of products covered by glaze is set out in Annex D.

7.3 Thawing of Meat

A sample is thawed by enclosing it in a film type bag and immersing in an agitated water bath held at approximately 20°C (68°F) until no hard core or ice crystals are felt. The complete thawing of the product is determined by gently squeezing the bag occasionally, taking care not to damage the texture of the product.

7.4 Examination of Physical Defects

Subject to the provisions of subsection 7.1.2 each sample unit shall be examined for physical defects set out in Annex C.

7.5 Sensory Examination

Sensory assessment shall be made only by trained persons and shall take place after the sample has been thawed or where applicable cooked in accordance with Annex E.

8. CLASSIFICATION OF DEFECTIVES

A container which fails to meet one or more of the following requirements shall be considered a "defective":

- (a) The quality requirements for the final product subject to the tolerance for physical defects per sample unit as shown in Annex C.
- (b) Appearance (sub-section 3.3.1)
- (c) Odour and flavour (subsection 3.3.2)
- (d) Texture (subsection 3.3.3)

9. LOT ACCEPTANCE

A lot will be considered as meeting the final product requirements of this standard when the total number of "defectives" does not exceed the acceptance number (c) of the appropriate Sampling Plan (AQL - 6.5) in the Sampling Plans for Prepackaged Foods (CAC/RM 42-1969) when the average net contents of all containers examined is not less than the specified minimum, and when the size of the lobsters complies with the declared count.

ANNEX A

The traditional practice followed in several countries of designating Nephrops norvegicus as Norway lobster and similarly qualified names is recognized and nothing in the standard shall prevent this practice continuing provided due precautions are taken in the labelling of the product to ensure that the consumer in those countries will not be misled.

ANNEX B

Definitions of Defects of Lobsters

dehydration	- areas of meat which have a whitish appearance or dryness affecting texture or palatability
dark discolouration	- black, brown or blue discolouration of meat or of the membrane on the underside of the tail
capacity	- the raw meat is not characteristically translucent
damaged	- less than five tail segments, cuts or scars penetrating the shell or crushed
incomplete removal of intestine	- any portion of intestine or content remaining
soft shell	- the shell is easily flexed by hand
shell fragments	- perceptible pieces of shell

ANNEX C

DEFECT TABLE I - WHOLE, SPLIT, TAIL - SHELL ON

(A sample unit is one lobster or lobster tail or one half lobster or lobster tail)

Defect	Minor	Major	Serious	Combined
Dehydration	10%	1		1
	10 - 20%	2		2
	Over 20%		4	4
Discolouration	(i) Membrane		4	4
	(ii) Meat		4	4
Damage				
	(i) Less than 5 Segs.	1		1
	(ii) Cuts/Scars	1		1
	(iii) Crushed		2	2
Incomplete removal of the intestine				
Tail - Shell on only		2		2
Soft Shell		2		2
Opacity of meat		2		2
				<u>25</u>

Any unit with a total of 4 points in the serious column is a defective
Any unit with more than 4 points in the major and minor columns combined is a defective

DEFECT TABLE II - TAIL MEAT AND MEAT
500 GRAMS OF MEAT OR 1 UNIT OF TAIL MEAT

Defect	Minor	Major	Serious
Dehydration - Cooked + Raw Meat			
	< 10%	1	
	10 - 20%	2	
	> 20%		4
Discolouration on Meat			
	(i) Yellow staining	1	
	(ii) Dark staining		4
Incomplete removal of the intestine		2	
Shell fragments			
	1 to 3 pieces	1	
	> 3 pieces	2	
Opacity (Raw Tail Meat only)		2	
Texture			
	(i) tough or fibrous tails	2	
	(ii) soft, spongy claws	2	

Any unit with a total of 4 points in the serious column is a defective
Any unit with more than 6 points in the major and minor column combined is a defective

Tolerance for Uniformity - Applicable to Styles (i) (ii) and (iii)

The average weight of lobsters in a container determined by dividing total weight of lobster by number, must be within designated weight range. No more than 10% of lobster by number may be outside the designated size range.

