codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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ALINORM 78/18

CODEX ALIMENTARIUS COMMISSION
Twelfth Session, 1978

REPORT OF THE ELEVENTH SESSION OF THE CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS
Bergen (Norway), 27 September - 2 October 1976

INTRODUCTION

1. The Codex Committee on Fish and Fishery Products held its 11th Session in Bergen, Norway, from 27 September - 2 October 1976 by courtesy of the Government of Norway. Dr. O.R. Braekkan, Norway, was in the chair. The Chairman particularly welcomed the delegate of Gabon, whose country was represented for the first time.

2. Mr. K. Vartdal, Director-General of Fisheries of Norway, welcomed the participants on behalf of the Norwegian Government. He observed that many standards were now going through the acceptance procedure and that in the particular case of Norway the standards were now being translated into Norwegian so that the examination of harmonization with national legislation could begin.

3. He expressed the hope that other governments were going through the same exercise so that the objectives of Codex could progress towards the protection of the consumer and the encouragement of fair trade practices. With regard to the Codes of Practice, two of which had been adopted by the Commission at its recent session, he was of the opinion that these were of great value to the Fisheries Industry and wished the Committee success in its consideration of those codes which were before the present session.

4. The session Was attended by government delegations from the following 33 countries:

Australia	Germany, Fed.Rep. of	Peru
Belgium	India	Poland
Brazil	Iceland	Portugal
Bulgaria	Ireland	Senegal
Canada	Japan	Spain
Cuba	Morocco	Sweden
Czechoslovakia	Mexico	Switzerland
Denmark	Netherlands	United Kingdom
Finland	New Zealand	United States of America
Prance	Nigeria	Yugoslavia
Gabon, Rep.of	Norway	South Africa (Observer)

Observers were present from the following five international organizations:

Association des Industries de poisson de la CEE (AIPCEE)
Association of Official Analytical Chemists (AOAC)
International Institute of Refrigeration (IIR)
International Association of Pectin Producers
Marinalg International

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

ELECTION OF RAPPORTEURS

5. On the proposal of the Chairman, Mr. I.M.V. Adams (United Kingdom) and Mlle F.Soudan (France) were appointed as rapporteurs to the session.

ADOPTION OF PROVISIONAL AGENDA

6. The agenda was adopted without modification.

REVIEW OF MATTERS RELEVANT TO THE CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS AS DISCUSSED BY THE CODEX ALIMENTARIUS COMMISSION (11th SESSION) AND VARIOUS CODEX COMMITTEES

Matters arising from the 11th Session of the Codex Alimentarius Commission (March/April 1976, ALINORM 76/44)

Status of Standards and Codes

7. The Committee noted that the Commission had adopted with some amendments the following standards as Recommended Standards at Step 8 of the Procedure:

- Draft Standard for Quick Frozen Fillets of Flat Fish (ALINORM 76/18, Appendix II);
- Draft Standard for Canned Crab Meat (ALINORM 76/18, Appendix IV); and
- Draft Standard for Quick Frozen Shrimps or Prawns (ALINORM 76/13A, Appendix III).

8. The Commission had concurred with the recommendation of this Committee (ALINORM 76/13A, para 65) to provide for styles of products not specifically named in the Description Section and had further agreed with a proposal of the Group of Experts on Standardization of Quick Frozen Foods - erdorsed by the Committee on Food Labelling - to insert a new labelling provision covering these other presentations. The Commission, in agreeing to the use of the general provision on other styles confirmed that its action was not a reversal of the decision made at its 10th Session, but rather should be viewed as a derogation to meet special circumstances associated with the standards to which the new provision was being applied (ALINORM 76/44, para 276).

9. The Commission had observed that the procedure this Committee had followed with regard to allowing for the traditional use of a terra contained in the name of the food, e.g. "prawn" for species which were not true prawns (Dublin Bay Prawn), had also been used by other Committees. The Committee noted that the Commission had requested the Committee on General Principles to deal with the general question of the use of such terms in standards on the basis of a paper to be prepared by France on the question of greater flexibility in the elaboration of standards (ALINORM 76/44, paras 97-98, 326).

10. The Committee noted that the Commission had concurred with the recommendation of this Committee and the Committee on Food Hygiene and had adopted the two Codes hereunder at Step 8 of the Procedure with the omission of Steps 6 and 7:

- Code of Practice for Fresh Fish (ALINORM 76/13A, Appendix II); and
- Code of Practice for Canned Fish (ALINORM 76/13A, Appendix III).

Food Additive Matters

11. The Committee noted that the Commission had requested the commodity committees to be quite specific when proposing food additive provisions for substances which interacted with food or otherwise underwent change in the food. Appropriate analytical parameters and methods of analysis on the basis of which the provisions could be checked for compliance were to be provided by the Committee (ALINORM 76/44, para 48). It was also noted that the Commission had endorsed the Principle Relating to the Carry-over of Additives into Food as a Guide for Commodity Committees when preparing standards (ALINORM 76/44, para 121).

12. The Committee was informed that the Commission had agreed with a proposal of the Food Additives Committee that modifications made in the endorsement status of additives in Step 9 Standards need not follow the Amendment Procedure (ALINORM 76/44, para 122). This decision applied to the Standard for Canned Shrimps or Prawns (CAC/HS 37-1970) where the use of amaranth and erythrosin (30 mg/kg, singly or in combination with other colours) was "temporarily endorsed" and "endorsed", respectively (ALINORM 76/12, Appendix II, paras 16-17).

13. The Committee noted the instructions of the Commission that governments be requested to provide information regarding contaminants - in particular heavy metals - for all products for which standards were being elaborated (ALINORM 76/44, para 253 - see also para 154 of this Report).

Food Hygiene Committee

14. The Committee was informed of the amendment to the terms of reference of the Committee on Food Hygiene, which implied that not only the hygiene provisions in standards but also those in codes would-be subjected to its review (ALINORM 76/44, para 138). The Committee took note of the Commission's recommendation that commodity committees be represented when their work is being examined by the Hygiene Committee (ALINORM 76/44, para 133).

Commodity Studies - New Standards

15. The Committee was informed that at its next session the Commission would receive a recommendation from the Coordinating Committee for Europe on the feasibility of standardizing vinegar. The Committee further noted that the Committee on Food Additives had been requested to develop a standard for food grade salt.

Matters arising from the 13th Session of the Codex Committee on Food Hygiene (May 1976 -ALINORM 73/13)

16. The Committee noted that the Food Hygiene Committee would discuss at its next session the desirability of reviewing, after a certain number of years, those codes which had been advanced to Step 8 of the Procedure (ALINORM 78/13, para 41). The Committee further noted that the Code of Hygienic Practice - General Principles of Food Hygiene - was presently being revised. Any consequential amendments to the Fish

Codes of Practice could be considered in due course (Executive Committee, ALINORM 76/4, para 27). The Committee agreed to deal with matters related to specific standards and codes during the Session when these documents were discussed.

Matters arising from the 11th Session of the Codex Committee on Food Labelling (March 1976 -ALINORM 76/22A)

17. The Committee noted that the Food Labelling Committee, which at its last session had only reviewed the labelling sections of Step 8 standards, had generally endorsed a proposal from the Group of Experts on Quick Frozen Foods (ALINORM 76/25A, para 24) to amend the labelling sections of those standards in which a provision for styles not listed in the standard had been included (ALINORM 76/22A, para 33 - see also para 8 of this Report). The Group, noting that point (iii) of the additional styles provision as drafted by the Fish Committee required an appropriate label declaration of any additional styles sold under the name of the food, had suggested the following text:

> "If the product is produced in accordance with sub-section *[*styles*]* the label shall contain in close proximity to the words *[*Name of the product*]* such additional words or phrases that will avoid misleading or confusing the consumer".

18. The Committee took note of the change made by the Labelling Committee in the Standard for Quick Frozen Shrimps or Prawns (adopted at Step 8 by the 11th Codex Alimentarius Commission) in the provision for "Country of origin": "When the product undergoes further processing in a second country **....**". (ALINORM 76/22A, para 43).

19. In line with the text endorsed by the Committee on Food Labelling for the Step 8 standards the Committee further agreed to amend the provision for "Lot Identification" in the various standards under consideration: "Each container shall be permanently marked in code or in clear to identify the producing factory and the lot" (ALINORM 76/22A, para 44). It was realized that the provision might again be amended in the light of the discussions which the Labelling Committee would hold at its next session on a definition for lot identification clarifying the term "Lot".

20. The Committee was informed of the developments on the Guidelines for the Date Marking of Prepackaged Foods for the Use of Commodity Committees, in particular on the purpose and on the proposed instructions to the Codex Committees (ALINORM 76/22A, paras 67-93). It was agreed to postpone discussion of the document until agreement had been reached in the Labelling Committee on this particular issue. The Committee noted, however, that the Commission had agreed that, where appropriate, date marking provisions should be incorporated into standards (ALINORM 76/44, paras 112, 321).

Matters arising from the 9th Session of the Codex Committee on Methods of Analysis and Sampling (October 1975 - ALINORM 76/23)

21. The Committee noted the concurrence of the Committee on Methods of Analysis with its finding that e.g. thawing and draining procedures were not truly analytical methods requiring endorsement. It further agreed with the proposal to deal with the treatment of such procedures on a case by case basis (ALINORM 76/23, para 13). The Committee was also informed of the work of an Ad Hoc Working Group on Acceptance Sampling Plans for the Determination of Net Contents of Prepackaged Commodities, which was preparing details for a "Moderate Acceptance Plan".

STATEMENT BY THE REPRESENTATIVE OF THE FAO FISHERIES DEPARTMENT

22. The representative of the Fisheries Department informed the Committee on the work in progress with regard to the Codes of Practice for Crabs, Minced Fish and Battered and Breaded Fish. He further drew attention to the work by the Fisheries Department in the field of utilization of small pelagic fish and shrimp by-catch. At the forthcoming Government Consultation on Fish Technology (October 1976) the above matters as well as a technical paper on trade in dried fish and fishery products would be discussed. The recommendations from the Consultation would be presented to the Committee at its next session.

23. The representative further briefly reported on an FAO programme for regional cooperation in research between institutes in developing countries and on the provision by the Department of an advisory service on good manufacturing procedures, quality control and fishery products standards.

24. The Committee noted with great appreciation the work already accomplished and further being undertaken by the Fisheries Department. The Codes of Practice so far developed had been found most helpful to existing fisheries as well as for the establishment of new fisheries in developing countries.

STATEMENT BY THE REPRESENTATIVE OF WHO

25. The representative of WHO informed the Committee of recent and planned activities of his organization in the field of food hygiene related to the work of this Committee.

26. A second Expert Committee on Microbiological Aspects of Food Hygiene which met in Geneva in March 1976 critically reviewed recent scientific developments in food microbiology so as to relate them to the further improvement of national and international food hygiene programmes. Particular attention was given to microbiological specifications for foods and to the cost-benefit aspects of microbiological testing of foods in food control and food hygiene programmes.

