REPORT OF THE
CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS
Fifth Session
5 - 10 October 1970
Bergen, Norway
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Introduction

1. The Codex Committee on Fish and Fishery Products held its Fifth Session in Bergen, Norway, from 5 to 10 October 1970 by courtesy of the Government of Norway. Dr. O.R. Braekkan (Norway) was in the chair.

2. The Chairman welcomed the participants in the name of the Director-General of Fisheries of Norway.

3. Representatives from 24 countries were present:

   - Algeria
   - Australia
   - Belgium
   - Brazil
   - Canada
   - Cuba
   - Denmark
   - France
   - Fed. Rep. of Germany
   - Iceland
   - India
   - Ireland
   - Japan
   - Morocco
   - Netherlands
   - Norway
   - Peru
   - Poland
   - Portugal
   - South Africa*
   - Spain
   - Sweden
   - United Kingdom
   - United States of America

*) in an observer capacity

Observers were present from the following international organizations:

- Association des Industries de Poisson de la CEE (AIPCEE)
- European Economic Community (EEC)
- Institut International du Froid (IIF)

The list of participants is contained in Appendix I to this Report.

Election of Rapporteur

4. On the proposal of the Chairman, the Committee appointed Mr. L.G. Hanson (U.K.) as Rapporteur of the Session.

Adoption of Provisional Agenda

5. The Committee adopted the Provisional Agenda.

6. The Secretariat informed the Committee that the Codex Committee on Food Labelling and the Commission had made certain amendments to the Standard for Quick Frozen Gutted Pacific Salmon and to the Standard for canned Shrimps or Prawns and that the Commission had then decided to advance both standards to Step 9 of the Procedure for the Elaboration of World-wide Codex Standards.

7. The Group was further informed that the Proposed Draft Standards for Quick Frozen Fillets of Plaice and Quick Frozen Fillets of Ocean Perch were advanced to Step 6 of the Procedure with the instruction by the Commission that these standards should not be advanced to Step 8 of the Procedure until the Committee was satisfied that it had satisfactorily resolved the problems on defects.

8. The Group was informed that the Commission had decided to permit as an alternative to "quick frozen" the use of the term "frozen" in those countries where this term is customarily used for describing products processed as defined in the process definition section of the standards.

Matters arising from the Report of the 5th Session of the Codex Committee on Food Labelling (April 1970)

9. The Committee was informed that the introductory sentence to the labelling section of commodity standards which applied provisions of the General Standard for the Labelling of Prepackaged Food by cross-reference, had been amended by the Committee on Food Labelling to delete reference to section 5 of the General Standard.

10. The Food Labelling Committee considered that Commodity Committees, when requiring a declaration of a complete list of ingredients, should have regard to whether water should or should not be declared in the list of ingredients.

Matters arising from the Report of the 6th Session of the Codex Committee on Food Additives (October 1969)

11. It was brought to the attention of the Committee that the Codex Committee on Food Additives, at its 6th Session, had requested Codex Commodity Committees to give due attention to the technological justification for the use of food additives. In this connection, the Committee was informed that the Codex Alimentarius Commission, at its 7th Session, had adopted general principles for the use of food additives and that these were published as an Appendix to the Report of that Session (1970).

Codes of Practice

12. The Committee was informed that the Third Ad Hoc Consultation on Codes of Practice for Fish and Fishery Products was convened in Rome (20–22 May 1970)
and included experts in their personal capacity from Canada, Denmark, France, Netherlands, Norway, United Kingdom and the United States of America.

13. The Draft Code for Frozen Fish was reviewed in detail by the Consultation and the amended draft was approved by the Group for distribution to Member Countries of FAO and WHO. Unless substantive changes are required as a result of country review, both the Frozen Fish Code and the Fresh Fish Code will be submitted to the Secretariat of the Codex Alimentarius Commission. The Code of Practice for Fresh Fish (FAO Fisheries Reports No. 74) is available in English. The French and Spanish versions are in print. A Draft Code for Canned Fish and Shellfish was reviewed by the Ad Hoc Consultation and is now in the hands of experts for comments.

14. As terms of future work, priorities for development of codes were established as follows: crustaceae; dried and salted fish; smoked fish; pre-cooked, breaded and fried products. FAO employed a consultant during the past year to speed up this work and has now added a full time staff member to ensure continuing progress in this field. Some members of the Consultation had also been asked to develop codes of hygienic practice for fish. They expressed concern about possible duplication of work and overlap in the codes of technological and hygienic practice. The Ad Hoc Group suggested that these matters should be brought to the attention of the appropriate Codex Committees.

Codes of Hygienic Practice

15. The Committee was informed that the Eighth Session (1971) of the Codex Committee on Food Hygiene would consider codes of hygienic practice to be elaborated for:

(i) Handling Fresh and Frozen Fish at Sea and on Shore
   (author country: United Kingdom, in collaboration with Australia)

(ii) Fresh and Frozen Processed Fishery Products
    (author country: United Kingdom, in collaboration with Australia)

(iii) Canned Fish
     (author country: United States)

(iv) Molluscan Shell-fish
     (author country: United States, in collaboration with Italy)

(v) Smoked and Semi-preserved Fish Products
     (author country: Netherlands, in collaboration with the United States).

General Matters Relating to the Standards for Frozen Fillets

A. The Terms "frozen" and "quick frozen"

16. The Committee considered a proposal by Australia supported by Canada and the United States of America that the title of the standards should be changed back to "Frozen Fillets of ..." with a corresponding change in the scope section.
17. At its Fourth Session the Committee had changed the title of the standards to "Quick Frozen Fillets of ...", in order to make clear that the standards did not relate to products that had merely been "frozen" but not "quick frozen"; it was noted that the Committee's view about translation of the term "quick frozen" had been placed on record. (ALINORM 70/18, paragraph 17).

18. It was pointed out that the Commission at its Seventh Session (1970), in considering the Standard for Quick Frozen Gutted Pacific Salmon, had discussed the use of the term "quick frozen" and had decided not to change the title or the scope section (paragraph 84 of the Commission Report). It was also noted that all the standards elaborated by the Joint ECE/Codex Group of Experts on Quick Frozen Food used the term "quick frozen" in the title and throughout the standards.

19. The Commission had observed that the problem was essentially a labelling problem. While not changing the reference to the words "frozen" or "quick frozen" which were permitted as alternatives in sub-section 5.1 "Name of the Product" of the Recommended Standard for Quick Frozen Gutted Pacific Salmon, the Commission had made a special provision in the labelling section of the Recommended Standard for Quick Frozen Peas as follows: "... the words 'quick frozen' shall also appear on the label, except that the term 'frozen' may be applied in countries where this term is customarily used for describing the product processed in accordance with sub-section 2.1(b) of this Standard."

20. Those delegations who supported the Australian proposal (see paragraph 16 of this Report) to change the references from "quick frozen" to "frozen" pointed out that the title and nomenclature would then refer to the state of the product and not to the type of processing. Furthermore there was a general tendency to describe products which had been subjected to the quick freezing process as "frozen". The term "frozen" was moreover used in the Draft Code of Practice for Frozen Fish, elaborated by the Fisheries Department of FAO. Attention was also drawn to the standards for "canned" fish which did not refer to the method of canning.

21. Other delegations considered that it was necessary to use the term "quick frozen" in order to make it clear that products which complied with the standard had been frozen in that specific way; they considered it essential to make it clear that products even though in the frozen state would not necessarily be in conformity with the standard. They also considered it necessary that the consumer be protected by the use of the term "quick-frozen" on the label in order to distinguish such products from those which had been frozen in other ways and could therefore be inferior in quality.

22. The Committee was informed that with very few exceptions all the fillets moving in international trade would have been subjected to the quick freezing process as laid down in the process definition. The Committee recognized that this definition was the same as in the standards for quick frozen fruits and vegetables elaborated by the Joint Group of Experts and that the Commission might therefore wish to see the same terms used in all the Codex standards unless there were good reasons for having different provisions.