ANNEX D

DETERMINATION OF NET CONTENTS OF PRODUCTS COVERED BY GLAZE AND DETERMINATION OF WEIGHT OF INDIVIDUAL LOBSTERS, ROCK LOBSTERS, SPINY LOBSTERS, CRAWFISH, SLIPPER LOBSTERS, BAY LOBSTERS OR SAND LOBSTERS COVERED BY GLAZE

Procedure

1. Open the package containing quick frozen lobsters, rock lobsters, spiny lobsters, crawfish, slipper lobsters, bay lobsters or sand lobsters, immediately after removal from low temperature storage and place the contents in a container into which fresh water at room temperature is introduced.
2. Weigh a dry clean sieve with woven wire cloth with nominal size of the square aperture [to be determined]. The sieve must be of a diameter appropriate to the size of the lobster.
3. After all glaze that can be seen or felt has been removed, empty the contents of the container on the previously weighed sieve. Incline the sieve at an angle of about 20° and drain for two minutes.
4. Weigh the sieve containing the drained product. Subtract the mass of the sieve; the resultant figure shall be considered to be the net content of the package.

ANNEX E

COOKING PROCEDURES

1. Steaming - Steam the sample in a closed dish of an appropriate size over boiling water until the internal temperature of the product reaches 70°C (160°F). The dish should be covered and should be kept in a water bath at 60°C (140°F) during testing.
2. Boiling in Bag - Place the [thawed] sample into a boilable film-type pouch and seal. Immerse the pouch and its contents into boiling water and cook until the internal temperature of the product reaches 70°C (160°F). Remove the boiled product from the pouch and drain.

DRAFT STANDARD FOR CANNED CRAB MEAT
(advanced to Step 8 of the Procedure)

1. SCOPE

This standard applies to canned crab meat and does not apply to speciality products where the crab meat constitutes only a part of the edible contents nor to products which include other edible parts of the crab.

2. DESCRIPTION

2.1 Product Definition

Canned Crab Meat is the product consisting of leg, claw, body and shoulder meat from which the shell has been removed, of any of the edible species of the sub-order Brachyura of the order Decapoda and all species of the family Lithodidae packed in hermetically sealed containers with or without packing medium and so processed with heat as to prevent spoilage.

2.2 Presentation

Canned Crab Meat shall be presented in one of the following styles:

2.2.1 Twin Face Pack (Two End Leg Pack)

The top and the bottom of the content of the pack shall consist of leg meat or leg meat together with either claw or shoulder meat, having their original conformation except that leg meat may be cut to fit the can width. The pieces shall appear well arranged and the inner portion of the content of the pack shall consist of (solid) pieces of crab meat and/or flakes.

2.2.2 Single Face Pack (One End Leg Pack)

Either end of the content of the pack shall consist of leg meat or leg meat together with either claw or shoulder meat having their original conformation except that leg meat may be cut to fit the can width. The pieces shall appear well arranged and the remaining content of the pack shall consist of (solid) pieces of crab meat and/or flakes.

2.2.3 Chunk Pack - consists of (solid) pieces or chunks of crab meat ($\geq 50\%$ m/m) and flakes.

2.2.4 Flake Pack - consists of flakes ($\geq 50\%$ m/m) and (solid) pieces and chunks.

2.2.5 Lump Pack - consists of large segments of crab meat from the back fin cavity of the blue crab only having its original conformation.

2.2.6 Claw Pack - consists of claw meat only, having its original conformation.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material

Canned crab meat shall be prepared from clean, sound crab of the designated species which are alike immediately prior to the commencement of processing and of a quality suitable for human consumption.

3.2 Optional Ingredients

- Potable water of properties in accordance with WHO requirements contained in the "International Standard for Drinking Water"
- Salt

3.3 Processing

The crab shall be cooked and the meat shucked. Damaged or discoloured meat associated with bruises or small wounds shall be removed. The meat shall be cleaned and packed in cans, with or without wrapping.

3.4 Canned Product

(a) Appearance

On opening the cans shall appear well filled and be well arranged where appropriate for the style of presentation. The colour of the product shall be characteristic of the species canned and shall be practically free from discolouration (e.g. blue discolouration, browning or black spots).

(b) Odour and Flavour

Canned crab meat shall have an odour and flavour characteristic of the species canned and be free from objectionable odours and flavours of any kind.

(c) Texture

Canned crab meat shall have a texture characteristic of the species canned and shall not be mushy.

(d) Objectionable Matter

Canned crab meat shall be free from foreign material and practically free from struvite crystals, shell particles, antennae or other extraneous material.

3.5 Classification of "Defectives"

A container which fails to meet any of the applicable requirements for appearance, odour and flavour, texture and objectionable matter as set out in subsections 3.4(a), (b), (c) and (d) shall be considered a "defective".