27. Another step in the development of microbiological specifications for foods would be taken when the 2nd. Joint FAO/WHO Expert Consultation on Microbiological Specifications for Foods meets in Geneva in February-March 1977. Concern had been expressed since the first consultation in 1975, on the justification and usefulness of microbiological end-product specifications. The second consultation would, therefore, as one of its main items, consider drafting guiding principles for the establishment and application of microbiological specifications. In the light of such discussions, the consultation would, among other specifications, consider those for pre-cooked frozen shrimps or prawns; and for processed frog legs; and would review the need for microbiological specifications in codes and standards prepared, or under preparation by the Codex Alimentarius Commission.

28. The Committee was reminded that the microbiological end-product specifications considered by the first Joint FAO/WHO Expert Consultation were parts of codes of practice, that is of documents of a purely advisory nature. It had been suggested that microbiological specifications for inclusion in mandatory standards would not be introduced until there was sufficient experience of the usefulness of microbiological end-product specifications m non-mandatory codes of practice.

29. The attention of the Committee was also drawn to the recent policy decisions resulting in the concentration of WHO activities on technical cooperation with the

member states. Work on the establishment of standards and criteria formed part of the continuing programmes although this work as such was not considered technical cooperation. The opportunities for post-graduate training of microbiologists were also mentioned.

CONSIDERATION OF DRAFT STANDARD FOR CANNED SARDINES AND SARDINE TYPE-PRODUCTS AT STEP 7

30. The Committee considered the above draft standard (ALINORM 76/18A, Appendix V) in the light of comments received from Australia, Belgium, Denmark, France, Fed.Rep. of Germany, Italy, Japan, Mexico, Netherlands, Norway, Thailand, United Kingdom, USA and South Africa (CX/FFP 76/3 and Appendices).

Scope (1)

31. It was pointed out that the restrictive provision in the scope stating that the standard did "not apply to speciality products where sardines or sardine type products only constitute a portion of the edible contents" was open to varying interpretations. It was noted that the term "portion" was not defined in the standard. Proposals were made to specify the minimum quantity of fish which should be in the container. Some delegations held the view that the lower limit should be related to the packing medium.

32. The Committee noted that in traditional packs - own juice, brine or oil - the fish portion for the most part varied between 70-80% and exceptionally was as low as 65%. For products with sauce or other foods the quantity of fish at times appeared to be lower. The Committee considered that for a product to be covered by the standard the amount of fish should not be quantified as a percentage and that "not less than half" of the edible content should be sardines or sardine type fish. Later during the discussions it was, however, agreed that the minimum limit for fish in products to be covered by the standard would be 60% m/m.

Product Definition (2.1)

33. As in previous years the Committee discussed whether the qualification "small" in relation to the fish to be used in the preparation of the product was appropriate (ALINORM 76/18A, para 87). It was noted that the present wording was ambiguous in that the description provided for the use of small fish independent of regional differences in the natural size of mature fish of the same species and differences in size of mature fish of different species. The term "small" could therefore lead to different interpretations and the term should thus be deleted.

34. Other delegations were of the opinion that in this case a point of principle would be lost. The Committee agreed to the following change in the wording: "(2.1.1) Canned sardines and sardine-type products are the products prepared from small fish. The following species shall be used.".

35. The delegations of Japan and Peru expressed strong reservations against the retention of the term "small", as they held the view that the present wording could exclude from the standard certain sardine-type species presently marketed as such in some areas.

36. The Committee agreed to include Engraulis ringens in the list of species. The delegation of Senegal proposed the listing of Sardinella senegalensis. However, at a later stage it was found that this was the same species as Sardinella aurita.

37. There was some discussion on the criteria which should be provided to the Committee before a decision could be made on the inclusion of species in the list

defining the product. It was agreed that samples should be submitted to the Committee for appraisal, accompanied by trade statistics (see also para 71 of this Report).

Forms of Packed Fish (2.2.1)

38. The Committee considered at length the desirability and the feasibility of setting a lower limit of fish per container and relating the number of fish in a container to its volume. At the 10th Session (1975) it had been agreed to request Governments to comment specifically on this matter (ALINORM 76/18A, para 91).

39. From the discussion it appeared that there existed a recognizable trade in cans containing two fish. Whereas most delegations could accept as a minimum specification this form of pack for can sizes in the range of 125 ml and though some delegations thought 3 fish more appropriate there was considerable opposition to allowing for only two fish in cans with a much larger volume. The delegation of Japan stated that its country marketed 300 000 cases per year of 176 ml cans containing two fish. The delegation of Peru indicated that its country produced large quantities of a sardine type product Sardinops sagax and Ethmidium maculatus, in 15 oz packs containing a minimum of two fish.

40. The Committee in relation to its earlier discussion on the meaning of the term "small" in the product definition considered relating number of fish and volume of container to the species. It further considered setting upper limits for the number of fish for a certain volume of the can.

41. The Committee ultimately agreed to delete the square brackets around the figure 2 in the standard indicating the minimum number of fish per can and not to relate the number of fish to the volume of the can. It was thought useful to ask Governments when requesting comments on the standard to indicate specifically details on the minimum number of fish in relation to can volume and to the species involved in the standard in relation to their size.

Forms of Packing Media (2.2.2)

42. The Committee noted that there was no request for packs with aspic (jelly) (2.2.2.7) and agreed to delete this form of pack from the standard. A consequential change was made in subsection 3.2.

Packing Media (3.2)

43. The Committee agreed to include a cross reference to subsections 2.2.2 and 2.2.3 to complement the mention of "other packing media" in the provision.

Optional Ingredients (3.3.3)

44. It was noted that whereas spices were considered to be food ingredients, spice oil and spice extracts were food additives and were listed as such; their deletion from this provision was agreed to.

45. With regard to vegetables, fruits and other kinds of foods it was pointed out that the scope allowed for a certain portion of the pack to be of a non-fish nature. The Committee discussed whether a limit should not be set for these ingredients, to restrict their use and to emphasize that their inclusion was for decorative purposes only.

46. It was agreed to revise the provision to read: "Spices, herbs, vegetable seasonings, vinegar and wine; vegetables and fruits for decorative and flavouring purposes only. The ingredients shall be suitable for human consumption and shall be free from abnormal taste, flavour or odour.

Processing (3.4)

47. The Committee discussed a proposal to subdivide the provision and to introduce a statement covering the filling weight of fish for different forms of pack. It was agreed that the present text adequately set forth the broad scheme of processing following which the final product as described further in the standard could be obtained. It was further pointed out that during earlier discussions limits contained in the original OECD draft standard for fish to be processed had been deleted as these could be checked on the end product.

48. To cover this point, the Committee revised an earlier decision and increased the minimum fish content required in the product covered by the standard from 50 to 60% m/m of packed fish and amended the scope section accordingly (see para 32 of this Report).

49. It was agreed that fish, if ungutted, should be practically free from undigested feed or vent feed without further qualifications.

Final Product (3.5)

50. The Committee considered a proposal made by the Fed. Rep. of Germany to introduce a provision for the drained weight of fish in the forms of pack covered by the standard which was as follows:

> "3.5.4 Drained Weight of Fish (Final Product Composition)
>
> The net drained weight of fish shall be not less than the following percentage (m/m) of the labelled net content of the can when packed in:
>
> - edible oil 70%
> - own juice, brine or water, edible oil with own juice 65%
> - sauces and other packing media 50%"

In view of differing opinions expressed the Committee considered that Governments should be requested to comment on the proposal before its inclusion in the standard (to follow 3.5.3).

51. To protect the interest of the consumer the Committee agreed, however, to require that "the can shall be well filled with fish" (3.5.1.3 amended). Should the proposal to include a provision for the drained weight of fish be included then a cross reference to that provision would be made in 3.5.1.3.

52. The Committee agreed that it was not necessary to refer to objectionable matter and GMP in the provision for the appearance of the final product (3.5.1.4) and agreed to the wording used in other standards, that is: "The final product shall be free from foreign matter

Food Additives (4)

53. The representative of the International Pectin Producers Association provided the Committee with technological data justifying the use of pectin in water based packing media. The Committee noted, however, that there was no evidence that the substance was employed at present in sardine packs.

54. The additives tentatively proposed in the present standard were discussed substance by substance. The Committee agreed that thickening and jellifying agents were for use in packing media only. It was agreed to include only those additives in current use and to delete arabic gun, tragacanta and tartaric acid.

55. The Committee agreed to provide for the use of alginic acid as calcium, potassium and sodium salts. Modified starches, agar agar, carrageenan, caroub bean gum, guar gum and alginates could be used singly or in combination up to a level of 20 g/kg. For the acidifying agents good manufacturing practice was recommended.

56. The technological justification for the use of thickeners was their ability to bind free liquid, to coat the surface of the fish, and to thicken the packing medium thus reducing abrasion and breakage. The acidifying agents were added to ensure processing at a constant pH and to adjust the taste. The modifications made with regard to the maximum level of use were included in the revised standard. With regard to contaminants, see para 154 of this Report.

Hygiene and Handling (5.1(i))

57. The Committee agreed to include a reference to the Code of Practice for Smoked Fish.

Name of the Food (6.1.4)

58. At its 10th Session the Committee had agreed to revise the provision on exuded water and to relate it to the product packed in edible oil (ALINORM 76/18A, para 101). At the time, as suggested by the "Nantes" working group, a limit of 12% for exuded water in a product containing oil had been recommended above which the product would have to be declared as processed in own juice with oil added. It was noted that the defect table covered two penalty ranges of exuded water: 3-10% and 10-12%. After some discussion it was agreed to remove the square brackets and to accept the proposed limit of 12%.

Other Presentations (6.1.5(new))

59. The Committee agreed to insert a labelling provision covering other presentations consequential to the relevant decision of the Commission (ALINORM 76/44, para 323).

Net Contents (6.3.2)

60. The Committee discussed whether or not to make mandatory a declaration of net drained weight of the fish and the number of fish in the can. It was agreed to leave this optional. It was noted that no method for the determination of drained weight had been specified for inclusion in the standard (see also, para 86 of this Report).

Determination of Net Contents (7.3)

61. The Committee adopted a proposal to amend the provision.

Defects Table - Annex A

62. The Committee was presented with a study made by Norway on the applicability of the present defect table (Conference Room Document). After discussion of the findings and other suggestions made by delegations some amendments were made in the classification of the defects.

63. Following a proposal by the delegation of Canada the Committee agreed to request Governments to comment on the need for including in the defects table a provision for uniformity in size and to make suggestions for the classification of this defect.

64. One delegation observed that certain optional ingredients might have influence on the colour of the packing oil. The Committee did not make any changes in this respect.

Status of the Standard for Sardines and Sardine-Type Products

65. The Committee agreed to return the Standard to Step 6 of the Procedure. It further agreed not to seek Government observations on the standard as a whole but to invite Governments to comment specifically on the following points:

(i) the need to relate the number and size of fish to the volume of a can (see paras 33-41);
(ii) the inclusion of a provision for the drained weight of fish in the final product (see para 50);
(iii) the additives listed and their proposed level of use - either singly or in combination (see paras 55-56);
(iv) the revised defect table and the proposal to lay down requirements for uniformity in size (sue para 62-63).

The revised standard is contained in Appendix II to this Report.