23. The Committee decided however to change the name of the standards back to "Frozen Fillets of ...", but to leave the scope section unchanged. It placed on record the view that the consumer could be misled by the indiscriminate use of the terms "quick frozen" and "frozen". It considered that a provision on the following lines was preferable, at least for standards for frozen fish, to the one agreed on by the Commission for quick frozen peas:
"The terms "frozen" or "quick frozen" shall also appear on the label; the term shall be that which is customarily used in the country in which the product is sold, for describing the products processed in accordance with sub-section 2.2 "Process Definition" of this Standard."

B. Sampling Plans

24. The Committee discussed the question of sampling plans for frozen fillets of fish against the background of the Commission's request that Commodity Committees should examine the sampling plans in ALINORM 69/27 with particular reference to determining appropriate AQLs for quality criteria and quality defects (7th Session Report, paragraph 125). It was noted that the Executive Committee will be considering future action, including the possible appointment of a consultant expert on sampling matters.

25. The delegation of Denmark introduced their observations on sampling plans, which are mentioned in paragraph 122 of the Commission's Report. The sampling plans are also referred to the Codex Committee on Methods of Analysis and Sampling. The delegation drew attention to the difficult nature of the problem as described in the paper and to weaknesses in the sampling plans in ALINORM 69/27, which had been drawn up for processed fruits and vegetables. If it could be assumed that all producers would exercise production control the intrinsic weaknesses might be reduced but, if not, there would be disadvantages in using the plans especially for checking imported consignments. The Danish delegation suggested that it would be wrong and impracticable for the Committee to attempt to draw up sampling plans until it had the benefit of advice from the Codex Committee on Methods of Analysis and Sampling and possibly a consultant. Meanwhile, however, a defect table should be completed and an AQL chosen, so that they could be applied in due course to sampling plans. The delegation of Japan drew attention to a new table for sampling based on primary containers given in its written comments and emphasized the need for the AQL to be chosen in relation to a specific sampling plan even if different sampling plans had to be drawn up for different production levels and added that the primary unit for sampling should be the unit of sale.

26. The Committee agreed to treat the question of sampling plans separately from the defect table and the AQL question and to delete all references to sampling until such time as plans could be elaborated for fish in the context of action on other commodities and action by the Codex Committee on Methods of Analysis and Sampling.

C. Defects

27. The Committee then considered the Report of the Chairman of the Ad Hoc Sub-Committee which had been formed earlier in the Session to consider the defect tables for Frozen Fillets of Cod and Haddock, Ocean Perch and Plaice in the light of the detailed Government comments and the field work undertaken by several countries. The Report of the Chairman of the Ad Hoc Sub-Committee is attached as Appendix VIII. The Committee noted the changes which had been made in the defect tables and that the Ad Hoc Sub-Committee had been able to reach agreement on certain changes to be made in sub-section 3.2.1(a) of each standard. The Committee accepted the Report, endorsed its conclusions and agreed to amend the standards in accordance with the recommendations. They agreed to the defect tables subject to minor editorial changes. In particular, the Committee agreed to the AQL of 6.5 associated with the defect tables agreed by the Ad Hoc Sub-Committee.
The Committee then considered whether the revised defect tables and the related AQL could form part of the standard without sampling plans being specified. It was agreed that further work was required on the defect table for Frozen Fillets of Plaice and Similar Species of Flat Fish because of the decision to widen the scope of that standard. Members of the Committee were asked to do the necessary work in this connection and to report their findings in a new round of comments at Step 6.

The Committee noted that the defect tables for Cod and Haddock and for Ocean Perch Fillets had been agreed by the Ad Hoc Sub-Committee consisting of eleven countries, and although all members had not been able to do the necessary field work, the Committee considered that the next step should be to gather experience regarding their practical applicability to be obtained over a sufficiently long period of time. It was suggested that the best way of doing this would be to attach the defect tables to the standards as a recommended, non-mandatory procedure for objective assessment of the quality criteria which were already included in sub-section 3.2.1(a) of the standards. This procedure would provide the Committee with the basis for an international referee method in connection with any sampling plans which it might be able to develop in the future.

Most of the members of the Committee agreed to this course of action, particularly as the alternatives would be either to hold the standards indefinitely at Step 7 or to send them forward without any defect tables. These members of the Committee considered that the standards as elaborated - that is including the optional defect table - would improve protection for the consumer if they were adopted and that they should therefore be sent forward to the Commission for consideration at Step 8. Five delegations were for various reasons unable to support the proposal. The delegation of the Netherlands considered that the defect tables should be a mandatory provision and also drew attention to the weaknesses in the Standard for Cod and Haddock in respect to net content of glazed products. The delegations of the Federal Republic of Germany, Belgium, and Japan were also of the opinion that the defect tables should be mandatory. The delegation of France would have preferred to be able to gain practical experience with the revised defect tables before agreeing to them.

The Committee decided to attach the defect tables to the individual standards as a separate appendix with a heading which would make clear that it was not part of the standard but a recommended defect table with a related AQL which was not to be applied to individual packs but to consignments in association with a suitable sampling plan. As recorded in paragraphs 52 and 59 the Committee agreed that the Standards for Frozen Fillets of Cod and Haddock and for Ocean Perch (as amended) should be sent to the Commission for consideration at Step 8.

Consideration at Step 7 of the Draft Standard for Quick Frozen Fillets of Cod and Haddock

The Committee had before it the above mentioned Draft Standard as contained in ALINORM 70/18, Appendix III. The Committee also considered the Comments contained in document CODEX FISH 1/11 (1970) with four addenda.

The Title of the Standard

The Committee discussed again the use of the terms "quick frozen" and "frozen" in the title of the standard. As this issue is of a general character it is recorded separately in paragraphs 16 - 23.
Process Definition

34. The Committee considered the reference to "the recognized practice of thawing and re-freezing" in the process definition which had been discussed at its 4th Session (ALINORM 70/18, paragraph 24). The Committee was informed that the Commission (7th Session) had amended this clause in the Standard for Quick Frozen Peas (Commission Report 1970, paragraph 104). The Committee noted that the Joint ECE/Codex Group of Experts at its 6th Session in July 1970 (ALINORM 71/25, paragraph 18) had deleted the reference to thawing in the corresponding paragraph of the Standard for Quick Frozen Strawberries and standards for other quick frozen products.

35. The Committee noted that it was sometimes the practice to increase the temperature under controlled conditions of fish frozen in blocks for repacking purposes, but nevertheless agreed that the revised wording was appropriate for Frozen Fillets of Cod and Haddock and amended the standard accordingly.

36. The delegation of the Federal Republic of Germany placed on record the view that the term "low temperature" so as to maintain the quality of the product during transportation, storage and distribution should be defined.

Presentation

37. The Committee noted that the term "skin-on, scaled", would not be entirely suitable when translated into the official languages and agreed to alter it to: "skin-on, scaled (scales removed)". The reference to "practically free of scales" was transferred to sub-section 3.2.

Final Product

38. The Committee considered the final product section taking into account the Report of the Chairman of the Ad Hoc Sub-Committee formed to study the various defect tables. (See also the relevant section covering defects in this Report, paragraphs 27-31).

39. It was decided to rearrange the paragraphs:

a. to cover all material defects of fillets in the frozen state, the main change being the inclusion of foreign matter, nematodes and blood clots in the list of defects named;

b. to cover quality criteria of the product after cooking;

c.(ex(d)) to cover defects with respect to the frequency and minimum allowable size of small fillet pieces; allowing only one piece of less than 30 g in packs weighing under 250 g and limiting the number to 4 per kg in packs over 250 g;

d. to cover the defect deep-dehydration (freezer burn) due to inadequate freezing and/or storage practices.

FOOD ADDITIVES

40. The Committee was informed of the endorsement by the Codex Committee on Food Additives of the provisions on Food Additives in the standard (see also document ALINORM 70/12, Appendix VIII, page 43).
LABELLING

41. In conformity with the relevant decision by the Commission the reference to Section 5 of the General Standard for the Labelling of Prepackaged Foods was deleted.

Name of the Food

42. The Committee agreed that the name of the product should be "cod fillets" or "fillets of cod", "haddock fillets" or "fillets of haddock". Regarding the additional reference to the frozen state, the Committee agreed that depending on the customary use in the country where the product was sold (see paragraph 16 - 23 of this Report) one of the terms "quick frozen" or "frozen" shall be used.