3.6 Lot Acceptance

A lot will be considered as meeting the requirements of this standard when the total number of "defectives" does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Prepackaged Foods (CAC/RM 42-1969) and when the average net contents and the average weight of drained crab meat of all containers examined is not less than the specified minimum.

4. FOOD ADDITIVES

The following provisions in respect of food additives and their specifications as contained in Section ... of the Codex Alimentarius are subject to endorsement by the Codex Committee on Food Additives:

<u>pH Regulating agents</u>	<u>Max. level in the final product</u>
Disodium diphosphate (Syn.: Sodium acid pyrophosphate) Phosphoric acid	} 5 g/kg, singly or in combination expressed as P ₂ O ₅ (endorsed, ALINORM 74/12, para 83)
Citric acid	
<u>Firming agent</u> Aluminium sulphate	Limited by GMP (endorsed, ALINORM 74/12, para 83)
<u>Sequestering agent</u> Calcium disodium EDTA	180 mg/kg as Aluminium (endorsement postponed)
<u>Flavour enhancer</u> Monosodium glutamate	275 mg/kg 0.5 g/kg

5. HYGIENE (endorsed by Codex Committee on Food Hygiene - ALINORM 76/13, para 10)

5.1 It is recommended that the product covered by the provisions of this standard be prepared in accordance with the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1 - 1969)

5.2 To the extent possible in good manufacturing practice the product shall be free from objectionable matter.

5.3 When tested by appropriate methods of sampling and examination, the product:

(a) shall be free from micro-organisms capable of development under normal conditions of storage: and

(b) shall not contain any substances originating from micro-organisms in amounts which may represent a hazard to health.

5.4 Products with an equilibrium pH above 4.6 shall have received a processing treatment sufficient to destroy all spores of Clostridium botulinum, unless growth of surviving spores is permanently prevented by product characteristics other than pH.

6. WEIGHTS AND MEASURES

6.1 Fill of Container

6.1.1 Wrapped - The container shall be filled so that the net contents by weight shall be not less than 80% of the water capacity of the container

6.1.2 Unwrapped - The container shall be filled so that the net contents by weight shall be not less than 88% of the water capacity of the container.

6.1.3 Drained Crab Meat

The container shall be so filled with crab meat that the drained crab meat shall be not less than:

- Wrapped - 64 per cent m/m
- Unwrapped - 70 per cent m/m

of the water capacity of the container.

7. LABELLING

In addition to Sections 1, 2, 4 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969) the following specific provisions which have been or have to be endorsed by the Codex Committee on Food Labelling shall apply.

7.1 The Name of the Food (endorsed, ALINORM 74/22A, para 17)

The name of the product shall be "crab meat" preceded or followed by the common or usual name applied to the species legally accepted in the country where the product is distributed.

7.2 Presentation

The forms of the pack as described in subsection 2.2.1 - 2.2.6 respectively shall be declared as follows:

- 7.2.1 - Twin Face Pack (Two End Leg Pack)
- 7.2.2 - Single Face Pack (One End Leg Pack)
- 7.2.3 - Chunk Pack
- 7.2.4 - Flake Pack
- 7.2.5 - Lump Pack
- 7.2.6 - Claw Pack

7.3 List of Ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion.

7.4 Declaration of Contents

The weight of the net contents exclusive of wrapping material and the weight of the drained crab meat shall be declared in either the metric system ("Système International" units) or avoirdupois or both systems as required by the country in which the food is sold.

7.5 Name and address (endorsed, ALINORM 74/22A, para 17)

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the food shall be declared.

7.6 Country of Origin (endorsed, ALINORM 74/22A, para 17).

The country of origin of the food shall be declared.

7.7 Lot Identification

Each container shall be embossed or otherwise permanently marked in code or clear to identify the producing factory, the date of production and the species packed.

8. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods and subject to endorsement by the Codex Committee on Methods of Analysis and Sampling.

8.1 Sampling for Destructive Examination

Sampling of lots for examination of the product shall be in accordance with the FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (CAC/RM 42-1969) (AQL - 6.5).

8.2 Determination of Drained Crab Meat

Drained crab meat shall be determined by averaging the results from all containers of a sample representing a lot, provided that there shall be no unreasonable underweight in any individual container.