CONSIDERATION OF PROPOSED DRAFT STANDARD FOR CANNED MACKEREL AND JACK MACKEREL AT STEP 4

66. The Committee considered the above Proposed Draft Standard as contained in ALINORM 76/18A, Appendix V in the light of comments received from the governments of Australia, France, Fed. Rep. of Germany, Japan, Mexico, Netherlands, United Kingdom and South Africa (CX/FFP 76/4 and addenda) and further taking into consideration the report of a working group which had mot in Copenhagen (May 1976) to study the defects table (CX/FFP 76/7) and a Conference Room Document presented by the delegation of Norway on Exuded Oil and Water from Raw Packed Mackerel Fillets with high oil (Fat) contents in the Raw Fish.

67. The Committee was presented with a selection of samples of Canned Mackerel which the delegation of the Fed. Rep. of Germany had provided to demonstrate different types of pack and packing media (ALINORM 76/18A, para 71), and with a photographic display of defects by the delegation of Denmark.

Working Group

68. The Chairman of the working group - Mr. J.R. Brooker (USA) - reported on the findings of the Copenhagen meeting which also covered recommendations on provisions in the body of the standard. The Committee agreed to deal with the proposals when considering the relevant provisions and expressed its appreciation for the work done by the working group.

Scope (1)

69. The Committee was reminded of its discussions on the scope section of the Sardine Standard where weight limitation of the fish content for products to be covered by the Standard had been introduced. A similar limit was considered for the present standard. In view of the considerable cooking losses, which could vary extensively, the Committee agreed to require that the fish content be at least 50% m/m.

Product Definition. (2.1.1)

70. At the 10th Session of the Committee it had been agreed to request governments to provide production and trade data and further relevant information on the species listed in the standard (ALINORM 76/18A, para 67). It was noted that no information had been forthcoming directly from governments except from the government of Japan

(Conference Room Document 75/1.1) end that the mackerel products received by the working group had probably been largely Scomber.

71. The Committee agreed to delete the reference to Auxis and to place the other Scombridae genera with the exception of Scomber in square brackets. If no documented support for the inclusion of these species in the list was received then they would be removed. The Committee was reminded that in general for the inclusion of species the following supporting information was required:

(i) name of genus;
(ii) name of species and commercial names;
(iii) volume of annual catch;
(iv) annual export figures;
(v) form of processing (canned, frozen, etc.) preferably to be accompanied by samples.

Presentation (2.2)

72. The Committee considered the observation made by the Copenhagen Group which had queried whether all listed forms of packed fish were in fact manufactured on a commercial scale. After hearing the views of the delegations it was agreed to retain the present list with a minor amendment to the description of "solid pack".

Packing Media (3.2), Optional Ingredients (3.3.3) and Appearance (3.5.2.4 (new))

73. The Committee agreed to the same wording in these subsections as had already been discussed and agreed for the Sardine Standard.

Processing (3.4)

74. It was pointed out that the provision for the complete removal of the viscera was difficult to meet in machine filleted products and that roe and milt might remain. The Committee agreed to a rewording of the provision proposed by the delegations of Canada, Japan and USA which took into account this observation, and also agreed to further editing of the provision.

Appearance (3.5.2(new))

75. The Committee noted a proposal made by the delegation of the Fed. Rep. of Germany with regard to drained weight of fish (final product composition) and agreed to include a provision listing the minimum fish content for the different packs in square brackets in the standard. Some delegations expressed concern on the introduction of such a provision in the Standard in view of the great variations in packs.

Odour and Flavour (3.5.3 (new))

76. The Committee observed that the process to which the product was subjected would influence its odour and taste and agreed to include a reference to "process" in the provision.

Food Additives (4)

77. The Committee agreed to revise the section in the same way as for the Sardine Standard (see paras 54-56 of this Report). Since aspic jelly was among the packing media pectin was included in the list, to be used singly or in combination with other jellifying agents. With regard to food contaminants see para 154 of this Report.

Weights and Measures (6)

78. In the light of the decision taken on the inclusion in square brackets of a provision on drained weight of the fish the Committee agreed to retain the square brackets in the section.

Name of the Food (7.1)

79. The Committee agreed to specify that fish which has been fried should be declared as such (7.1.3). It further agreed that the limit beyond which a product containing oil with exuded water should be declared as "X processed in own juice with oil added" should be set at 12% exuded water (7.1.4). In this connection the delegation of the Fed. Rep. of Germany proposed to reverse the text in 2.2.2.4 to read "own juice with edible oil added". This proposal was not pursued.

Presentation (7.2)

80. The Committee agreed to the deletion of the words "adequately" and "if present" in order to make the text of the provision more precise.

Other presentations (7.1.5 (new))

81. Following the relevant decision of the Commission to make allowances for other presentations (2.2.3) a labelling provision covering these was inserted (see paras 8 and 17 of this Report.

Net Contents (7.4.2)

82. It was pointed out that for products packed in own juice it could be difficult to declare the drained weight because e.g. seasonal variations, size and freshness influenced the amount of exuded water. The provision was amended to apply to the product packed in brine or water only. The square brackets were retained.

Country of Origin (7.6)

83. There was some discussion on whether the declaration of the country of origin should be obligatory. The Committee noted that the present provision was extracted from the general standard for the Labelling of Prepackaged Foods and made no change.

Methods of Analysis and Sampling (8.4)

84. The Committee briefly discussed the determination of drained weight of canned fish in own juice or brine or water in relation to water capacity. Two methods, that of AOAC as contained in the standard and that of ISO (ISO R-90), were compared.

85. The Committee noted that the ISO determination of the water capacity was made on the closed empty can which limited its practical use in the case of imported products. The AOAC method was therefore retained.

86. It was further noted that in accordance with the requirements of the amended scope section a method for determination of washed drained weight would be required. The delegation of the Fed. Rep. of Germany undertook to examine the applicability of the recommended Codex method for mushrooms (CAC/RM 44/49-1972) and appropriate other methods and to report on its findings to the next session of the Committee.

Defect Tables (Report of Working Group - CX/FFP 76/7)

87. The Committee noted that the- Copenhagen Working Group had prepared two defect tables; one for fillets, bits and flakes and another for dressed fish and cutlets in various packing media. It was agreed to raise the limit for exuded water to 12% as a result of the decision previously taken on the name of the food (see para 79 of this Report) and to attach the defect tables to the standard for examination of their applicability.

Status of the Standard

88. The Committee agreed to return the Standard to Step 3 of the Procedure on the understanding that only those provisions which were in square brackets and the defect tables and possible consequential amendments would be discussed at the next meeting. The revised Proposed Draft Standard is contained in Appendix III to this Report.

CONSIDERATION OF DRAFT STANDARD FOR QUICK FROZEN HAKE AT STEP 7

89. The Committee considered the above draft standard as contained in ALINORM 76/13A, Appendix II in the light of comments received from the governments of Australia, France, Fed. Rep. of Germany, Japan, Netherlands, United Kingdom, USA and South Africa (CX/FFP 76/5 and addenda).

Product Definition

90. There was an extended discussion on the application of the term hake to the two genera covered under this heading. The discussion resolved into positions where there were countries in which the term hake was reserved for Merluccius and to other countries where the term hake could also apply to Urophycis. Some suggestions to change the name of the standard were made.

91. The Committee noted that the term hake had traditionally been applied to the genera Merluccius and Urophycis and agreed to the deletion of the names of the list of individual species.

Final Product - Appearance (3.3.1.3)

92. During the discussion of the defect table it was pointed out that the text could be interpreted as allowing for small pieces weighing less than 30 g (Annex A, B.10(i)) whereas in the provision for the final product it was stated that no piece shall be less than 30 g.

93. During a prolonged discussion the text in the Standard for Cod and Haddock dealing with small pieces was quoted (CAC/RS 50-1971, para 3.2.3).

94. Several delegations stated that current manufacturing practices could not guarantee complete absence of pieces below 30 g. The Committee agreed to request governments to comment on the text in the Standard as well as on the provision in the optional defect table.

Glazing (3.3.3 (new))

95. The Committee noted that the product covered by the Standard could be glazed and agreed to include a provision already adopted for the Standard for Quick Frozen Lobsters.

Name of the Food (6.1)

96. Discussion was renewed on the allocation of the name hake to species of Merluccius and Urophycis and to the use of the term "whiting" which in some countries was interchangeable with the name hake. The Committee recognized that in most cases this was a matter for national legislation.

97. It was noted that particularly in Spanish speaking countries Merluccius could rarely be described as whiting. The Committee agreed to keep the original text but to delete reference to whiting. The delegations of Morocco, Senegal and Spain reserved their position.

Other Presentations (6.1.3 (new))

98. A change similar to that made in other standards was agreed to (see paras 8 and 17 of this Report).

Cooking (7.3)

99. There was some discussion on whether the present method should not be replaced by an AOAC method (Journal AOAC, 59 (1): 225-226 (1976)). It was agreed to replace present reference method with the AOAC method.

Recommended Definitions - Annex A

Dehydration (Freezerburn)

100. The Committee agreed to revise the text as proposed by the delegations of the Netherlands and USA in their written comments and to relate the surface covered by dehydration (10 cm^2) to a sample unit of 1 kg.

Parasites

101. It was noted that the quality of the product could be affected by parasites of microscopic dimensions e.g. myxosporidia which influenced the organoleptic and textural characteristics of the product. It was agreed to provide for this type of parasitic infestation by expressing the provision in more general terms.

Ragged Edges and Tears and Scales

102. The Committee recognized that some irregularity of fillet edges was normal. They agreed to delete the definition and amended the defect (4) to "ragged and torn fillets". The definition of scales was considered superfluous and therefore deleted.

Bones

103. It was noted that in the defect table pinbones were indirectly defined and the Committee agreed that reference to them in the definitions was not necessary.

Small Pieces

104. It was agreed to remove the brackets from the definition of small pieces and to clarify the text dealing with small pieces larger than 30 g by specifying that their number should be limited to one per pack thus relating the allowable number of these pieces to the number of packs per kg.

Recommended Defect Table - Annex B

105. As a result of the discussion on the defect definitions consequential amendments were made throughout the table. The square brackets around Ragged and Torn Fillets (4) and Small Pieces (10) were removed.

106. The Committee noted that a sample would be considered defective if more than 4 points for defects classified as serious were found and agreed that a penalty of 5 points would suffice for a sample to be defective. A consequential change was made by charging the most serious defects with 5 points instead of 6.

107. The Committee had a its previous session included an alternative text for the defect "bones". Following a thorough consideration of the advantages of penalising bones 5 mm in any dimension versus measurement of length and diameter the Committee agreed that the general limitation of dimension provided the best safeguards and deleted the alternative text.

108. The figures placed in square brackets for loose scales (7(b)) and maximum allowable tolerances for defects in the major (b) and combined (c) classifications were agreed to and the brackets: deleted.

Status of the Standard

109. The Committee agreed to retain the Standard at Step 7 of the Procedure and to limit the discussion at its next session to the defects "dehydration", "bones" and "small pieces" and in conjunction with the latter the provision contained in 3. 3.1-3. Specific government comments were requested on these questions. The revised Draft Standard is contained in Appendix IV to this Report.

CONSIDERATION OF PROPOSED DRAFT STANDARD FOR QUICK FROZEN LOBSTERS, SPINY LOBSTERS AND SLIPPER LOBSTERS AT STEP 7

110. The Committee had before it the above draft standard (ALINORM 76/18, Appendix III) and government comments from Australia, Cuba, Denmark, France, Fed. Rep. of Germany, Japan, Netherlands, New Zealand, United Kingdom, USA and South Africa (CX/FFP 76/6 and appendices).