43. The delegation of the Netherlands, referring to fillets obtained by mechanical cutting from blocks of fillets, proposed that the term "fillets" be used also for a product which would not comply with sub-section 3.2.1(d) — dealing with the maximum number of small pieces — provided the consumer was not deceived. Several delegations supported this proposal which concerns a product widely traded on an international scale. The Committee considered that the consumer would be deceived if he could not distinguish this product from fillets presented in larger pieces and decided to include an appropriate labelling provision. The delegations of the United States and the Netherlands elaborated a text to which the Committee agreed:

"6.1.1 The name of the product as declared on the label shall be "cod fillets" or "fillets of cod"; "haddock fillets" or "fillets of haddock" as appropriate. Packs of fillets cut from blocks which may contain a number of small pieces in excess of the number permitted in sub-section 3.2.1(c) may be labelled as fillets of cod or haddock 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."

List of Ingredients

44. The Committee had a full discussion on the necessity for a complete list of ingredients on the label. As the product consisted of one raw material only, namely fillets of cod or fillets of haddock, it was discussed whether the name of the food on the label would not be sufficient. The delegation of the Netherlands pointed out that the food additives listed in the standard, namely polyphosphates and ascorbates, were used for technological purposes only. In its view there was no need to declare these on the label and it was not the practice for polyphosphates to be declared as they were part of the processing of the product. Other delegations were of the opinion that, if the final product contained any ingredients or food additives, the consumer should be informed about their presence and the additives should be declared either as such or under a generic name. It was agreed to make no change in this section of the standard.

Net Contents

45. The Committee recognized that the present wording of the provision gave the impression that all products were covered with glaze, whereas it was exceptional for the product to be glazed. The Committee therefore decided to divide this paragraph into two parts, one dealing with the net contents of products which had not been glazed, and the other referring to the net contents of products covered with glaze.

Lot Identification

46. Some delegations wished to have the declaration of the date of production made mandatory and the delegation of the Federal Republic of Germany drew attention to the requirements in its country for a date in clear to be given for the information of the
consumer. The point was made that it was necessary for public health reasons to be able to identify particular lots and that a marking in code or in clear on the label of the package facilitated identification. It was recognized however that the lot identification could be given on the carton instead of on each package. The Committee therefore decided, on balance, not to change the provision in the standard.

METHODS OF ANALYSIS AND SAMPLING

47. The Committee was informed that at its next session, the Executive Committee of the Codex Alimentarius Commission (February 1971) will be considering the possibilities of how to proceed with the elaboration of Sampling Plans suitable for various commodities. (See the relevant sections on Sampling Plans and Defects appearing in paragraphs 24 - 31 of this Report).

Removal of the Glaze

48. The Committee, referring to the changes made in the text of sub-section 6.3 "Net Contents", decided to change the title of sub-section 7.2 "Removal of the Glaze" to read "Determination of Net Contents of Products Covered by Glaze". Some delegations were of the opinion that a more appropriate method should be elaborated; however, as no specific proposal could be made, the Committee decided to make no change.

Thawing

49. The thawing method was amended as follows: "The sample is thawed by enclosing it in a film type bag and immersing in an agitated water bath held at approximately 20°C (68°F). 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."

Examination of Odour, Flavour and Texture

50. Regarding the examination for odour, flavour and texture, a proposal was made by the delegation of the Netherlands relating to the minimum quantity of the sample to be cooked. The Committee decided not to change the text which appears in sub-section 7.2.

51. The Committee decided that the thawing and cooking methods need not be referred to the Codex Committee on Methods of Analysis and Sampling for endorsement.

Status of the Standard

52. The Committee agreed to advance the standard to Step 8 of the Procedure for submission to the 8th Session of the Codex Alimentarius Commission. The standard as revised is attached to this Report as Appendix II.

Consideration at Step 7 of the Draft Standard for Quick Frozen Fillets of Ocean Perch

53. The Committee had before it the above mentioned Draft Standard as contained in ALINORM 70/18, Appendix V. The Committee also considered the Comments contained in document CODEX FISH 1 a/8 + two addenda.

54. The Committee decided that the same provisions as had been developed in the Draft Standard for Frozen Fillets of Cod and Haddock should be included, mutatis mutandis, in the Standard for Frozen Fillets of Ocean Perch.

Product Definition

55. The Committee agreed to include the species Sebastes viviparus and Helicholenus maculatus in sub-section 2.1(a).
Presentation

56. The Committee also agreed to replace the word "shall" by "may" in the first sentence of sub-section 2.2 (new 2.3).

Food Additives

57. Mention was made by the delegation of the Federal Republic of Germany on research undertaken in this country regarding antioxidants which would improve the keeping quality of the product. The delegation of France was of the opinion that at a later state provisions might be made in the standard for antioxidants, depending on the result of the research work.

Name of the Food

58. The Committee agreed that either the term "fillets of ocean perch" or "ocean perch fillets" could be used and that the wording "fillets of redfish" or "fillet's of rosefish" should be permitted in the countries where they were customarily used.

Status of the Standard

59. The Committee agreed to advance the standard to Step 8 of the Procedure for submission to the 8th Session of the Codex Alimentarius Commission. The standard as revised is attached to this Report as Appendix III.

Consideration at Step 7 of the Draft Standard for Quick Frozen Fillets of Plaice

60. The Committee had before it the above mentioned Draft Standard as contained in ALINORM 70/18, Appendix VI. The Committee also considered the Comments contained in document CODEX FISH 16/6 + two addenda.

61. The Committee discussed various proposals to extend the standard to other species of flat fish. Several delegations expressed some doubt about the possibility of having a single standard for all flat fish because of the great number of species which had been proposed, variations in dimension of the different groups of flat fish such as flounder, sole, halibut and turbot, as well as the difficulty which could be expected in elaborating provisions for defects which would be applicable to all these species.

62. The delegations of Canada and the United States observed that the surveys they had made on the defect table elaborated at the last meeting had covered fillets of flat fish of the species listed in their comments and that they had found no difficulty in applying a common table of defects applicable to these different species of flat fish. It was agreed that the title of the standard should be amended to read "Standard for Frozen Fillets of Plaice and Similar Species of Flat Fish". The Committee also agreed that all the species listed in the written comments should be included in the revised version of the standard with the exception of turbot and Greenland turbot, and that government comments should be specifically requested on a definite list of species appropriate for inclusion in the standard with the broadened scope. Governments should, if possible, include figures on international trade in the various species with their comments and further comment specifically on the defect provisions for these species. The Committee agreed that it would be also appropriate to include the species Austroglossus microlepis and A. pectoralis in this provisional list.
64. The Committee decided to make the same changes in this standard as for the Standard for Frozen Fillets of Cod and Haddock and made amendments to bring this standard, mutatis mutandis, into conformity with the other frozen fish standards.

Presentation

65. The Committee agreed to delete the phrase "including the removal of pin bones", as these species of fish did not contain such bones.

Final Product

66. Regarding sub-section 3.2.1(d) the delegation of France expressed the opinion that as fillets of this product were small and usually packed whole, there should be no "undesirably small" pieces in the pack. Other delegations commented that, particularly as the scope of the standard had been amended, many fillets would not be packed whole and that therefore the same provision for smaller pieces would be necessary. The Committee decided however to include additional words in the text to indicate that small pieces should only be added when necessary to make up the weight.

Name of the Food

67. The United States delegation supported the Danish proposal that, as the scope of the standard had been amended, it would be appropriate to include similar wording to that which appeared in the Standard for Canned Tuna and Bonito, e.g. "The name of the food shall be the name according to the law, custom or practice of the country in which the product is distributed". The delegation of France emphasized the advantages that would follow if the same name could be used in all countries. As FAO had undertaken work on the terminology of fish it would be possible, in the view of the delegation, to lay down one name which could then be used in conjunction with any other name customarily used in the country in which the product was sold. In due course, the old names would then cease to be used. Other delegations thought that it would be confusing for consumers if they had to become familiar with new names.