8.2.1 Specifications for Circular Sieve

- (i) If the quantity of the total contents of the container is less than 1.5 kg (3 lbs.), use a sieve with a diameter of 20 cm (8 in.).
- (ii) If the quantity of the total contents of the container is 1.5 kg (3 lbs.) or more, use a sieve with a diameter of 30 mm (12 in.).
- (iii) The meshes of sieves are made by so weaving wire as to form square openings of 2.8 mm by 2.8 mm.

8.2.2 Procedure

The weight of drained crab meat shall be determined by keeping the containers at a temperature of not less than 20°C (68°F) or more than 24°C (75°F) for a minimum of 12 hours prior to examination. After opening, tilt the container so as to distribute the contents over the meshes of a circular sieve which has been previously weighed. Remove all wrapping material and incline the sieve at an angle of approximately 17° - 20° and allow the crab meat to drain two minutes, measured from the time the product is poured into the sieve. Weigh the sieve containing the drained crab meat.

8.2.3 Calculation and Expression of Drained Crab Meat

The percentage m/m drained crab meat is given by the following equation:

$$\frac{m_2 - m_1}{m_w} \times 100$$

where m_1 = mass of the sieve

m_2 = mass of the sieve plus drained product

m_w = water capacity of the container as determined in subsection 8.3

8.3 Determination of Water Capacity of Container

Procedure

- (1) Select a container which is undamaged in all respects.
- (2) Wash, dry, and weigh the empty container after cutting out the lid without removing or altering the height of the double seam.
- (3) Fill the container with distilled water at 20°C to 5 mm vertical distance below the top level of the container, and weigh the container thus filled.
- (4) Subtract the weight found in (2) from the weight found in (3). The difference shall be considered to be the weight of water required to fill the container.

8.4 Determination of Net Content

Net content shall be determined by averaging the results from all containers of a sample representing a lot, provided that there shall be no unreasonable shortage in any individual container.

Procedure

- (1) Weigh the unopened container.
- (2) Open and pour out the contents and allow the container to drain for two minutes.
- (3) Weigh the empty container, including the top and wrapping material if present, after removing excess broth or liquid and adhering meat.
- (4) Subtract the mass of the empty container and wrapping material, if present, from the mass of the unopened container. The resultant figure shall be considered to be the net content.

8.5 Examination of Product Quality

After examination for net content, the sample taken for destructive examination shall be examined organoleptically by persons trained in such examination.

PROPOSED DRAFT STANDARD FOR CANNED MACKEREL AND JACK MACKEREL

(returned to Step 3)

1. SCOPE

This standard applies to canned mackerel and canned jack mackerel packed with or without seasonings in natural juices, brine (water with salt added), oil, sauce, marinade or aspic. It does not apply to speciality products where mackerel only constitutes a portion of the edible contents.

2. DESCRIPTION

2.1 Product Definition

Canned mackerel and canned jack mackerel is the product prepared from fish of species of the genera listed below, packed with or without seasonings in natural juices, brine (water with salt added), oil, sauce, marinade or aspic in hermetically sealed containers and so processed by heat as to prevent spoilage. The pack shall not contain a mixture of species.

The products are prepared from species of the following families and genera:

Mackerel:

Scombridae

Scomber

Scomberomorus

Rastrelliger

Acanthocybium

Grammatorcynus

Auxis

Gasterochisma

Jack Mackerel

Carangidae

Trachurus

2.2 Presentation

The product shall be presented in one of the following styles: whole or in various cut forms with or without bone or skin. It may be packed with or without packing media and/or seasoning ingredients. It may also be smoked.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material

The product shall be prepared from clean, wholesome, sound fish belonging to one of the species listed under sub-section 2.1. The raw material may be either fresh, frozen or smoked and must be suitable for human consumption.

3.2 Packing Media

3.2.1 Edible oils, tomato sauce, other sauces, marinades and aspic - in conformity with the relevant Codex Alimentarius standards.

3.2.2 Potable water - of properties in accordance with the WHO requirements contained in the "International Standard for Drinking Water".

3.3 Optional Ingredients

3.3.1 Salt.

3.3.2 Spices and spice oils and extracts, herbs, vegetables and vegetable seasonings and vinegar, and wine in conformity with the relevant Codex Alimentarius standard.