Title

111. The delegation of Cuba expressed the view that it was unnecessary and prejudicial to trade to use a title which contained anything more than Quick Frozen Lobster when in many countries the names of the other varieties of lobster mentioned had no significance. Several delegations supported that point of view.

112. Others stated that the title contained clearly identified species listed in the OECD multilingual dictionary and thus the term lobster unqualified in their countries referred only to the genus Homarus.

113. The Committee noted that from the consumer point of view the true importance of the standard with regard to nomenclature lay in the provisions of the labelling section and agreed to amend the title to "Proposed Draft Standard for Quick Frozen Lobsters" but to retain for linguistic reasons the present French and Spanish titles.

Product Definition (2.1)

114. A proposal was made to simplify the text for the same reasons as had been advanced for the change in the title of the standard.

115. After some discussion the Committee decided to maintain the present wording with the addition of a reference in 2.1.2 to lobsters of different varieties "and products thereof".

Process Definition (2.2.1)

116. The Committee agreed to replace reference to lobster varieties by the term "products".

Presentation (2.3.3 and 2.3.6 (new))

117. The Committee noted that there was an important difference between "cavity cleaned" and "cavity clean" and that the latter expression was intended. It altered the provision accordingly.

118. The Committee agreed to add a provision for "Other presentations" with the same wording as in previous standard (2.3.6).

Optional Ingredients (3.2)

119. Since there was no evidence for the use of sugars or vinegar as optional ingredients the Committee agreed to delete them. It was reported that spices and herbs were used and these were added to the list.

Glazing (3.3.4)

120. It was agreed that as an alternative to potable water allowance should be made for sea water of a suitable quality.

Food Additives (4)

121. The Committee noted that in the standard for shrimps and prawns a sulphur dioxide level of 100 mg/kg had been proposed for the raw product and 30 mg/kg for the cooked product and that several delegations supported similar provisions for the present standard, not as a preservative but to prevent discolouration.

122. Several other delegations pointed out that if the procedure set out under 3.1 Haw Material were followed then this treatment was unnecessary for any of the species covered by the standard.

123. The Committee recognized that for some countries processing under tropical conditions could pose special problems and agreed to the above levels which would be reviewed when revising the standard at a later date. It also agreed to include the antioxidant ascorbic acid or its sodium and potassiun salts at the level of 1000 mg/kg as also contained in the Recommended Standard for Quick Frozen Fillets of Cod and Haddock (CAC/RS 50-1971).

Thickening Agents

124. The Committee noted that thickening agents were not at present in use for products covered by the standard and deleted reference to them.

Hygiene (5)

125. The Committee agreed to revise this section and to add similar wording as contained in the Standard for Quick Frozen Shrimps or Prawns (ALINORM 76/18A, Appendix III) which had been endorsed by the Committee on Food Hygiene (ALINORM 78/13, para 24).

Name of the Food (6.1)

126. The Committee agreed to add to the declaration of the form of presentation "whole" the words "with head on". A similar change was made to the presentation provision (2.3.2). It was further agreed to remove the square brackets at 6.1.2(iii) and to delete 6.1.2(v) which referred to claw meat for which there was no trade. The delegation of Cuba registered an objection with regard to 6.1.1.

Size Classification (6.2)

127. It was pointed out that according to the defects table this provision dealt with weight classification rather than size classification. The Committee agreed to this change. As lobsters were also commonly classified by count it was further agreed to add the following sentence: "The product may be labelled by count provided that the actual count is in accordance with the number declared".

List of Ingredients (6.3)

128. A reference to cooking water was added to this provision to bring it into line with the text in the Standard for Quick Frozen Shrimps or Prawns.

Country of Origin (6.6) and Lot Identification (6.7)

129. The texts of these provisions were harmonized with those of previous standards.

Methods of Sampling, Analysis and Examination (7)

130. The Committee agreed to remove the square brackets at 7.1(iii) which referred to the sample unit size.

Classification of Defectives (8)

131. The word "container" was replaced by "sampling unit".

Defect Tables

132. The Committee had before it amendments to the provision on "Sampling for Examination for Defects" (7.1) and the definitions of defects (Annex B) and the defect table (Annex C.I) which had been prepared by an informal Working Group in which Australia, Canada, Cuba, New Zealand, USA and South Africa were represented and which were presented by the Chairman of the Group, Mr. J.R. Brooker (USA). The Committee agreed to all the proposals which were slightly amended during the discussions.

133. The Committee further agreed to include instead of the present table C.II an amended version presented by the USA in their written comments (CX/FFP 76/6) which was more detailed. A comparative check on the practical operation of these tables could then be made by national controlling authorities and reported to the next session of the Committee.

134. To facilitate testing and evaluation of the defect tables the following example was given:

> A shipment of lobster tails, comprising 500 15 kg-cartons, each carton containing approximately 50 tails weighing approximately 280 g each. Then:
>
> Lot Size (N) = 500 x 50
> = 25,000

From Sampling Plan 1 (Appendix I of CAC/RM 42-1969)

Lot Size (N) as previously calculated	=	25,000
Simple Size (n)	=	21
Acceptance Number (c)	=	3
Number of containers	=	500
Sample Size (containers)	=	6

For the lot, 21 tails would be drawn from 6 cartons for defect inspection.

The individual units for examination will be taken in a random manner from each of the containers which themselves should be randomly selected from the lot.

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 g (116) of meat or 1 unit of tail meat*]*.

Annex D (7.2 (new))

135. The Committee agreed to replace the present method with that already adopted in the Standard for Quick Frozen Fillets of Hake.

Annex D (old E)

136. The Committee agreed to remove under 2. "Boiling in Bag" a requirement that the sample should be "thawed".

Status of the Standard for Quick Frozen Lobsters

137. The Committee agreed to retain the Standard at Step 7 and to consider at its next session only the Definitions of Defects and the Defects tables and consequential amendments. The revised Draft Standard is contained in Appendix V to this Report.

138. The Committee expressed its appreciation for the extensive work carried out by the delegation of Prance in the preparation of the standard. Associated with this the Committee recognized the efforts of the informal Working Group in revising aspects of the standard.

CONSIDERATION OF CODES OF PRACTICE

139. An ad hoc Working Group comprising members of the delegations of Canada, Denmark, Ireland, Netherlands, Sweden, United Kingdom and the United States of America, the observer from South Africa and representatives of FAO and WHO met during the session of the Committee under the chairmanship of Dr. J.J. Doesburg of the Netherlands with Mr. C.J. McGrath of Ireland as rapporteur.

140. The Group examined the List of Amendments made in the Draft Code of Practice for Frozen Fish (ALINORM 76/18A, Appendix VI = CX/FFP 76/10) made by the Codex Committee on Food Hygiene at its 13th Session (May 1976) and agreed to recommend to the Committee that it should accept these amendments subject to a small number of minor changes in the text of an editorial nature. If these changes were acceptable it was recommended that this Draft Code of Practice for Frozen Fish be advanced as amended to Step 8 of the Procedure.

141. The Working Group further reviewed as requested by the Committee:

(i) Proposed Draft Code of Practice for Shrimps and Prawns; and
(ii) Proposed Draft Code of Practice for Smoked Fish in the light of government comments as set out in documents CX/FFP 76/14 and Addendum 1 and CX/FFP 76/12,

respectively. These codes were also examined to ensure they were in harmony with other codes of practice already elaborated.

142. The Group re-arranged certain portions of the text in these codes, revised the text of certain items, and added items which it thought necessary to clarify the meaning of the particular recommendations. In general with few exceptions, all recommendations received were incorporated by the Group in this revised text or amendments otherwise made to take account of the views of member governments.

143. The amended texts (which also included harmonization of changes made to other texts by the Codex Committee on Food Hygiene) were submitted by the Group for consideration by this Committee accompanied by some additional amendments to the Code for Shrimps and Prawns made as a result of subsequent discussion.

144. The Working Group held the view that certain public health aspects of provisions 2.2.2, 4.3.1 and 4.3.2 of the Smoked Fish Code were outside its competence.

145. The Committee agreed with the Working Group that the Secretariat be requested to formulate a subject index for the Codes now under elaboration and for further codes with the objective of providing a book of reference for all Codex Codes of Practice and ultimately for all Codex Fish Standards.

Status of the Codes

146. The Committee noted that the completed texts had received the unanimous approval of the Working Group and concurred with the recommendation for the advancement of the Codes to Step 8 (Frozen Fish) and 5 (Shrimps and Prawns, and Smoked Fish) respectively, and for the submission of the Codes to the next session of the Committee on Food Hygiene for consideration and endorsement of the hygienic provisions. Amendments to the Frozen Fish Code, which are of a substantial nature, are contained in a corrigendum to the Code (to be distributed early 1977). The revised Codes for Smoked Fish and for Shrimps and Prawns will be issued as CX/FFP 77/6 and 77/7 respectively.

147. The Committee expressed appreciation of the work of the Group and also wished to place on record its recognition of the valuable contribution made by the Committee on Food Hygiene in the formulation of these Codes of Practice and of the fruitful collaboration with the FAO Fisheries Department.

Code of Practice for Lobsters and Related Species

148. The Committee agreed that the Proposed Draft Code of Practice for Lobsters and Related Species (CX/FFP 76/16) be sent out to governments for comments at Step 3 of the Procedure.

Code of Hygienic Practice for Molluscan Shellfish

149. Due to the short time available the Committee did not have the opportunity to give full consideration to the Draft Code of Hygienic Practice for Molluscan Shellfish which had been referred to it for consideration. To avoid delay in the development of the Code the Committee recommended that governments be requested to consider the draft text in order to check the appropriateness of the provisions and references which were of a technological nature in this code of hygienic practice.

150. The written comments were to be sent directly to the Food Hygiene Committee for consideration at its next session in September 1977. It was further suggested that governments in deciding upon their representation at the next session of the Food

Hygiene Committee would take into account the consideration of the technological matters at this meeting. The Committee also suggested that the meeting of the FAO Government Consultation on Fish Technology (Codes of Practice) might wish to review the document and send their comments to the Food Hygiene Committee.

151. It was further suggested that an informal working group could meet, preferably in conjunction with the next session of the Committee on Food Hygiene, to discuss technological issues in the Code of Hygienic Practice for Molluscan Shellfish. The Committee noted this proposal.

152. The committee recommended in addition that the Consultation (Rome, October 1976) examine the need for the elaboration of a general code of practice on molluscan shellfish in due course taking into account various existing codes and the relevant standard.

153. The Committee indicated that it would be prepared to consider at its next session (October 1977) such questions of a technological nature as might be referred to it by the Committee on Food Hygiene.

OTHER BUSINESS

Contaminants

154. The Committee briefly reconsidered the request of the Commission to include where appropriate a provision for contaminants in the standards. One delegation stated that in its view the inherent risk of such a provision with regard to non commercial tariff barriers could be greater than the possible advantages. In particular the delegation pointed out the absence of sufficiently reliable methods of analysis. Other delegations held the view that the advantages of a contaminant provision in the Standard well outweighed possible disadvantages. The Committee agreed to request governments to consider the appropriateness of such provisions: in fishery products and to make specific proposals.

Slide Presentation

155. During the session delegates were shown through the courtesy of the delegation of the USA a slide presentation on a Plan for Market Names of Fishery Products. The Committee expressed its appreciation to the delegation for an informative and entertaining presentation on a subject of continuing interest in the field of labelling.