68. The Committee agreed to ask for detailed comments on the names which should be laid down for the species to be covered by the standard. Government comments should include information about current labelling practice for these species as well as suggestions for the revised labelling provision of the standard.

Status of the Standard

69. The Committee decided to retain the revised standard at Step 6 for a new round of government comments. The revised standard is attached to this Report as Appendix IV.

Consideration at Step 3 of the Proposed Draft Standard for Canned Tuna and Bonito in Brine or Oil

70. The Committee had before it the above mentioned Draft Standard as contained in ALINORM 70/10, Appendix VIII. The Committee also considered the Comments contained in document CODEX FISH 77/1 + one addendum.

Title

71. The Committee decided to change the title of this standard to read: "Proposed Draft Standard for Canned Tuna and Bonito in Water or Oil", which would also take account of the product which was packed without brine.
Scope

72. The Committee considered a proposal made by the delegation of France to include in the scope section of the standard products made from the raw flesh of some of the species and which were covered with water, with added salt and heat processed. Similar products were apparently also produced elsewhere, for example in Ivory Coast and Senegal. The Committee agreed to the following amended wording in the scope section of the standard: "This standard applies to canned flesh, pre-cooked or not, of tuna or bonito in water or oil. It does not apply to speciality products where tuna or bonito only constitutes a portion of the edible content". As a consequence of the new scope section, the Committee agreed to make appropriate changes in the other sections of the standard.

DESCRIPTION

73. The Committee considered the proposals made by the Governments in their written comments as regards the species of fish to be included in the standard (sub-section 2.1). Several delegations expressed some doubts as regards the inclusion of species of the genus Euthynnus (with the possible exception of Euthynnus pelamys, also called Katsuwonus pelamys) and also of species of the genus Sarda. In particular, it was suggested that the species Euthynnus alletteratus should be deleted as it had a flesh of a somewhat different texture. The Committee recognized, however, that all these species were being used in commercial production and it was finally agreed to make no change in the list of species in the standard.

74. The delegation of France considered that canning of uncooked fish should be restricted to the following species:

- Neothunnus albacora (Lowe) "thon albacore"
- Thunnus thynnus (Linné) "thon rouge"
- Germo alalunga (Gelin) "thon blanc"
- Parathunnus obesus (Lowe) "thon obese"

as the fish of other species would be unsuitable. The Committee agreed to ask Governments for comments specifically on this point and on an alteration of sub-section 3.1 "Raw Material" whereby a special provision would be added regarding the characteristics of raw fish, which was not to be cooked before canning.

Style

75. The Committee agreed to a proposal made by the delegation of Japan to include the following amended wording:

"(a) Regular: Packs prepared from cooked fish without skin.

(b) Natural: Solid packs prepared directly from raw fish, which may be presented as "skin-on"."

The Committee noted that it might be necessary to change the labelling provisions to take account of the inclusion of a natural pack, particularly as "natural" had different meanings in different countries when applied to this product. Governments were asked to comment and to make suggestions for any appropriate wording.

Form of Pack

76. The Committee agreed to delete the reference to discoloured tissue in sub-section 2.2.2(a) "Solid" because it was included in sub-section 3.4 "Final Product". It also agreed that the provision for large cans should be changed so that the thickness of layers would not be less than 2.5 cm (1 inch). The Committee agreed to add the word "shredded" as an alternative to "grated" in sub-section 2.2.2(d).
Raw Material

77. On the proposal of the delegation of France this paragraph was amended to reflect better the hygienic quality requirements for the raw material.

Ingredients

78. The Committee agreed to indicate that water used as packing medium had to be of potable quality and should be in conformity with the relevant WHO standard. It also agreed that natural flavourings may be used as ingredients.

Final Product

79. In a discussion regarding the allowable proportion of free flakes, the United States delegation informed the Committee that the figure of 18 percent for the proportion of free flakes had been obtained from careful studies of the product prepared by machine cutting and that this figure referred to the weight of the flesh. The Committee noted that the product cut by hand could reach a stricter requirement but decided to make no change.

Colour Classification

80. The Committee considered written comments on the question of optional colour classification. In the view of the delegation of the United States the method of determining colour, on which the figures specified in sub-section 3.5 had been based, would not be entirely suitable for an international standard, particularly as the results of research work on an objective method were now available. The Committee agreed that it would be necessary to wait until countries had been able to gain sufficient experience with the objective method to enable specific requirements for colour to be drawn up.

81. It was therefore decided to delete sub-section 3.5 "Colour Classification" and insert an appropriate provision in the labelling section (sub-section 6.1), to provide for optional references to colour with appropriate safeguards for terms currently in use in some countries (see Report of 4th Session; ALINORM 70/18, paragraph 35). The Committee reaffirmed its decision that the description "white" should only be permitted for "Thunnus alalunga". The delegation of Japan expressed regret that it was not possible at this time to elaborate a compulsory system of colour classification.

LABELLING

The Name of the Food

82. The Committee considered the written comments on the name of the food and noted that various countries followed very different procedures in naming the species covered by the standard. It was agreed that it would not be satisfactory in an international standard to leave the important question of the name of the food entirely to the law and custom of individual countries, but that it did not appear likely, at least at this time, that agreement could be reached on detailed rules for all species. The delegation of France drew attention to the possibility of including in the name, the species of the fish. The delegation of the United Kingdom observed that: it might help if the genus or species was listed somewhere on the label, for example in or near any list of ingredients, but that it appeared to be essential for countries to be asked when they accepted the standard, to say how products would have to be described in their country as otherwise exporting countries would not be helped.
83. In all the circumstances, the Committee agreed to reserve the description "tuna" and/or "bonito" to the species covered by the standard, but to provide for their use only in accordance with the law and custom of the country in which the product is sold. Governments were requested to comment specially on this part of the standard and, if they had not already done so, to provide information on current labelling rules and practices.

Net Contents - Drained Weight

84. The Committee discussed whether a drained weight provision should be included in the standard. It was pointed out that there were several styles and presentations and that there was no correlation between the fill of the container and the drained weight and no satisfactory method available for determining drained weight. The Committee therefore decided to make no provision.

Status of the Standard

85. The Committee agreed to advance the standard to Step 5 of the Procedure for submission to the 8th Session of the Codex Alimentarius Commission. The standard as revised is attached to this Report as Appendix V.

Consideration at Step 2 of the Proposed Draft Standard for Frozen Shrimps or Prawns

86. The Committee considered the Proposed Draft Standard prepared by the United States of America (CODEX FISH 9/7) and an alternative draft prepared by Denmark which had been circulated as a Conference Room Document. There was general agreement that a Proposed Draft Standard should be forwarded to Step 3 of the Procedure, but there existed a divergence of opinion on what the scope provision of such a standard should be. Some delegations favoured a single standard covering the raw and cooked products, while others preferred separate standards for each product.

87. A further question arose over whether the standard should also cover shrimps or prawns going forward for further processing. The delegation of the Netherlands considered that products for industrial purposes should be excluded as had been done for other standards, e.g. frozen fillets, on the grounds that the basic principle of Codex Standards was consumers' protection, and that this principle could best be applied to products going directly to consumers. Other delegations pointed out that both the raw and the cooked products were sold directly to the consumer and that there was no reason therefore for deciding now to exclude products when sold as intended for further processing.

88. After discussion, the Committee agreed that the Proposed Draft Standard prepared by the United States should go forward to Step 3 with a revised scope provision to include the steamed, parboiled and fully boiled products.

89. The attention of Governments was drawn to the fact that some of the provisions, e.g. presentation, count, defect factors and figures had been drawn up for the raw products and might need to be amended to apply also to cooked products. In making comments on the standard, Governments were asked to comment particularly on the provisions in relation to raw and cooked products and also on whether the standard should apply to products going forward for further processing or should be restricted to products going directly to consumers.

90. It was generally recognized that the degree to which different provisions would be necessary for the raw and cooked products, would influence the elaboration of the standard and that the question of whether a single standard or separate standards would be appropriate could be kept in mind.
91. The Committee's attention was again drawn by the delegation of Ireland to the problem of "Nephrops norvegicus" which was called Dublin Bay Prawn in some countries (see ALINORM 70/18, paragraph 58). It was agreed to include a suitable provision in the scope and labelling sections of the standard to safeguard the continued use of this description, but to place it in square brackets pending a final decision on whether it should be included or not. Governments were asked to comment specially on these provisions. The draft standard as revised is attached to this Report as Appendix VI.