3.4 Processing

The head (including gills), tail and viscera (excluding kidneys) shall be completely removed; where possible the kidneys, blood and pectoral fins and scutes shall also be removed; damaged flesh associated with bruises and/or blood spots shall be cut away; the fish shall be well washed; the body cavity shall be thoroughly cleaned; the fish may be cooked and shall be well packed in accordance with the form of pack desired, in clean containers which are free from dents, rust or defective seams. After sealing the containers shall be heat processed and cooled.

3.5 Final Product

(a) Appearance

On opening, the cans shall be well filled with fish and be well packed in accordance with the appropriate mode of pack (2.2.3). The colour of the product and the packing material shall be characteristic for the species in the type of packing medium.

(b) Odour and Flavour - shall be characteristic of the species and type of packing medium and be free from objectionable odours and flavour of any kind.

(c) Texture - shall be characteristic of the species and shall not be mushy.

(d) Bones - bones or scutes when present should be soft.

(e) Defects and Tolerances - the product shall comply with the tolerances for defects as set out in Annex A.

3.6 Classification of Defectives

A container which fails to meet the end product requirements in accordance with 3.5 shall be considered a "defective".

3.7 Lot Acceptance

A lot will be considered as meeting the end product requirements of this standard when the number of "defectives" as classified in accordance with section 8 does not exceed the acceptance number (c) of the appropriate sampling plan (AQL - 6.5) in the Sampling Plans for Prepackaged Foods (1969).

4. FOOD ADDITIVES

The following additives in canned mackerel and canned jack mackerel are subject to endorsement by the Codex Committee on Food Additives:

<u>Additive</u>	<u>Maximum level in the final product</u>
Thickening or jellifying agents - to be specified	
Sodium carboxymethyl cellulose (CMC)	800 mg/kg
Natural flavours, e.g.)	
- spice oils)	Limited by G.M.P.
- spice extracts)	
Smoke flavours)	

5. HYGIENE

5.2 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969).

5.2 To the extent possible in good manufacturing practice the product shall be free from objectionable matter.

5.3 When tested by appropriate methods of sampling and examination, the product:

- a. shall be free from microorganisms capable of development under normal conditions of storage; and
- b. shall not contain any substances originating from microorganisms in amounts which may represent a hazard to health.

- 5.4. Products with an equilibrium pH above 4.6 shall have received a processing treatment sufficient to destroy all spores of *Clostridium botulinum*, unless growth of surviving spores is permanently prevented by product characteristics other than pH.

6. LABELLING

In addition to sections 1, 2, 4 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969) the following specific provisions which have to be endorsed by the Codex Committee on Food Labelling shall apply.

6.1 Name of the Food

The name of the food shall be mackerel or jack mackerel, whether qualified or not, used in accordance with the law and custom of the country in which the food is sold and in a manner so as not to mislead the consumer. A local designation may be used provided it is not misleading to the consumer in the country in which the product is distributed. The names mackerel and jack mackerel shall not be applied to fish of any species of genera other than those listed in subsection 2.1.

6.2 Presentation

Except where the product is in the form of whole dressed fish the method of presentation shall be adequately described on the label. The packing medium if present shall be declared.

6.3 List of Ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion. The subsections 3.2(b) and (c) of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969) are applicable.

6.4 Net Contents

The net contents shall be declared by weight in either the metric system ("Système International" units) or avoirdupois or both systems of measurement as required by the country in which the food is sold.

6.5 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the food shall be declared.

6.6 Country of Origin

6.6.1 The country of origin of the food shall be declared.

6.6.2 When the food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposes of labelling.

6.7 Lot Identification

Each container shall be embossed or otherwise permanently marked in code or clear to identify the producing factory, the date of production and the contents of the container.

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling.

7.1 Sampling for Destructive Examination

Sampling of lots for examination of the product shall be in accordance with the FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (CAC/RM 42-1969) (AQL - 6.5).

7.2 Sensory Examination

Sensory assessment of the product shall be made only by trained persons.

7.3 Determination of Net Contents

Net content shall be determined by averaging the results from all containers of a sample representing a lot, provided that there shall be no unreasonable shortage in any individual container.

Procedure

- (1) Weigh the unopened container.
- (2) Open the container and remove the contents, wash the container and cover and dry with absorbent paper or cloth.
- (3) Weigh the empty container, including the top.
- (4) Subtract the mass of the empty container from the mass of the unopened container. The resultant figure shall be considered to be the net content.