Use of the Spanish Language

156. A number of Spanish speaking delegations supported a proposal by the delegation of Mexico for the government of Norway to consider the provision of simultaneous translation facilities in the Spanish language. It was pointed out that a number of Spanish speaking countries had a large trade in fish and fishery products and this resulted in an increasing interest in Latin America in the work of this Committee. It was considered that simultaneous translation into Spanish would promote further participation. Appreciation was expressed by the delegations for the efforts made to provide translation of documents into Spanish.

Future Work

157. The Committee noted that at its next session it would reconsider specific questions of the various standards it had dealt with at this session. It was agreed that the Standards for Quick Frozen Blocks of White Fish Fillets and for Quick Frozen Breaded Fish as revised by the Secretariat would also be considered.

158. There was general agreement that the work of the Committee would be facilitated considerably by timely distribution of the documents containing government comments. The delegations undertook to cooperate by sending their national observations in early. Several non-English speaking delegations requested that the English documents be sent out to all delegations to assist the working of the Committee.

159. The delegation of Canada and the USA undertook to report to the next session of the Committee on the need of a revision of the Recommended International Standard for Canned Pacific Salmon.

160. The Committee requested the Secretariat to draw up a list of generally applicable amendments to standards presently at Step 9 in line with the relevant decision of the Commission (ALINORM 76/44, paras 101-102).

DATE AND PLACE OP NEXT SESSION

161. The Committee was informed that the twelfth session was tentatively planned for October 1977 to be held in Bergen. It noted that the 13th Session would be held in the biennium 1978/79 at a date to be decided later.

SUMMARY STATUS OF WORK

Standard/Code	Step	To be dealt with by	Document
Canned Pacific Salmon (see also para 159 of this Report)	9	Governments	CAC/RS 3-1969 Rev.1
Quick Frozen Gutted Pacific Salmon	9	Governments	CAC/RS 36-1970
Canned Shrimps or Prawns	9	Governments	CAC/RS 37-1970 Rev.1
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
Canned Crab Heat	9	Governments	CAC/RS 90-1976 [1]
QF Fillets of Flat Fish	9	Governments	CAC/RS 91-1976 [1]
QF Shrimps or Prawns	9	Governments	CAC/RS 92-1976 [1]
Code of Practice for Fresh Fish	9	Governments	CAC/RCP 9-1976 [1]
Code of Practice for Canned Fish	9	Governments	CAC/RCP 10-197 [1]
Code of Practice for Frozen Fish + Corrigendum (1976) [1]	8	12th CAC	ALINORM 76/18A, VI
Canned Sardines and Sardine-type Products	6	12th FFP	ALINORM 78/18, II
Canned Mackerel and Jack Mackerel	3	12th FFP	ALINORM 78/18, III
QF Fillets of Hake	7	12th FFP	ALINORM 78/18, IV
QF Lobsters	7	12th FFP	ALINORM 78/18, V
QF Blocks of Cod, Haddock, Hake and Ocean Perch	3	12th FFP	CX/FFP 77/3 [1 2]
QF Breaded Fish Portions	3	12th FFP	CX/FFP 77/4 [1 2]
Code of Practice for Smoked Fish (Revised)	3(5)	14th FH	CX/FFP 77/6
Code of Practice for Shrimps and Prawns (Revised)	3(5)	14th FH	CX/FFP 77/7
Code of Practice for Lobsters and Related Species	3	14th FH	CX/FFP 76/16
Code of Practice for Salted Fish	3	14th FH	CX/FFP 77/5
Code of Practice for Minced Fish Blocks	-	14th FH	
Code of Practice for Crabs	-	14th FH	
Code of Practice for Frozen Breaded and Battered Fishery Products	-	Expert Consultat.	
Code of Hygienic Practice for Molluscan Shellfish [3]	6	14th FH	ALINORM 76/13A, VI

[1] To be distributed in due course.
[2] See also para 157 of this Report.
[3] Elaborated independently by the Food Hygiene Committee.

ALINORM 78/18
APPENDIX I

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ALINORM 78/18
APPENDIX II

PROPOSED DRAFT STANDARD FOR CANNED SARDINES AND SARDINE-TYPE PRODUCTS
(advanced to Step 5)

1. SCOPE

This standard applies to canned sardines and sardine-type products packed in water or oil or other suitable packing medium. It does not apply to speciality products where sardines or sardine-type products constitute less than 60% m/m of the edible contents.

2. DESCRIPTION

2.1 Product Definition

Canned sardines and sardine-type products are the products prepared from small fish.

2.1.1 The following species shall be used:

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
Engraulis anchoita
Engraulis ringens

The pack may Contain a mixture of species of the same genus which have similar organoleptic qualities.

2.1.2 Packed in water or oil or other suitable packing media in hermetically sealed containers.

2.1.3 Processed by heat so as to prevent spoilage.

2.2 Presentation

2.2.1 Forms of Packed Fish

The fish pre-cooked or not, smoked or unsmoked shall be neatly arranged within the can. At least 2 fish shall be contained in each can.

2.2.2 Forms, of Packing Media

The product shall be presented in one of the following packing media with or without permitted optional ingredients.

2.2.2.1 Own juice
2.2.2.2 Brine or water
2.2.2.3 Edible oil
2.2.2.4 Edible oil with own juice

2.2.2.5 Sauce
2.2.2.6 Marinades with or without wine

2.2.3 Other Presentations

Any other presentation of the product shall be permitted provided that it:

(i) is sufficiently distinctive from other forms of presentation laid down in this standard;
(ii) meets all the other requirements of this standard;
(iii) is adequately described on the label to avoid confusing or misleading the consumer.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material

The product shall be prepared from clean, wholesome and sound fish belonging to one of the species listed under sub-section 2.1.1. The raw material may be either fresh, frozen or smoked and shall be of a quality suitable for human consumption.

3.2 Packing Media

Own juice, brine, water*, edible oil with or without own juice, sauce, marinades with or without wine, other packing media, and optional ingredients in accordance with the requirements of 2.2.2 and 2.2.3. The packing medium used shall be suitable for human consumption.

* Potable water of properties in accordance with the requirements contained in the WHO "International Standards for Drinking Water".

3.3 Optional Ingredients

3.3.1 Salt

3.3.2 Natural starches

3.3.3 Spices, herbs, vegetable seasonings, vinegar and wine } vegetables and fruits for decorative and flavouring purposes only. The ingredients shall be suitable for human consumption 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 may be gutted. If gutted, it shall be practically free from visceral parts other than roe, milt or kidney. If ungutted, it shall be practically free from undigested feed or vent feed.
The fish shall be well washed.
The fish may be cooked or smoked and shall be well packed in accordance with the form of pack desired.
After sealing the containers shall be heat processed and cooled.

3.5 Final Product

3.5.1 Appearance

3.5.1.1 The product in a can shall comprise fish:

(i) reasonably uniform in size;
(ii) of an appearance and colour characteristic of the species processed and packed in the manner indicated (2.2.1);

(iii) neatly cut to remove the head;
(iv) without excessive ventral breaks (unsightly rupture of the ventral area), or breaks and craks in the flesh.

3.5.1.2 The packing medium shall be of normal colour and consistency for the type.

3.5.1.3 The can shall be well filled with fish.

3.5.1.4 The final 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 (3.5.1.1 (ii).

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.

4. FOOD ADDITIVES

The following additives in canned sardines and sardine-type products are subject to endorsement by the Codex Committee on Food Additives:

Additive	Maximum level in the final product	
Thickening or jellifying agents (for use in packing medium only)		
- Sodium carboxymethyl cellulose (CMC)		2.5 g/kg
- Modified starches - Agar agar - Carrageenan - Guar gum - Caroub bean gum - Alginic acids as calcium, potassium, sodium salts	singly or in combination	20 g/kg
Acidifying agents:		
- Acetic acid - Citric acid - Lactic acid	Limited by GMP	
Natural flavours, e.g.		
- Spice oils - Spice extracts	Limited by GMP	
Smoke flavours (natural smoke solutions and their extracts)	Limited by GMP	

5. HYGIENE AND HANDLING

5.1 It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the following Codes:

(i) the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969)

(ii) the *[*Recommended*]* Code of Practice for Canned Fish *[*CAC/RCP 10-1976*]*

(iii) the *[*Recommended*]* Code of Practice for Smoked Fish *[*CAC/RCP 16-1976]

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 apply subject to endorsement by the Codex Committee on Food Labelling.

6.1 Name of the Food

6.1.1 The name of the product shall be:

(i) "Sardines" (to be reserved exclusively for Sardina pilchards) (Walbaum); or
(ii) "X sardines", where "X" is the name of a country, a geographic 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.

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

6.1.3 If the fish has been smoked or smoke flavoured, this information shall appear on the label m close proximity to the name.

6.1.4 Where in a product containing oil the exuded water exceeds 12% the product shall be declared as "X processed in own juice with oil added" ("X" shall be the name of the Sod).

6.1.5 If the product is produced in accordance with sub-section 2.2.3, the label shall contain in close proximity to the name of the food such additional words or phrases that will avoid misleading or confusing the consumer.

6.2 List of Ingredients

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

6.3 Net Contents

6.3.1 The total 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 product is sold.

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

6.4 Name and Address

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

6.5 County 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 embossed or otherwise permanently marked in code or in clear to identify the producing factory and the lot.

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods.

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 (AQL-6.5) (CAC/RM 42-1969).

7.2 Organoleptic Assessment

Organoleptic assessment of the product shall be made only by persons trained in such assessment.

7.3 Determination of Net Contents

Compliance with net contents declaration shall be determined by averaging the results from all containers of a sample representing a lot.

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.

7.4 Determination of Drained weight To be developed

8. CLASSIFICATION OF "DEFECTIVES"

A container which fails to meet the final, product requirements specified in subsection 3.5 shall be considered a "defective".

9. LOT ACCEPTANCE

A lot will be considered as meeting the final product and weight 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 in the Sampling Plans for Prepackaged Foods (AQL-6.5) (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.

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 in water or oil or other suitable packing medium. It does not apply to speciality products where mackerel or jack mackerel constitute less than 50% m/m of the edible contents.

2. DESCRIPTION

2.1 Product Definition

Canned mackerel and canned jack mackerel are the products:

2.1.1 Prepared from species of the following families and genera:

Mackerel	Jack Mackerel
Scombridae	Carangidae
Scomber	Trachurus
Scomberromorus	Decapterus
Rastrelliger	
Acanthocybium	
Grammatorcynus	
Gasterochisma	

The pack shall not contain a mixture of genera but may contain a mixture of species of the same genus which have similar organoleptic qualities.

2.1.2 Packed in water or oil or other suitable packing media in hermetically sealed containers.

2.1.3 Processed by heat so as to prevent spoilage.

2.2 Presentation

2.2.1 Forms of packed fish

The fish pre-cooked or not, smoked or unsmoked, fried or unfried shall be presented in one of the following forms of pack:

2.2.1.1 Dressed fish - eviscerated fish with heads and tails removed (small fish may have the tails on), but with skin and bone. There shall be no free pieces other than a piece or segment added to fill the container.