92. The delegation of India informed the Committee that maximum permissible bacteriological loads had been made mandatory in India for exports of frozen and cooked shrimps or prawns.

Proposed Draft Standard for Frozen Fillets of Hake

93. The Committee was informed that the delegation of Spain had prepared a first draft of the Standard for Frozen Fillets of Hake, but this document was not presented to the Committee, because there was still some doubt about the scope section of this standard. The Committee agreed that this scope section should cover frozen fillets of hake in retail packages and should not deal with frozen blocks of fillets. The delegation of Spain agreed to prepare, for the Sixth Session (1971) of the Committee a new document based on the revised version of the Standard for Frozen Fillets of Cod and Haddock. The Committee further agreed that proposals for this first draft standard should be sent by the interested governments to the Head of the Delegation of Spain by the end of February 1971.

Report on the Replies to the Questionnaire on "Canned Sardines"

94. The Committee had before it a Synopsis of the Replies to the Questionnaire on Canned Sardines as contained in document CX/FFP 70/2. The Questionnaire had been elaborated at the 4th Session of the Committee (ALINORM 70/18, paragraph 47). Written comments had also been circulated from Morocco and Sweden. The delegation of Brazil informed the Committee that Sardinella aurita had been described as a sardine for very many years in Brazil. The Committee noted that a large number of countries had provided valuable factual information and views on sardines and sardine-type products and agreed that the Synopsis of Replies without appendices but expanded to include the written comments should be attached to this Report (see Appendix VII).

95. The Committee noted that the French delegation had prepared a detailed draft standard including defect provisions for the species Sardina pilchardus (Walbaum) in oil. It was furthermore noted that an outline text proposed by the Danish delegation covering sardine and sardine-type products had been distributed to the delegations at the meeting but that it did not include defect provisions.

96. After further discussion in which it was observed that the Synopsis of Replies formed a suitable basis for further action in elaboration detailed provisions for sardines and sardine-type products, it was agreed that a working paper should be prepared with due regard to the Synopsis of Replies and the text drawn up by Denmark and France. It was recognized that information and suggestions about defect provisions were required for the species other than Sardina pilchardus (Walbaum) and several delegations including the United States, Canada and Norway agreed to provide them. The Committee accepted an offer by the United Kingdom to draw up the working paper and asked that information and suggestions about defect provisions together with any comments on the defect provisions in the text drawn up by France should be sent to the Head of the United Kingdom Delegation no later than 31 March 1971. The comments on defects should contain information suitable for inclusion in one or more defect tables and should also indicate whether one or more defect tables were necessary.
The delegation of the United Kingdom undertook to make the working paper available for distribution to members of the Committee as soon as practicable. Attention was drawn to the list of species in question 2 of the Questionnaire and it was suggested that all of them might be included in any standard with the exception of Engraulis (Anchovy). The Committee noted that, when considering the working paper at a future session, it would be necessary to elaborate detailed provisions for one or more draft standards which would necessarily take up a considerable part of the time available of that session.

Other Business and Future Work

The delegation of Ireland proposed that the Committee should give some priority to the elaboration of standards for salted herring, frozen herrings and frozen blocks of cod. The Chairman said that these points would be considered in the future work programmes which would also take account of written comments submitted to him in accordance with the request in paragraph 59 of the Report of the Fourth Session (document ALINORM 70/18). A paper on future work would be issued by the Secretariat for consideration at the next meeting.

The delegation of India proposed that standards for canned shrimps, dried or packed in brine should be elaborated. It was noted that these products were not covered by the Recommended Standard for Canned Shrimps or Prawns and that if an amendment was to be proposed it would be necessary to make an application to the Commission. The delegation also asked whether a standard for frogs' legs could be elaborated by the Committee. The Chairman observed that new work had to be considered in accordance with the rules of the Commission regarding the elaboration of standards and that in his view the terms of reference of the Committee did not include frogs' legs.

Date of Next Session

The Committee noted that the next session of the Committee would be held in approximately a year's time. It was however realized that the timing was provisional and subject to approval by the Commission and the timetable of other meetings.

### SUMMARY STATUS OF THE STANDARDS

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<td>Frozen Fillets of Hake</td>
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1/ to be elaborated, see this report, para 93
**LIST OF PARTICIPANTS**

**LISTE DES PARTICIPANTS**

**LISTA DE PARTICIPANTES**

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Appendix I
Page 10

INTERNATIONAL ORGANIZATIONS
ORGANISATIONS INTERNATIONALES
ORGANIZACIONES INTERNACIONALES

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1. SCOPE

This standard shall apply 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

(a) Quick Frozen Fillets of Cod and Haddock are obtained from fish of the following species:

Cod: Gadus morhua L. (synonym Gadus callarias L.)
Gadus ogac, and Gadus macrocephalus
Haddock: Melanogrammus aeglefinus

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

2.2 Process Definition

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

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

2.3 Presentation

Fillets shall be presented as:

(a) skin-on, unscaled; or
(b) skin-on, scale (scales removed); or
(c) skinless.

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

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material

Quick Frozen Fillets of Cod and Haddock shall be prepared from sound fish of
the designated species which are of a quality such as to be fit to be sold fresh for human consumption.

3.2 Final Product

3.2.1 (a) The fillets shall be free from foreign matter and all internal organs and shall be reasonably free from ragged edges, tears and flaps, fins, significantly discoloured flesh, blood clots, black membrane (belly wall), nematodes and where appropriate skin, scales and bones.

(b) After cooking by steaming, baking or boiling as set out in Annex A the product shall have a flavour characteristic of the species and shall be free from any objectionable flavour and odour, and its texture shall be firm and not tough, soft or gelatinous.

(c) The final product shall be reasonably free from undesirably small fillet pieces. A piece weighing less than 30 g is classed undesirably small. The maximum number of small fillet pieces permitted is one per pack weighing less than 250 g and no more than 4 per kg in packs of 250 g or more, except as provided for in sub-section 6.1.1.

(d) The final product shall be free from deep dehydration (freezerburn) which cannot easily be removed by scraping.

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

4. FOOD ADDITIVES

The following provisions in respect of food additives have been endorsed by the Codex Committee on Food Additives; they may be used singly or in combination:

<table>
<thead>
<tr>
<th>Additive</th>
<th>Maximum level of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monophosphate, monosodium or monopotassium (Na or K orthophosphate)</td>
<td>0.5% m/m of the final product expressed as P₂O₅, singly or in combination</td>
</tr>
<tr>
<td>Diphosphate, tetraboron or tetrapotassium (Na or K pyrophosphate)</td>
<td></td>
</tr>
<tr>
<td>Triphosphate, pentasodium or pentapotassium or calcium (Na, K or Ca tripolyphosphates)</td>
<td></td>
</tr>
<tr>
<td>Polyphosphate, sodium (Na hexametaphosphate)</td>
<td></td>
</tr>
<tr>
<td>Ascorbate, potassium or sodium salts</td>
<td>0.1% m/m of the final product, expressed as ascorbic acid</td>
</tr>
</tbody>
</table>
HYGIENE

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

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 "cod fillets" or "fillets of cod"; "haddock fillets" or "fillets of haddock" as appropriate. Packs of fillets cut from blocks which may contain a number of small pieces in excess of the number permitted by sub-section 3.2.1(c) may be labelled as fillets of cod or haddock provided that such labelling is customarily used in the country where the product is to be sold and provided the product is identified to the consumer so that he will not be misled.

6.1.2 The label may, in addition, include reference to the presentation as skin-on or skinless and/or boneless, as appropriate. This shall be included if the omission of such labelling would mislead the consumer.

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

6.2 List of Ingredients

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

6.3 Net Contents

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

6.3.2 Where products have been glazed the net contents concern the product exclusive of the glaze.

6.4 Name and Address

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

6.5 Country of Origin

6.5.1 The country of origin of the food shall be declared if 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

There may be an indication in code or in clear of the date of production, that is, the date the final product was packaged for final sale.