SAMPLING PLAN [To be developed]

ANNEX A (proposed by Canada)

DEFECT TABLE - CANNED MACKEREL PACKED IN BRINE OR NATURAL JUICES

TYPE OF DEFECT	ONE INSTANCE	ADDITIONAL INSTANCE
Blood clots	A clot greater than 10 mm in any dimension	Each additional occurrence
Discolouration	A significant discolouration of the flesh greater than 5 cm ² up to and including 10 cm ²	Each additional occurrence and for each significant discolouration over 10 cm ² , every additional complete 5 cm ²
Skin in free liquid	Free liquid contains excessive amounts of skin fragments	-
Incomplete removal of fins	An attached pectoral or tail fin or part thereof	Each additional occurrence
Belly wall (black membrane)	A piece greater than 3 cm ² up to and including 5 cm ²	Each additional occurrence and, for each piece greater than 5 cm ² , every additional complete 5 cm ²
Improper cleaning	Fragments of viscera present	

Allowable Tolerances for Defects: a sample unit is considered defective if it contains a total of more than 10 instances of defects.

ANNEX B (proposed by USA)

DEFECT TABLE - CANNED MACKEREL AND JACK MACKEREL

DEFECT	DEFECT CATEGORIES	
	MINOR	MAJOR
<u>Trimming</u>		
(i) A container with parts of the fish, fins, and/or tail incompletely removed from the fish, but still attached	1	
(ii) Trimming of the head not posterior to posterior gill covering or the cut edges are not perpendicular	1	
(iii) A container in which fish are found with the head not removed, or head parts, fins and/or tails present in a detached form		2
<u>Cleaning and Evisceration</u>		
(i) A container in which fish contain the complete "Y" with both lobes attached		2
(ii) A container in which the fish body cavities are found to contain more than a slight amount of feed, regardless of the presence or absence of the entrail		2
<u>Blemishes</u>		
(i) A container found to have skin fragments in excess of 1/4 per cent of the net weight, except in skin-on packs	1	
(ii) A container in which fish are found to have prominent blood streaks, blood clots and/or bruises in excess of 1 per cent of the net weight	1	
(iii) Skin-on pack; a container in which fish with more than 1 inch of flesh exposed in the greatest dimension due to slipped, sloughed or mutilated skin	1	
<u>Bone Material</u>		
A container in which bones are found (except in regular pack which shall have soft bones) in quantities exceeding 1/2 per cent of the net weight	1	
<u>Texture</u>		
(i) A container in which the fish are found to be slightly soft or slightly loose in texture	1	
(ii) A container in which the fish are very soft and readily breaking into pieces		2
<u>Honeycombed Fish</u>		
A container in which is found fish with a pitted condition due to the cellular breakdown of the flesh caused by bacterial spoilage		2
<u>Flavour</u>		
A container in which the flavour of the fish and/or packing media is not normal and typical for the type of product in accordance with the indicated form of pack		2
<u>Colouration</u>		
A container wherein the colouration of the fish and/or packing medium is not characteristic of the normal type of product in accordance with the indicated form of pack		2
<u>Packing Media (oil or sauce pack only)</u>		
A container having exuded water in the covering oil or sauce in an amount 30 per cent or more of the total volume of oil or sauce	1	
<u>Container Packing</u>		
A container not properly packed with fish in accordance with the indicated form of pack	1	
A container which contains more than 4 major defect points, or a combination of more than 4 major and minor defect points shall be considered a "defective"		

REVISED PROPOSED DRAFT STANDARD FOR CANNED SARDINES AND SARDINE-TYPE PRODUCTS
(Step 3)

1. SCOPE

This standard applies to canned sardines and sardine-type products as defined below.

2. DESCRIPTION

2.1 Product Definition

Canned Sardines and sardine-type products is the product:

a. Prepared from small fish of the species

Sardina pilchardus (Walbaum)

Sardina sardina

Sardinops caerulea, *melanostica*, *neopilchardus*, *ocellata*, or *sagax*

Sardinella aurita, *anchovia*, *brasiliensis*, or *eba*

Clupea harengus

Clupea antipodum, *bassensis*, or *fuegensis*

Sprattus sprattus (*Clupea sprattus*)

Hyperlophus vittatus

Fluvialosa viaminghi

Etrumeus micropus

Ethmidium maculatus

b. Packed, pre-cooked or not, smoked or unsmoked, in hermetically sealed containers in:

(i) their own juices with or without added oil; or

(ii) brine (water with salt added); or

(iii) edible oil; or

(iv) tomato or other sauce

with or without permitted optional ingredients.

c. Processed with heat to prevent spoilage.