2.2.1.2 Fillets - slices of fish of irregular size and shape, which are removed from the carcase by cuts made parallel to the back bone and sections of such-fillets Cut so as to facilitate packing.

2.2.1.3 Solid Pack - complete transverse segments of dressed fish [With or without/ skin and bone. There shall be no free pieces other than a piece or segment added to fill the container.

2.2.1.4 Cutlets - complete or half transverse segments of dressed fish. There shall be no free pieces other than a piece or segment added to fill the container.

2.2.1.5 Middle-cut complete transverse segments of dressed fish not including any part of the belly cavity. There shall be no free pieces other than a piece or segment added to fill the container.

2.2.1.6 Chunks - skinned and deboned pieces of fish substantially consisting of two or more unseparated flakes.

2.2.1.7 Bits - irregular shaped pieces.

2.2.1.8 Flake or flakes-- skinned and deboned flakes. The muscle structure of the flesh is retained.

2.2.1.9 Grated, shredded or minced - comminuted fish not including skin or bone and not having the consistency of a paste.

2.2.2 Form of packing media

The product shall be presented in one of the following packing- media with or without permitted optional ingredients.

2.2.2.1 Own juice

2.2.2.2 Brine or water

2.2.2.3 Edible oil

2.2.2.4 Edible oil with own juice

2.2.2.5 Sauce

2.2.2.6 Marinades with or without wine

2.2.2.7 Aspic (jelly)

2.2.3 Other Presentations

Any other presentation of the product shall be permitted provided that it:

(i) is sufficiently distinctive from other forms of presentation laid down in this standard;
(ii) meets all the other requirements of this standard;
(iii) is adequate]y described on the label to avoid confusing or misleading the consumer.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material

The product shall be prepared from clean, wholesome and sound fish belonging to one of the genera listed under sub-section 2.1.1. The raw material may be either fresh, frozen or smoked and shall be of a quality suitable for human consumption.

3.2. Packing media

Own juice, brine, water*, edible oil with or without own juice, sauce, marinades with or without wine, aspic (jelly) and other packing media and optional ingredients in accordance with the requirements of 2.2.2 and 2.2.3. The packing medium used shall be suitable for human consumption.

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

3.3. Optional Ingredients

3.3.1 Salt

3.3.2 Natural starches

3.3.3 Spices, herbs, vegetable seasonings, vinegar and wine; vegetables and fruits for decorative and flavouring purposes only. The ingredients shall be suitable for human consumption and shall be free from abnormal taste, flavour or odour.

3.4 Processing

Head including gills shall be completely removed. Tails except for small fish shall be removed. Viscera (excluding kidneys, milt or roe), pectoral fins and acutes in the case of jack mackerel shall be removed to the extent possible. Damaged flesh associated with bruises and/or blood spots shall be cut away.
The eviscerated fish shall be well washed, and cleaned.
The fish may be cooked, fried or smoked and shall be well packed in accordance with the form of presentation desired. After sealing the containers shall be heat processed and cooled.

3.5 Final Product

3.5.1 Drained Height of Fish (Final Product Composition)

The *[*net*]* drained weight of fish shall be not less than the following percentage (m/m) of the *[*labelled*]* net content Of the can when packed in:

- edible oil 70%
- own juice, brine or water, edible oil with own juice 65%
- sauces and other packing media 50%

3.5.2 Appearance

3.5.2.1 The product in a can shall comprise fish of an appearance and colour characteristic of the genus processed and packed in the manner indicated (2.2.1).

3.5.2.2 The packing medium shall be of normal colour and consistency for the type.

3.5.2.3 The can shall be well filled with fish.

3.5.2.4 The final product shall be free from foreign matter.

3.5.3 Odour and Flavour

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

3.5.4 Texture

The fish shall have a texture characteristic of the species, free from mushiness and not crumbly.

3.5.5 Bones

Bones, scutes, tails and pectoral fins when present shall be soft.

3.5.6 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.

4. FOOD ADDITIVES

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

Additive	Maximum level in the final product		
Thickening or jellifying agents:(for use in packing medium only)			
- Sodium carboxymethyl cellulose (CMC)		2.5 g/kg	
- Pectins		2.5 g/kg	
- Modified starches - Agar agar Carrageenan Guar gum - Carob bean gum - Alginic acid as calcium, potassium, sodium salts	singly or in combination	20 g/kg	20 g/kg (total)
Acidifying agents:			
- Acetic acid - Citric acid - Lactic acid	Limited by GMP		
Natural flavours, e.g.			
- Spice oils - Spice extracts	Limited by GMP (TE, ALINORM 76/12 App. II, 3.112.1)		
Smoke flavours (natural smoke solutions and their extracts)	Limited by GMP (TE, ALINORM 76/12 App. II, 3.113.1)		

5. HYGIENE AND HANDLING

5.1 It is recommended, that the products covered by. the provisions of this standard be prepared and handled in accordance with the following Codes:

(i) the appropriate, sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969)
(ii) the *[*Recommended*]* Code of Practice for Canned Fish *[*CAC/RCP. 10-1976*]*
(iii) the *[*Recommended*]* Code of Practice for Smoked Fish *[*CAC/RCP 16-1976*]*

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 net weight of contents of canned mackerel and jack mackerel shall be determined in accordance with the method specified in sub-section 8.3. *[*In the case of canned mackerel or jack mackerel in own juice (with or without added edible oil) or in brine or in

marinades, the container shall be filled so that the mackerel or jack mackerel constitutes not less than *[ ]*percent m/m of the water capacity of the container when determined by the method specified in sub-section 8.4*]*.

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

7.1.1 The name of the product shall be:

- mackerel or jack mackerel in accordance with sub-section 2.1, whether qualified or not, used 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 ;
- a local designation may be used provided it is not misleading to the consumer in the country in which the product is distributed.

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

7.1.3 If the fish has been smoked or smoke flavoured, or fried, this information shall appear on the label in close proximity to the name.

7.1.4 Where in a product containing added oil the exuded water exceeds 12%, the product shall be declared as "X processed in own juice with oil added" ("X" shall be the name of the food).

7.1.5 If the product is produced in accordance with sub-section 2.2.3 the label shall contain in close proximity to the name of the food such additional words or phrases that will avoid misleading or confusing the consumer.

7.2 Presentation

Except where the product is in the form of dressed fish, the method of presentation specified in sub-section 2.2.1.2-2.2.1.9 shall be described on the label. The packing medium shall be declared as specified in 2.2.2.1-2.2.2.7.

7.3 List of Ingredients

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

7.4 Net Contents

7.4.1 The total 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 product is sold.

7.4.2 Mackerel or jack mackerel packed in brine or water normally discarded before consumption shall carry a declaration of the drained weight of the mackerel or jack mackerel.

7.5 Name and Address

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

7.6 Country of Origin

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

7.7 Lot Identification

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

8. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods.

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 (AQL-6.5) (CAC/RM 42-1969).

8.2 Organoleptic Assessment

Organoleptic assessment of the product shall be made only by persons trained in such assessment.

8.3 Determination of Net Contents

Compliance with net contents declaration shall be determined by averaging the results from all containers of a sample representing a lot.

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.

8.4 Determination of Drained Weight of Mackerel or Jack Mackerel in Own Juice, Brine, Water or Oil in relation to Water Capacity of the Container

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

8.4.1 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 cm (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.

8.4.2 Procedure

The weight of drained mackerel or jack mackerel shall be determined on containers that have been kept at a temperature of not less than 20ºC (68ºF) or more than 24ºC (75ºF)

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. Incline the sieve at an angle of approximately 17º-20º and allow the mackerel or jack mackerel to drain two minutes, measured from the time the product is poured into the sieve. Weigh the sieve containing the drained mackerel or jack mackerel.

8.4.3 Calculation and Expression, of Drained Mackerel or Jack Mackerel

The percentage m/m drained mackerel or jack mackerel 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

mw = water capacity of the container as determined in sub-section 8.4.4.

8.4.4 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 20º 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.

9. CLASSIFICATION OF DEFECTIVES

A container Which fails to. meet the final product requirements specified in sub-section 3.5 shall be considered a "defective".

10. LOT ACCEPTANCE

A lot will be considered as meeting the final product and weight 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 in the Sampling Plans for Prepackaged Foods (AQL-6.5) (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.

DEFECTS TABLE FOR CANNED MACKEREL AND JACK MACKEREL
Fillets, bits, and flakes in various packing media

Definition of Defect	Classification		
	Serious	Major	Minor
Cutting and trimming			
Parts of head or tail	-	-	1
Parts of viscera	-	2	-
Scutes (jack mackerel)	-	-	1
Skin (fillets labelled skinless)			
Each instance 3 to 10 cm^2	-	-	1
Over 10 cm^2 for each additional 5 cm^2	-	-	1
Black membrane			
Each instance 5 to 10 cm^2	-	-	1
Over 10 cm^2 for each additional 5 cm^2	-	-	1
Non characteristic pieces			
Flake or further disintegrated fish flesh clearly separated from fillets or pieces of fillets (expressed as % of drained fish solids material)			
Over 25%	4	-	-
Over 15% to 25%	-	2	-
Over 10% to 15%	-	-	1
Discolouration, flesh			
Severe	-	2	-
Slight or localized	-	-	1
Discolouration, packing media			
Severs (overall)	-	2	-
Slight	-	-	1
Odour and flavour, flesh or packing media			
Distinctly objectionable odour and flavour (e.g. metallic, rancid)	6	-	-
Texture			
Excessively mushy flesh	6	-	-
Excessively tough or fibrous flesh	4	-	-
Hard bones (not easily friable using thumb and forefinger)	-	2	-
Exuded water (oil packs only)			
Water content (expressed as % of net contents of can)			
Over 12%	4	-	-
Foreign material	6	-	-

Defective Unit

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:

a. consistency for sauces,
b. separation of sauces into solid and liquid (except oil)*]*.

DEFECTS TABLE FOR CANNED MACKEREL AND JACK MACKEREL
Dressed Fish and Cutlets in various packing media

Definition of Defects	Classification		
	Serious	Major	Minor
Cutting, trimming and evisceration			
Parts of tail (except for small fish) and/or head	-	-	1
Scutes (jack mackerel)	-	-	1
Excessive amount of viscera and/or feed	4	-	-
Small amounts of viscera and/or feed (except for small fish and cutlets With belly uncut)	-	2	-
Non characteristic pieces			
Each additional small piece beyond *[2]*	-	-	1
Flake or further disintegrated fish flesh, skin, bone or fin fragments (expressed as % of drained fish solids material)			
Over 10%	4	-	-
Over 7 % to 10%	-	2	-
Discolouration, flesh			
Severe	-	2	-
Slight or localized	-	-	1
Discolouration, packing media			
Severe (overall)	-	2	-
Slight	-	-	1
Odour and flavour, flesh or packing media			
Distinctly objectionable odour and flavour (e.g. metallic, rancid)	6	-	-
Texture			
Excessively mushy flesh	6	-	-
Excessively tough or fibrous flesh	4	-	-
Hard bones (not easily friable using thumb and forefinger)	-	2	-
Significant honeycombing conditions	-	4	-
Exuded water (oil packs only)			
Water content (expressed as % of net contents of can)			
Over 12%	4	-	-
Foreign material	6	-	-

Defective Unit

A can shall be considered a defective if it has more points than specified below:

Points classified as	Jack mackerel in oil	Other packs of jack mackerel % mackerel in oil	Other packs of mackerel
Serious	4	4	4
Major	10	3	6
Serious + major + minor	14	12	10

*[*Note: Packing media may need to be defined in regard to:

a. consistency for sauces,
b. separation of sauces into solid and liquid (except oil)*]*.