7. METHODS OF EXAMINATION AND ANALYSIS

7.1 Thawing

The sample is thawed by enclosing it in a film type bag and immersing in an agitated water bath held at approximately 20°C (68°F). 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.

7.2 Cooking

Methods for cooking the product by steaming, baking or boiling are set out in Annex A of this Standard.

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

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

Steaming

Steam the sample in a closed dish of 18 cm (7 inches) diameter over boiling water for 35 minutes if frozen, or for 18 minutes after thawing the product.

The dish should be covered and should be kept in a water bath at +60°C (+140°F) during testing.

Baking

A baking pan, approximately 30 x 20 x 6 cm (12" x 8" x 2½") is lined with aluminium foil. The sample is placed in the pan and a cover is made by crimping an additional sheet of aluminium foil around the edges of the top of the pan. The pan is placed in an oven that has been pre-heated to 230°C (450°F), for 20 minutes or until cooking has been completed.

Boiling in Bag

Place the thawed sample into a boilable film-type pouch and seal. Immerse the pouch and its contents into boiling water and cook until the internal temperature of the fillet sample reaches 70°C (160°F) which requires about 20 minutes.
### RECOMMENDED DEFECT TABLE — COD AND HADDOCK

This table and the maximum allowable number of demerit points are based on an A.Q.L. of 6.5. The defect table is not to be applied to individual packs but to consignments in association with a suitable sampling plan.

Demerit points are awarded for each defect occurrence as listed below e.g.

<table>
<thead>
<tr>
<th>One bone</th>
<th>5 mm or less = 2 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two bones</td>
<td>5 mm or less = 4 points</td>
</tr>
</tbody>
</table>

1. **Bones**
   
   (a) **Boneless Fillets**
       - 5 mm or less in any dimension = 2 points
       - Greater than 5 mm up to and including 30 mm in any dimension = 4 points
       - Greater than 30 mm in any dimension = 8 points
   
   (b) **Fillets not designated as boneless**
       - Bones other than pin-bones greater than 10 mm in any dimension = 4 points

2. **Discolourations**
   
   - Each significantly intense discolouration of the flesh over 3 cm² up to and including 10 cm² = 4 points
   - Over 10 cm², every additional complete 5 cm² = 2 points

3. **Blood Clots**
   
   - Each piece greater than 5 mm in any dimension = 4 points

4. **Nematodes**
   
   - Each nematode with a capsular diameter greater than 3 mm or worms not encapsulated greater than 1 cm in length, or worms which are objectionable by virtue of their dark colour = 4 points

5. **Fins or Part Fins including both internal and external bones, other than the back fins of butterfly (block) Fillets**
   
   **Boneless Fillets**
   - Each fin or part fin 3 cm² or less = 8 points
   - Over 3 cm², every additional complete 3 cm² = 4 points
   
   **Fillets not designated boneless**
   - Each fin or part fin 3 cm² or less = 4 points
   - Over 3 cm², every additional complete 3 cm² = 2 points

6. **Skin (Skinless Fillets)**
   
   - Each piece greater than 3 cm² up to and including 10 cm² = 4 points
   - Over 10 cm², every additional complete 5 cm² = 2 points

7. **Black Membrane (Belly Wall)**
   
   - Each piece greater than 5 cm² up to and including 10 cm² = 4 points
   - Over 10 cm², every additional complete 5 cm² = 2 points

A sample of one kg will be considered defective if the demerit points total more than 20.
DRAFT STANDARD FOR FROZEN FILLETS OF OCEAN PERCH
(Submitted to the 8th Session of the Codex Alimentarius Commission
at Step 8 of the Procedure)

1. SCOPE

This standard shall apply 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

(a) Quick Frozen Fillets of Ocean Perch are obtained from fish of the
following species: (a) Sebastes marinus, (b) Sebastes mentella,
(c) Sebastes viviparus, (d) Sebastodes alutus, (e) Scorpaena dactyloptera
Delaroche, or (f) Helicolenus maculatus.

(b) 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 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 maxi-
mum crystallization is passed quickly. The quick freezing process shall not
be regarded as complete unless and until the product temperature has reached
-18°C (0°F) at the thermal centre after thermal stabilization. The product
shall be maintained at a low temperature such as will maintain the quality
during transportation, storage and distribution up to and including the time
of final sale.

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

2.3 Presentation

Fillets may be presented as:

(a) skin-on, scaled (scales removed); or
(b) skinless.

The fillets may be presented as boneless, provided that boning has been com-
pleted including the removal of pin bones.
3. **ESSENTIAL COMPOSITION AND QUALITY FACTORS**

3.1 **Raw Material**

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

3.2 **Final Product**

3.2.1 (a) The fillets shall be free from foreign matter and all internal organs and shall be reasonably free from ragged edges, tears and flaps, fins, significantly discoloured flesh, blood clots, black membrane (belly wall), nematodes and copepods and where appropriate skin, scales and bones.

(b) After cooking by steaming, baking or boiling as set out in Annex A the product shall have a flavour characteristic of the species and shall be firm and not tough, soft or gelatinous.

(c) The final product shall be reasonably free from undesirably small fillet pieces. A piece weighing less than 30 g is classed undesirably small. The maximum number of small fillet pieces permitted is one per pack weighing less than 250 g and no more than 4 per kg in packs of 250 g or more except as provided for in sub-section 6.1.1.

(d) The final product shall be free from deep dehydration (freezerburn) which cannot easily be removed by scraping.

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

4. **FOOD ADDITIVES**

The following provisions in respect of food additives have been endorsed by the Codex Committee on Food Additives; they may be used singly or in combination:

<table>
<thead>
<tr>
<th>Additive</th>
<th>Maximum level of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monophosphate, monosodium or monopotassium (Na or K orthophosphate)</td>
<td>0.5% m/m of the final product expressed as P₂O₅, singly or in combination</td>
</tr>
<tr>
<td>Diphosphate, tetrasodium or tetrapotassium (Na or K pyrophosphate)</td>
<td></td>
</tr>
<tr>
<td>Triphosphate, pentasodium or pentapotassium or calcium (Na, K or Ca tripolyphosphates)</td>
<td></td>
</tr>
<tr>
<td>Polyphosphate, sodium (Na hexametaphosphate)</td>
<td></td>
</tr>
<tr>
<td>Ascorbate, potassium or sodium salts</td>
<td>0.1% m/m of the final product, expressed as ascorbic acid</td>
</tr>
</tbody>
</table>
HYGIENE

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

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 of 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 ocean perch" or "ocean perch fillets" as appropriate. The terms "fillets of redfish" or "fillets of rosefish" are permitted in the countries where they are customarily used. Packs of fillets cut from blocks which may contain a number of small pieces in excess of the number permitted by sub-section 3.2.1(c) may be labelled as fillets of ocean perch provided that such labelling is customarily used in the country where the products are to be sold and provided the product is identified to the consumer so that he will not be misled.

6.1.2 The label may, in addition, include reference to the presentation as skin-on or skinless and/or boneless, as appropriate. This shall be included if the omission of such labelling would mislead the consumer.

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

6.2 List of Ingredients

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

6.3 Net Contents

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

6.3.2 Where products have been glazed the net contents concern the product exclusive of the glaze.

6.4 Name and Address

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

6.5 Country of Origin

6.5.1 The country of origin of the food shall be declared if 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

There may be an indication in code or in clear of the date of production, that is, the date the final product was packaged for final sale.

7. METHOD OF EXAMINATION AND ANALYSIS

7.1 Thawing

The sample is thawed by enclosing it in a film type bag and immersing in an agitated water bath held at approximately 20°C (68°F). 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.

7.2 Cooking

Methods for cooking the product by steaming, baking or boiling are set out in Annex A of this Standard.

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

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

Steaming

Steam the sample in a closed dish of 18 cm (7 inches) diameter over boiling water for 35 minutes if frozen, or for 18 minutes after thawing the product. The dish should be covered and kept in a water bath at +60°C (+140°F) during testing.