2.2 Presentation

2.2.1 The fish shall be neatly arranged within the can.

2.2.2 At least $\sqrt[3]{}$ fish shall be contained in each can.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material

Canned Sardines and sardine-type products shall be prepared from clean, wholesome, and sound fish belonging to one of the species listed under sub-section 2.1(a). The raw material may be either fresh, frozen or smoked and must be suitable for human consumption.

3.2 Packing Media

3.2.1 Edible oil, tomato sauce, other sauces, brine (water with salt added) and natural juice (exuded water). The packing medium used shall be in good condition, and shall comply, where appropriate, with the Codex standard.

3.2.2 Potable water shall have properties in accordance with WHO requirements contained in the "International Standard for Drinking Water."

3.3 Optional Ingredients

- Salt

- Spices and Spice oils and extracts, herbs, vegetables and vegetable seasonings, vinegar and wine

All products used as ingredients shall comply with Codex standards as appropriate. Where Codex standards do not exist, the ingredients shall be in good condition and shall be free from abnormal taste, flavour or odour.

3.4 Processing

Head and gills shall be completely removed. Scales and/or tail may be removed. The fish shall be well washed.

The fish may be gutted. If gutted, it shall be practically free from visceral parts other than roe or kidney. If ungutted, it shall be practically free from undigested feed or vent feed which would impair the quality of the product.

The fish may be cooked and shall be well packed in accordance with the form of pack desired, in clean containers which are free from dents, rust or defective seams. After sealing the containers shall be heat processed and cooled.

3.5 Final Product

3.5.1 Appearance

- a. The product in a can shall comprise fish:
 - (i) reasonably uniform in size, i.e. no fish more than 25% above or below the average weight of the individual fish;
 - (ii) of an appearance and colour characteristic of the species processed and packed in the manner indicated;
 - (iii) neatly cut to remove the head;
 - (iv) without excessive ventral breaks (unsightly rupture of the ventral area), or breaks and cracks in the flesh.
- b. The packing medium shall be of normal colour and consistency for the type.
- c. There shall be no excessive (i.e. over 1.5 cm) space between the fish and any side of the can.
- d. The product shall be free from foreign matter.

3.5.2 Odour and Flavour

The product shall have an odour and flavour characteristic of the species and type of packing medium, and be free from objectionable odours and flavours of any kind.

3.5.3 Texture and Colour

The fish shall be reasonably firm, free from mushiness, with soft bones. The colour of the flesh shall be characteristic of the species and type of pack.

3.5.4 Defects and Tolerances

The product shall comply with the definition and essential quality factors as set forth in this standard, subject to tolerance allowances as defined and set out in Annex A.

Note

"Sardines", Smoke flavoured

A definition for smoke flavoured products as distinct from smoked products may need to be included in the Standard. Specific tolerances for defects may be necessary.]

3.6 Classification of "Defectives"

A container which fails to meet the end product requirements in accordance with subsection 3.3, shall be considered a "defective".

3.7 Lot Acceptance

A lot will be considered as meeting the end product requirements of this Standard when the total number of "defectives" as classified according to Annex A, does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Prepackaged Foods (CAC/RM 42-1969), and when the average net contents of all containers examined is not less than the declared weight provided there is no unreasonable shortage in individual containers.

4. FOOD ADDITIVES

(Countries proposing additives, to provide maximum levels of use and technological justification).

5. HYGIENE

5.1 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969) and the hygiene provisions of the Code of Practice for Canned Fish.

5.2 To the extent possible in good manufacturing practice, the product shall be free from objectionable matter.

5.3 When tested by appropriate methods of sampling and examination, the product :

- a. shall be free from microorganisms capable of development under normal conditions of storage; and
- b. shall not contain any substances originating from microorganisms in amounts which may represent a hazard to health.

5.4 Products with an equilibrium pH above 4.6 shall have received a processing treatment sufficient to destroy all spores of *Clostridium botulinum* unless growth of surviving spores is permanently prevented by product characteristics other than pH.

6. WEIGHTS AND MEASURES

The product may be packed by weight and/or by number of fish.

7. LABELLING

In addition to Sections 1, 2, 4 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969) the following specific provisions apply subject to endorsement by the Codex Committee on Food Labelling.