DRAFT STANDARD FOR QUICK FROZEN FILLETS OF HAKE
(retained at Step 7)

1. SCOPE

This standard applies to quick frozen fillets of the species as defined below and 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

2.1.1 Quick frozen fillets of hake are obtained from fish of the genera Merluccius and Urophycis.

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

2.2 Process Definition

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 -18ºC (0ºF) at the thermal centre after thermal stabilization. The product shall be maintained under such conditions 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

2.3.1 Fillets shall be presented as:

2.3.1.1 skin-on, unscaled; or

2.3.1.2 skin-on, scaled (scales removed); or

2.3.1.3 skinless

Fillets may be presented as boneless, provided that boning has been completed including the removal of pin bones.

2.3.2 Other Presentation

Any other presentation of the product shall be permitted provided that it:

(i) is sufficiently distinctive from other forms of presentation laid down in this standard;
(ii) meets all the other requirements of this standard;
(iii) is adequately described on the label to avoid confusing or misleading the consumer.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material

Quick frozen fillets of hake shall be prepared from sound fish of the species listed under sub-section 2.1.1 which are of a quality such as to be fit to be sold fresh for human consumption.

3.2 Optional Ingredients

Sodium chloride may be present at a level not exceeding 1.0 % m/m.

3.3 Final Product

3.3.1 Appearance

3.3.1.1 The fillets shall be free from foreign matter and all internal organs and shall be reasonably free from ragged edges, tears, fins or part fins, significantly discoloured flesh, bruises, blood clots, black membrane (belly wall), parasites and where appropriate skin, scales and bones (see Annex B).

3.3.1.2 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.

3.3.1.3 The final product shall be reasonably free from undesirably small fillet pieces, and where more than one fillet or fillet piece is packed in a pack, the portions shall be reasonably uniform in size. No piece added for mass adjustment shall have a mass of less than 30 g, and the maximum number of small fillet pieces shall be one per pack except as provided for in sub-section 6.1.1.

3.3.2 Odour, Flavour, Colour and Texture

After thawing and/or after cooking by steaming, baking or boiling as set out in sub-section 7.3, the product shall have an odour, flavour, colour and texture characteristic of the species and shall be free from any objectionable odours and flavours and its texture shall be firm and not tough, soft or gelatinous.

3.3.3 Glazing

Hake may be glazed either individually or in bulk. When glazed the coating of ice shall cover the hake 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.

3.3.4 Defects and Tolerances (Recommended)

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

4. FOOD ADDITIVES (endorsed; ALINORM 74/12, para 79)

Additive	Maximum level in the final product
Water-binding agent (driploss prevention)	
- Monophosphate, monosodium or monopotassiium (Na or K orthophosphate) - Diphosphate, tetrasodium or tetrapotassium (Na or K pyrophosphate) - Triphosphate, pentasodium or pentapotassium or calcium (Na, K or Ca tripolyphosphate) - Polyphosphate, sodium (Na hexametaphosphate)	0.5 m/m expressed as P_2O_5, singly or in combination
Antioxidant	
- Ascorbate, sodium or potassium salts	0.1% m/m expressed as ascorbic acid

5. HYGIENE AND HANDLING

5.1 It is recommended that the product covered by the provisions of this standard be prepared and handled; in accordance with the following Codes:

(i) the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969)
(ii) the *[*Recommended*]* Code of Practice for Frozen Fish *[*CAC/RCP **.....***]*

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 in amounts harmful to man;
b. shall be free from parasites harmful to man; and
c. 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 name of the product as declared on the label shall be:

- "fillets of hake", "hake fillets" whether qualified or not, or in countries where laws and customs so provide, other names which do not mislead the consumer may be used;
- packs of fillets cut from blocks which may contain a number of small pieces in excess of the number permitted by sub-section 3.3.1.3 may be labelled as fillets of hake 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 In addition, there may appear on the label reference to the form of presentation as skin-on or skinless and/or boneless, as appropriate. This information shall be included if the omission of such labelling would mislead the consumer.

6.1.3 If the product is produced in accordance with sub-section 2.3.2, the label shall contain in close proximity to the name of the food such additional words or phrases that will avoid misleading or confusing the consumer.

6.1.4 The term "quick frozen" shall also appear on the label, except that the term "frozen" [1] may be applied in countries where this term is customarily used for describing the product processed in accordance with sub-section 2.2 of this standard.

[1] "frozen": This term is used as an alternative to "quick frozen" in some English speaking countries.

6.2 List of Ingredients

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

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 product 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 product shall be declared.

6.5 Country of Origin

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

6.5.2 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.

6.6 Lot Identification

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

7. SAMPLING, EXAMINATION AND ANALYSIS

7.1 Sampling

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

7.2 Thawing (CAC/RM 40-1970

The sample is thawed by enclosing it in a film type bag and immersing in an agitated water bath held at approximately 20ºC (68ºF). 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 Cooking - Journal of the AOAC (Vol.59 No.1, 1976, pp 225-226)

Following procedures are based on heating product to internal temperature 70ºC (≥ 160ºF). Cooking times vary according to size of product and equipment used. If determining cooking time, cook extra sample, using temperature measuring device to determine internal temperature. For fish blocks or other unbreaded samples, cut ≥ 3 portions, each ca 10 x 7.5 x 1.2 cm (4 x 3 x 0.5") from sample.

7.3.1 Bake procedure

Wrap product in aluminium foil and distribute evenly on flat cookie sheet or shallow flat pan. Heat in ventilated oven, preheated to 204ºC (400ºF) until internal temperature of product reaches 70ºC (≥ 160ºP).

7.3.2 Boil-in-bag procedure

Place thawed, unseasoned product in boilable film-type pouch. Fold open end of pouch over suspension bar. Clamp to provide loose seal to let vapors escape during heating. Immerse pouch and contents in boiling water and heat until internal temperature of product reaches 70ºC (≥ 160ºF).

7.3.3 Deep fat frying procedure

Place frozen, breaded product in wire mesh fry basket large enough to hold all items in single layer. Heat by immersing in 190ºC (375ºF) liquid or hydrogenated cooking oil 2-3 minutes or until items float to surface. After cooking, let items drain 15 sec. and place on paper napkin or towel to absorb excess oil.

7.3.4 Steam procedure

Wrap product in aluminium foil and place on wire rack suspended over boiling water in covered container. Heat until internal temperature of product reaches 70ºF (≥ 160ºF).

7.4 Examination for Physical Defects

The sample may be examined for defects set out in Annex A according to Annex B.

7.5 Organoleptic Assessment

Organoleptic assessment of the product shall be made only by persons trained in such assessment and shall take place after the sample has been thawed in accordance with the procedure as set forth in sub-section 7.2. When applicable, the sample shall be cooked prior to organoleptic assessment according to a method set out in sub-section 7.3.

7.6 Determination of Net Contents of Products Covered by Glaze

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. Remove adhering water by the use of a paper towel and weigh the product in a tared pan.
Note: Storage of the product may cause or contribute to a low net weight (whether or not the product has been glazed).

8. CLASSIFICATION OF DEFECTIVES

A sample shall be considered as "defective" when it fails to meet one or more of the quality requirements for the final product (sub-sections 3.3.1.1, 2 and 3 and 3.3.2).

9. LOT ACCEPTANCE

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

a. the total number of "defectives" does not exceed the acceptance number (c) of the appropriate sampling plan in the Sampling Plans for Prepackaged Foods (AQL-6.5) (CAC/RM 42-1969); and

b. the average net contents of all containers determined by procedures to be elaborated by the Codex Committee on Methods of Analysis and Sampling is not less than the declared net contents.

ANNEX "A"

RECOMMENDED DEFINITIONS OF DEFECTS IN QUICK FROZEN FILLETS OF HAKE

Dehydration (Freezerburn)

i) Deep dehydration

An excessive loss of moisture from the surface of the sample unit which shows clearly on the surface of the product penetrates below the surface and cannot be easily removed by scraping, and covers more than 10 cm of the surface area of the sample unit.

ii) Moderate dehydration

A loss of moisture from the surface of the sample unit which is colour masking, and covers more than 10 cm^2 of the sample unit but does not penetrate the surface and can be easily removed by scraping.

Foreign matter

Any material not derived from fish or not permitted by the standard.

Viscera

Any portion of the internal organs.

Parasites

Each parasite with a capsular diameter greater than 3 mm or a parasite not encapsulated and greater than 1 cm in length, or other parasitic infestation which is objectionable.

Discoloration, bruises and blood clots

i) Any significant discoloration, including bruises, browning or yellowing which is greater than 3 cm^2 up to and including 10 cm^2 and each additional complete 5 cm^2 thereafter.

ii) Any lump or mass of clotted blood greater than 5 mm in any dimension.

Skin and black membrane (belly lining)

i) In the case of skin-on or skinless fillets each piece of black membrane (belly lining) greater than 5 cm^2 up to and including 10 cm^2 and every additional complete 5 cm^2 thereafter.

ii) In the case of skinless fillets each piece of skin greater than 3 cm^2 up to and including 10 cm^2 and every additional complete 5 cm^2 thereafter.

Fins or part fins

Any fin or part fin (part fins are two or more rays connected by membrane).

Bones

Any bones exceeding the sizes specified in Annex B.9.

Small pieces (not applicable to products cut from blocks)

(a) Each piece less than or equal to 30 g in weight.

(b) Each piece in excess of one per pack greater than 30 g but less than half the size of the average size of fillets in the pack.

Odour in thawed state

Any odour which is distinctly objectionable.

Odour and flavour in cooked state

Any odour or flavour which after cooking is distinctly objectionable.

Texture

Any texture which after cooking is not characteristic of the species or is mushy, soft, or gelatinous, or tough.