Baking

A baking pan, approximately 30 x 20 x 6 cm (12" x 8" x 2 1/2") is lined with aluminium foil. The sample is placed on the pan and a cover is made by crimping an additional sheet of aluminium foil around the edges of the top of the pan. The pan is placed in an oven that has been pre-heated to 230°C (450°F), for 20 minutes or until cooking has been completed.

Boiling in Bag

Place the thawed sample into a boilable film-type pouch and seal. Immerse the pouch and its contents into boiling water and cook until the internal temperature of the fillet sample reaches 70°C (160°F) which requires about 20 minutes.
RECOMMENDED DEFECT TABLE - OCEAN PERCH

This table and the maximum allowable number of demerit points are based on an A.Q.L. of 6.5. The defect table is not to be applied to individual packs but to consignments in association with a suitable sampling plan.

Demerit points are awarded for each defect occurrence as listed below e.g.

<table>
<thead>
<tr>
<th>Defect</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>One bone</td>
<td>2</td>
</tr>
<tr>
<td>Two bones</td>
<td>4</td>
</tr>
</tbody>
</table>

1. Bones
   (a) Boneless Fillets
       5 mm or less in any dimension 2
       Greater than 5 mm up to and including 30 mm in any dimension 4
       Greater than 30 mm in any dimension 8
   (b) Fillets not designated as boneless
       Bones other than pin-bones greater than 10 mm in any dimension 4

2. Discolourations
   Each significantly intense discolouration of the flesh over 3 cm² up to and including 10 cm² 4
   Over 10 cm², every additional complete 5 cm² 2

3. Blood Clots
   Each piece greater than 5 mm in any dimension 4

4. Nematodes and Copepods
   Each nematode or copepod with a capsule diameter greater than 3 mm or worms not encapsulated greater than 1 cm in length, or worms which are objectionable by virtue of their dark colour 4

5. Fins or Part Fins, including both internal and external bones
   Boneless Fillets
   Each fin or part fin 3 cm² or less 8
   Over 3 cm², every additional complete 3 cm² 4
   Fillets not designated boneless
   Each fin or part fin 3 cm² or less 4
   Over 3 cm², every additional complete 3 cm² 2

6. Skin (Skinless Fillets)
   Each piece greater than 3 cm² up to and including 10 cm² 4
   Over 10 cm², every additional complete 5 cm² 2

7. Black Membrane (Belly Wall)
   Each piece greater than 5 cm² up to and including 10 cm² 4
   Over 10 cm², every additional complete 5 cm² 2

A sample of 1 kg will be considered defective if the demerit points total more than 32.
1. SCOPE

This standard shall apply 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

(a) Quick frozen fillets of plaice and similar species of flat fish are obtained from fish of the following species:

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genus - Ancylopsetta</td>
<td></td>
</tr>
<tr>
<td>Ancylopsetta quadrocellata</td>
<td>flounder</td>
</tr>
<tr>
<td>Genus - Atheresthes</td>
<td></td>
</tr>
<tr>
<td>Atheresthes stomias</td>
<td>flounder</td>
</tr>
<tr>
<td>Genus - Citharichthys</td>
<td></td>
</tr>
<tr>
<td>Citharichthys sordidus</td>
<td>flounder</td>
</tr>
<tr>
<td>Genus - Cyclopsetta</td>
<td></td>
</tr>
<tr>
<td>Cyclopsetta fimbriata</td>
<td>flounder</td>
</tr>
<tr>
<td>Cyclopsetta chittendeni</td>
<td>flounder</td>
</tr>
<tr>
<td>Genus - Glyptocephalus</td>
<td></td>
</tr>
<tr>
<td>Glyptocephalus cymoglossus</td>
<td>flounder</td>
</tr>
<tr>
<td>Genus - Hippoglossina</td>
<td></td>
</tr>
<tr>
<td>Hippoglossina oblonga</td>
<td>flounder</td>
</tr>
<tr>
<td>Genus - Hypsopsetta</td>
<td></td>
</tr>
<tr>
<td>Hypsopsetta guttulata</td>
<td>flounder</td>
</tr>
<tr>
<td>Genus - Limanda</td>
<td></td>
</tr>
<tr>
<td>Limanda ferruginea</td>
<td>flounder</td>
</tr>
<tr>
<td>Limanda limanda (Pleuronectes</td>
<td></td>
</tr>
<tr>
<td>Limanda)</td>
<td>flounder</td>
</tr>
<tr>
<td>Genus - Liopsetta</td>
<td></td>
</tr>
<tr>
<td>Liopsetta putnami</td>
<td>flounder</td>
</tr>
<tr>
<td>Genus - Paralichthys</td>
<td></td>
</tr>
<tr>
<td>Paralichthys dentatus</td>
<td>flounder</td>
</tr>
<tr>
<td>Paralichthys lethostigma</td>
<td>flounder</td>
</tr>
<tr>
<td>Paralichthys squamilentus</td>
<td>flounder</td>
</tr>
<tr>
<td>Paralichthys albicarpa</td>
<td>flounder</td>
</tr>
<tr>
<td>Paralichthys californicus</td>
<td>flounder</td>
</tr>
<tr>
<td>Genus - Platichthys</td>
<td></td>
</tr>
<tr>
<td>Platichthys stellatus</td>
<td>flounder</td>
</tr>
<tr>
<td>Platichthys flesus (Pleuronectes</td>
<td>flounder</td>
</tr>
<tr>
<td>flesus)</td>
<td></td>
</tr>
<tr>
<td>Genus - Pseudopleuronectes</td>
<td></td>
</tr>
<tr>
<td>Pseudopleuronectes americanus</td>
<td>flounder</td>
</tr>
<tr>
<td>Genus - Scophthalmus</td>
<td></td>
</tr>
<tr>
<td>Scophthalmus aquosus</td>
<td>flounder</td>
</tr>
</tbody>
</table>
### Scientific Names

<table>
<thead>
<tr>
<th>Genus</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syacium</td>
<td>flounder</td>
</tr>
<tr>
<td>Syacium papillosum</td>
<td>flounder</td>
</tr>
<tr>
<td>Syacium micrurum</td>
<td>flounder</td>
</tr>
<tr>
<td>Austroglossus</td>
<td>sole</td>
</tr>
<tr>
<td>Austroglossus microlepis</td>
<td>sole</td>
</tr>
<tr>
<td>Austroglossus pectoralis</td>
<td>sole</td>
</tr>
<tr>
<td>Bopsetta</td>
<td>sole</td>
</tr>
<tr>
<td>Bopsetta jordani</td>
<td>sole</td>
</tr>
<tr>
<td>Glyptocephalus</td>
<td>sole</td>
</tr>
<tr>
<td>Glyptocephalus zachirus</td>
<td>sole</td>
</tr>
<tr>
<td>Glyptocephalus cynoglossus</td>
<td>sole</td>
</tr>
<tr>
<td>Hippoglossina</td>
<td>sole</td>
</tr>
<tr>
<td>Hippoglossina stomata</td>
<td>sole</td>
</tr>
<tr>
<td>Iopsetta</td>
<td>sole</td>
</tr>
<tr>
<td>Iopsetta isohepisis</td>
<td>sole</td>
</tr>
<tr>
<td>Lepidopsetta</td>
<td>sole</td>
</tr>
<tr>
<td>Lepidopsetta billineata</td>
<td>sole</td>
</tr>
<tr>
<td>Lepidorhombus</td>
<td>sole</td>
</tr>
<tr>
<td>Lepidorhombus whiff-lagonis</td>
<td>sole</td>
</tr>
<tr>
<td>Lophosetta</td>
<td>sole</td>
</tr>
<tr>
<td>Lophosetta aquosa</td>
<td>sole</td>
</tr>
<tr>
<td>Lyopsetta</td>
<td>sole</td>
</tr>
<tr>
<td>Lyopsetta exilis</td>
<td>sole</td>
</tr>
<tr>
<td>Microstomus</td>
<td>sole</td>
</tr>
<tr>
<td>Microstomus pacificus</td>
<td>sole</td>
</tr>
<tr>
<td>Microstomus kitt (Pleuronectes microcephalus)</td>
<td>sole</td>
</tr>
<tr>
<td>Parophrys</td>
<td>sole</td>
</tr>
<tr>
<td>Parophrys vetulus</td>
<td>sole</td>
</tr>
<tr>
<td>Pleuronichthys</td>
<td>sole</td>
</tr>
<tr>
<td>Pleuronichthys decurrens</td>
<td>sole</td>
</tr>
<tr>
<td>Psettichthys</td>
<td>sole</td>
</tr>
<tr>
<td>Psettichthys melanostictus</td>
<td>sole</td>
</tr>
<tr>
<td>Scophthalmus</td>
<td>sole</td>
</tr>
<tr>
<td>Scophthalmus rhombus</td>
<td>sole</td>
</tr>
<tr>
<td>Solea</td>
<td>sole</td>
</tr>
<tr>
<td>Solea solea</td>
<td>sole</td>
</tr>
<tr>
<td>Xystreurys</td>
<td>sole</td>
</tr>
<tr>
<td>Xystreurys liolepis</td>
<td>sole</td>
</tr>
<tr>
<td>Pleuronectes</td>
<td>plaice</td>
</tr>
<tr>
<td>Pleuronectes platessa</td>
<td>plaice</td>
</tr>
<tr>
<td>Pleuronectes quadrituberculatis</td>
<td>plaice</td>
</tr>
<tr>
<td>Hippoglossoides</td>
<td>plaice</td>
</tr>
<tr>
<td>Hippoglossoides platessoides</td>
<td>plaice</td>
</tr>
</tbody>
</table>