7.1 Name of the Food

The name of the food shall be:

- (i) "Sardines" (to be reserved exclusively for *Sardina pilchardus* (Walbaum)); or
- (ii) "X sardines", where "X" is the name of a country, a geographical area or the species; or
- (iii) the common name of the species;

in accordance with the law and custom of the country in which the product is sold, and in a manner so as not to mislead the consumer.

In addition, if required by the country in which the product is sold, the common name shall be accompanied either by the common name of the species or by one of the terms "sardine style" or "sardine type" or by both descriptions.

7.1.1 The name of the packing medium used shall form part of the name of the food.

7.1.2 If the fish has been smoked or smoke flavoured, this information shall appear on the label [as part of the name or in close proximity to the name].

7.1.3 Where exuded water exceeds [12%] the product shall be declared as "X processed in own juice with Y". "X" shall be the name of the food, and "Y" shall be the name of the packing medium.

7.2 List of Ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion. The sub-sections 3.2(b) and (c) of the Recommended International Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969) are applicable.

7.3 Net Contents

7.3.1 The total net contents of the can shall be declared by weight in either the metric system ("Système international" units) or avoirdupois or both system of measurement as required by the country in which the food is sold.

7.3.2 The net drained weight of the fish and/or the number of fish in the can may be declared.

7.4 Name and Address

The name and address of the manufacturer, packer, distributor, importer, exporter or vendor of the food shall be declared.

7.5 Country of Origin

The country of origin (i.e. the country in which the product was processed and packed) shall be declared if its omission would mislead the consumer. [Such declaration shall take the form "Processed or packed in"].

7.6 Lot Identification

Each container shall be embossed or otherwise permanently marked in code or clear to identify the producing factory, the lot and the contents of the container.

8. METHODS OF ANALYSIS AND SAMPLING

Provision for:

Net weight

Drained weight

Determination of:

(i) fish species

(ii) packing medium

)
)
)
)
)

To be developed

Examination of product quality

After examination for net content or drained weight the samples taken for destructive examination shall be examined organoleptically by persons trained in such examination, and otherwise examined to check the samples' conformance with the requirements in the standard. The examinations shall only be done of samples kept at room temperature, i.e. approximately 20°C.

DEFECTS TABLE FOR SARDINES AND SARDINE TYPE PRODUCTS

<u>DEFINITION OF DEFECT</u>	<u>CLASSIFICATION</u>		
	<u>Serious</u>	<u>Major</u>	<u>Minor</u>
<u>Removal of Head</u>			
Head incompletely removed			
(a) a can containing more than 10 fish			
- more than 20% of fish	-	2	-
- up to 20% of fish	-	-	1
(b) a can containing 10 or fewer fish			
- more than 2 fish	-	2	-
- 2 or fewer fish	-	-	1
<u>Ventral Breaks</u>			
- More than 60% of fish in a can having ventral breaks of half the length or more of the abdominal cavity	4	-	-
- 30-60% of fish in a can with ventral breaks	-	2	-
<u>Broken or cracked flesh</u>			
- More than 60% of fish with greater than $\frac{1}{2}$ the width of the fish at the point of occurrence	4	-	-
- > 30 - 60%	-	2	-
- 20 - 30%	-	-	1
<u>Colour of packing oil</u>			
- Very brown (except smoked products)	-	2	-
- Slightly brown (except smoked products) or cloudy	-	-	1
<u>Odour and Flavour</u>			
- Distinctly objectionable odour and flavour (e.g. metallic, rancid)	6	-	-
<u>Texture</u>			
- Excessively mushy flesh (i.e. if the fish does not retain its shape after draining on a screen)	6	-	-
- Excessively tough or fibrous flesh	4	-	-
- Hard bones (not easily friable using thumb and forefinger)	-	-	1
<u>Discolouration</u>			
- Severe	-	2	-
- Slight or localised	-	-	1
<u>Exuded water (oil packs only)</u>			
- Water content (expressed as % of net contents of can)			
> 10-12% (if above 12% Section 8.13 applies)	4	-	-
- 8 - 10%	-	2	-
<u>Defective Unit</u>			

A can shall be considered a defective if it has:

- (a) More than 4 points for defects classified as serious; or
- (b) More than 8 points (oil packs) or 6 points (other packs) for defects classified as major; or
- (c) More than a total of 10 points (oil packs) or 8 points (other packs) for defects in the combined classifications (including minor).

NOTE: Packing media may need to be defined in regard to consistency for sauces.]