ANNEX "B"

RECOMMENDED DEFECT TABLE FOR QUICK FROZEN FILLETS OF HAKE

Defect description			Classification		
FROZEN STATE (1 kg sample unit)			Serious	Major	Minor
Dehydration: i) Deep dehydration		- > 10 cm^2	5	-	-
		- ⩽ 10 cm^2	-	2	-
	ii) Moderate dehydration	>10 cm^2	-	-	1
THAWED STATE (1 kg sample unit)					
1. Foreign matter - each instance			5	-	-
2. Viscera - each instance			2	-	-
3. Parasites - each instance			2	-	-
4. Ragged and torn fillets - each instance			-	-	1
5. Discoloration, bruises and blood clots					
i) Each significant discoloration >3 cm^2 - ⩽ 10 cm^2			-	-	1
ii) Over 10 cm^2 significant discoloration, each additional complete 5 cm^2			-	-	1
iii) Each blood clot >5 mm in any dimension			-	2	-
6. Skin and black membrane (belly lining)					
(a) Skin-on fillets					
i) Each piece of black membrane > 5 cm^2 ⩽ 10 cm^2			-	-	1
ii) Over 10 cm^2 black membrane, each additional complete 5 cm^2					1
(b) Skinless fillets					
i) Each piece of skin >3 cm^2- ⩽ 10 cm^2, or each piece of black membrane > 5 cm^2 - ⩽ 10 cm^2			-	-	1
ii) Over 10 cm^2 skin or black membrane, each additional complete 5 cm^2			-	-	1
7. Scales					
Skin-on fillets - scaled					
i) Each area of scale >3 cm^2 - ⩽ 10 cm^2			-	-	1
ii) Over 10 cm^2 scale, every additional complete 5 cm^2			-	-	1
(b) Skinless fillets					
Each complete unit of 5 loose scales			-	-	1
8. Fins or part fins					
(a) Skin-on fillets - each fin or part fin			-	-	1
(b) Fillets designated boneless and/or skinless, each fin or part fin			-	2	-
9. Bones					
(a) Fillets not designated boneless - each single bone, other than pin bones, > 5 mm in any dimension or each cluster of such bones within an area of 3 cm^2			-	2	-
(b) Fillets designated boneless - each single bone > 5 mm in any dimension			2	-	-

10. Small pieces				
i)	Each piece ≤ 30 g in weight	-	2	-
ii)	Each other small piece in excess of one per pack as defined in Annex A	-	2	-
11. Odour - distinctly objectionable		5	-	-
COOKED STATE (100 g sub-sample)				
1. Odour or flavour distinctly objectionable		5	-	-
2. Texture				
i)	The flesh is definitely not characteristic of the species or is mushy or very tough	5	-	-
ii)	The flesh is tough or very soft	4	-	-

Maximum allowable tolerances for defects

A sample is considered defective if it has:

a) More than 4 points for defects classified as Serious; or
b) More than a total of 10 points for defects in the Major classification; or
c) More than a total of 12 points for defects in the combined classifications (including minor).

ALINORM 73/18
APPENDIX V

DRAFT STANDARD FOR QUICK FROZEN LOBSTERS
(retained at Step 7)

1. SCOPE

This standard applies to quick frozen raw or cooked lobsters, rock lobsters, spiny lobsters and slipper lobsters and to tails, and meat there from 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 and products thereof shall not be packed together.

2.2 Process Definition

2.2 1 The products 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 -18ºC (0ºF) at the thermal centre after thermal stabilization. The product shall be maintained under such conditions 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

The products shall be presented in one of the following forms:

2.3.1 Whole.

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

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

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.

2.3.6 Other Presentation

Any other presentation of the product shall be permitted provided that it:

(i) is sufficiently distinctive from other forms of presentation laid down in this standard;
(ii) meets all the other requirements of this standard;
(iii) is adequately described on the label to avoid confusing or misleading the consumer.

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) Spices and Herbs

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, the products 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

The products 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 (latest edition) or shall be clean sea water with the same microbiological standards as potable Water and free from objectionable substances.
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

The products in the various forms 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:

		Maximum level in the final product
Salts		
Triphosphate, pentasodium or pentapotassium or calcium (Na, K or Ca tripolyphosphates) Polyphosphate sodium (Na hexametaphosphate	singly or in combination	5 g/kg expressed as P_2O_5.
Preservatives		
Sulphite, bisulphite or metabisulphite, sodium or potassium	for use in the raw product only singly or in combination	100 mg SO_2/kg raw product 30 mg/kg cooked product expressed as SO_2
Antioxidants		
Ascorbates, sodium or potassium salts		0.1% m/m expressed as ascorbic acid

5. HYGIENE

5.1 It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the following Codes:

(i) the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969)
(ii) the *[*Recommended*]* Code of Practice for Frozen Fish *[*CAC/RCP **……***]*
(iii) the *[*Recommended*]* Code of Practice for Lobsters *[*CAC/RCP **……..***]*

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 raw product:

a. shall be free from microorganisms in amounts harmful to man;
b. shall be free from parasites harmful to man; and
c. shall not contain any toxic substances originating from microorganisms in amounts which may represent a hazard to health.

5.4 When tested by appropriate methods of sampling and examination, the heat treated 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 form of presentation shall be declared as follows:

(i) whole: lobster, rock lobster, spiny lobster, crawfish, slipper lobster, bay lobster, sand lobster;

(ii) whole, split with head on: 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) 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 form of presentation may be individually quick frozen, and in such case the labelling may be "individually quick frozen" or "individually frozen".

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

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

6.1.6 If the product is produced in accordance with sub-section 2.2.3, the label shall contain in close proximity to the name of the food such additional words or phrases that will avoid misleading or confusing the consumer.

6.2 Weight and Count

6.2.1 If the product is labelled according to weight, all lobsters or tails in the container so designated must be within the declared weight range subject to the tolerance provided in Annex C.

6.2.2 The product may be labelled by count provided that the actual count is In accordance with the number declared.

6.3 List of Ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion; sub-sections 3.2(b) and (c) of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969) are applicable. When the product is glazed no specific label declaration shall be required unless the cooking and/or glazing water contains additives.

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 if its omission would mislead or deceive the consumer.

6.6.2 When the product undergoes further 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 he permanently marked in code or in clear to identify the producing factory and the lot.

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.

* Note by the Secretariat: Other standards for Quick Frozen Fishery Products include a method for cooking.

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).

(i) The sample unit for examination of the deglazed products in forms, of presentation 6.1.2(i), (ii) and (iii) for tolerances for physical defects in accordance with Annex C shall be one whole lobster or lobster tail.

In the case of forms of presentation 6.1.2(i), (ii) and (iii), the lot size (N) on which the number of sample units (n) and the acceptance number (c) will be based, will comprise the total number of units, whether whole lobsters or tails, or in the case of splits, half lobsters, and shall be arrived at by multiplying the total number of containers in the lot by the average number of units in each container.

The number of containers from which these sample units will be taken will be established in accordance with the Sampling Plan, and shall equate to the recommended sample size which would apply to the actual number of containers comprising the lot had the container been regarded as the sample unit.

(ii) The sample unit size for examination of tail meat, or meat in forms of presentation 6.1.2(iv) and (v) shall be 500 g (1 lb) of meat or tail meat.

7.2 Determination of Net Contents of Products Covered by Glaze

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. Remove adhering water by the use of a paper towel and weigh the product in a tared pan.

Note: Storage of the product may cause or contribute to a low net weight (whether or not the product has been glazed).

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 20ºC (68ºF) 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 in accordance with 7.3 or where applicable cooked in accordance with Annex E.

8. CLASSIFICATION OF DEFECTIVES

A sample unit 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 sample units examined are 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	-	exposed surface areas of meat which have a whitish appearance or dryness affecting texture or palatibility
abnormal colouration	-	colouration of meat or of the membrane on the underside of the tail that deviates from the natural colour
opacity	-	the raw meat is not characteristically translucent
damaged	-	broken telson, cuts or scars penetrating the shell, crushed or cracked shell
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

PHYSICAL DEFECTS

DEFECT TABLE I - WHOLE, SPLIT, TAIL-SHELL ON
A sample unit is 1 lobster or lobster tail or 1 half lobster

Defect	Serious	Major	Minor
Damage			
(i) crushed	-	2	-
(ii) other than crushed	-	-	1
Dehydration - 10-20% of exposed surface area	-	2	-
- > 20% of exposed surface area	4	-	-
Abnormal colour (area affected)			
(i) whole lobsters up to 900 g (2 lb) or tail units up to 300 g (10 oz)			
(a) 1 - 2.25 cm^2	-	2	-
(b) over 2.25 cm^2	6	-	-
(ii) whole lobsters over 900 g (2 lb) or tail unit over 300 g (10 oz)			
(a) 1 - 2.25 cm^2	-	-	1
(b) 2.25-5 cm^2	-	2	-
(c) over 5 cm^2	6	-	-
Soft shell	-	2	-
Opacity	-	2	-
Incomplete removal of intestine	4	-	-
Texture (cooked state)			
(i) tough or fibrous	-	2	-
(ii) mushy or gelatinous	4	-	-
Objectionable odour/flavour (raw or cooked)	6	-	-

A sample unit shall be considered a defective if it has:

(a) more than 4 points for defects classified as serious; or
(b) more than 6 points for defects classified as major; or
(c) more than a total of 8 points for defects in the combined classifications including minor.

DEFECT TABLE II - TAIL MEAT AND MEAT
A sample unit is 500 g of meat or tail meat

Defect	Serious	Major	Minor
Dehydration - cooked and raw meat (% affected by weight)			
10 - 20 %	-	2	-
> 20 %	4	-	-
Abnormal colour of meat (% affected by weight)			
(i) yellow staining 10%	-	-	1
> 10%	-	2	-
(ii) dark staining 10% or more	4	-	-
Incomplete removal of intestine, blood, and viscera (% affected by weight)			
(tail meat only) 10%	-	2	-
> 10%	4	-	-
Shell fragments and extraneous material (No. of pieces/sample unit)			
1 piece	-	-	1
2-3 pieces	-	2	-
> 3 pieces	4	-	-
Opacity (Raw tail meat only) (% affected by weight)			
5%	-	2	-
> 5%	4	-	-
Texture (% affected by weight)			
(i) Tough or fibrous - 10%	-	2	-
> 10%	4	-	-
(ii) Mushy or gelatinous meat - 5%	-	2	-
> 5%	4	-	-
Objectionable odour - Raw meat only	4	-	-
Objectionable flavour or odour - Cooked meat only	4	-	-

A sample unit shall be considered a defective if it has:

(a) more than 4 points for defects classified as serious; or
(b) more than 6 points for defects classified as major; or
(c) more than a total of 8 points for defects in the combined classifications including minor.

Tolerance for Uniformity - Applicable to Forms of presentation 2.3.1, 2.3.2 and 2.3.3.

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

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 70ºC (160º F). The dish should be covered and should be kept in a water bath at 60ºC (140º F) during testing.

2. Boiling in Bag - Place the 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 70ºC (160º F). Remove the boiled product from the pouch and drain.

codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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Corrigendum to ALINORM 78/18

ENGLISH ONLY

December 1976

CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS

Please make to following corrections in document ALINORM 78/18:

1. Page 30 - Insert the Defects Table for Sardines and Sardine Type Products reproduced below which was inadvertently omitted.
2. Page 31 - Appendix II to read Appendix III.

ANNEX A

DEFECTS TABLE FOR SARDINES AND SARDINE TYPE PRODUCTS

DEFINITION OF DEFECT	CLASSIFICATION Serious	Major	Minor
Removal of Head			
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
Ventral Breaks			
- More than 40% of fish in a can having ventral breaks of half the length or more of the abdominal cavity	4	-	-
- 30-40% of fish in a can with ventral breaks	-	2	-
Broken or cracked flesh			
- More than 45% of fish with greater than 1/2 the width of the fish at the point of occurrence	-	4	-
- > 25 - 45%	-	2	-
- 15- 25%	-	-	1
Colour of packing oil			
- Very brown (except smoked products)	-	2	-
- Slightly brown (except smoked products) or cloudy	-	-	1
Odour and Flavour			
- Distinctly objectionable odour and flavour (e.g. metallic, rancid)	6	-	-
Texture			
- 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
Discolouration			
- Severe	-	2	-
- Slight or localised	-	-	1
Exuded water (oil packs only)			
Water content (expressed as % of net contents of can)			
- > 10-12% (if above 12% Section 6.1.4 applies;	4	-	-
- 8 - 10%	-	2	-

Defective Unit

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).