**Note:** There are alternative common names for many of these species, some of which do not correspond to the three main headings used, and others which use different headings for the same species. (See, for example, Multilingual Dictionary for Fish and Fish Products, OECD, 1968, Fishing News (Books) Ltd. London).
(b) 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 shall be subjected to a freezing process and shall comply with the conditions laid down hereafter. The freezing process shall be carried out in appropriate equipment in such a way that the range of temperature of maximum crystallization is passed quickly. The quick freezing process shall not be regarded as complete unless and until the product temperature has reached \(-18^\circ \text{C} (0^\circ \text{F})\) at the thermal centre after thermal stabilization. The product shall be maintained at a low temperature such as will maintain the quality during transportation, storage and distribution up to and including the time of final sale.

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

2.3 Presentation

Fillets shall be presented as:

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

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

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

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

3.2 Final Product

3.2.1 (a) The fillets shall be free from foreign matter and all internal organs and shall be reasonably free from ragged edges, tears and flaps, fins, significantly discoloured flesh, blood clots, black membrane (belly wall) nematodes and where appropriate skin, scales and bones.

(b) After cooking by steaming, baking or boiling as set out in Annex A the product shall have a flavour characteristic of the species and shall be free from any objectionable flavour and odour, and its texture shall be firm and free from abnormal conditions such as chalkiness and milkiness.

(c) The final product shall be free from undesirably small fillet pieces unless their presence is necessary to make up the weight of the pack. A piece weighing less than 30 g is classed undesirably small. The maximum number of small fillet pieces permitted is one per pack weighing less than 250 g and no more than 4 per kg in packs of 250 g or more except as provided for in sub-section 6.1.1.
(d) The final product shall be free from deep dehydration (freezerburn) which cannot easily be removed by scraping.

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

4. FOOD ADDITIVES

The following provisions in respect of food additives have been endorsed by the Codex Committee on Food Additives; they may be used singly or in combination:

<table>
<thead>
<tr>
<th>Additive</th>
<th>Maximum level of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monophosphate, monosodium or monopotassium (Na or K orthophosphate)</td>
<td>0.5% m/m of the final product expressed as P_2O_5, singly or in combination</td>
</tr>
<tr>
<td>Diphosphate, tetrasodium or tetrapotassium (Na or K pyrophosphate)</td>
<td></td>
</tr>
<tr>
<td>Triphosphate, pentasodium or pentapotassium or calcium (Na, K or Ca tripolyphosphates)</td>
<td></td>
</tr>
<tr>
<td>Polyphosphate, sodium (Na hexametaphosphate)</td>
<td></td>
</tr>
<tr>
<td>Ascorbate, potassium or sodium salts</td>
<td>0.1% m/m of the final product, expressed as ascorbic acid</td>
</tr>
</tbody>
</table>

5. HYGIENE

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

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

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

6.2 List of Ingredients

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

6.3 Net Contents

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

6.3.2 Where products have been glazed the net contents concern the product exclusive of the glaze.

6.4 Name and Address

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

6.5 Country of Origin

6.5.1 The country of origin of the food shall be declared if 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

There may be an indication in code or in clear of the date of production, that is, the date the final product was packaged for final sale.

7. METHODS OF EXAMINATION AND ANALYSIS

7.1 Thawing

The sample is thawed by enclosing it in a film type bag and immersing in an agitated water bath held at approximately 20°C (68°F). 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.

7.2 Cooking

Methods for cooking the product by steaming, baking or boiling are set out in Annex A of this standard.
The method of analysis described hereunder is an international referee method which is to be endorsed by the Codex Committee on Methods of Analysis and Sampling.

7.3  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. Transfer the product to a circular No. 8 sieve 20 cm (8 inches) in diameter for samples weighing less than 900 g (2 pounds) and 30 cm (12 inches) for those more than 900 g (2 pounds). Without shifting the product incline the sieve at an angle of approximately 17-20° to facilitate drainage, and drain exactly 2 minutes (stop watch). Immediately transfer the product to a tared pan and weigh (Methods of Analysis of AOAC 18.001).
COOKING METHODS

Steaming

Steam the sample in a closed dish of 18 cm (7 inches) diameter over boiling water for 35 minutes if frozen, or for 18 minutes after thawing the product.

The dish should be covered and should be kept in a water bath at +60°C (+140°F) during testing.

Baking

A baking pan, approximately 30 x 20 x 6 cm (12" x 8" x 2½") is lined with aluminium foil. The sample is placed in the pan and a cover is made by crimping an additional sheet of aluminium foil around the edges of the top of the pan. The pan is placed in an oven that has been pre-heated to 230°C (450°F), for 20 minutes or until cooking has been completed.

Boiling in Bag

Place the thawed sample into a boilable film-type pouch and seal. Immerse the pouch and its contents into boiling water and cook until the internal temperature of the fillet sample reaches 70°C (160°F) which requires about 20 minutes.
### RECOMMENDED DEFECT TABLE - PLAICE AND SIMILAR SPECIES OF FLAT FISH

This table and the maximum allowable number of demerit points are based on an A.Q.L. of 6.5. The defect table is not to be applied to individual packs but to consignments in association with a suitable sampling plan.

Demerit points are awarded for each occurrence as listed below e.g.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bones</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Boneless Fillets</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 mm or less in any dimension</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Greater than 5 mm up to and including 30 mm in any dimension</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Greater than 30 mm in any dimension</td>
<td>8</td>
</tr>
<tr>
<td>(b) Fillets not designated as boneless</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bones greater than 10 mm in any dimension</td>
<td>4</td>
</tr>
<tr>
<td><strong>Discolourations</strong></td>
<td>Each significantly intense discolouration of the flesh over 5 cm² up to and including 10 cm²</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Over 10 cm², every additional complete 5 cm²</td>
<td>1</td>
</tr>
<tr>
<td><strong>Blood Clots</strong></td>
<td>Each piece greater than 5 mm in any dimension</td>
<td>4</td>
</tr>
<tr>
<td><strong>Nematodes</strong></td>
<td>Each nematode with a capsular diameter greater than 3 mm or worms not encapsulated, greater than 1 cm in length, or worms which are objectionable by virtue of their dark colour</td>
<td>4</td>
</tr>
<tr>
<td><strong>External Fins of Part Fins</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Each fin or part fin 3 cm² or less</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Over 3 cm², every additional complete 3 cm²</td>
<td>4</td>
</tr>
<tr>
<td><strong>Skin (Skinless Fillets)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Each piece greater than 3 cm² up to and including 10 cm²</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Over 10 cm², every additional complete 5 cm²</td>
<td>2</td>
</tr>
<tr>
<td><strong>Black Membrane (Belly Wall)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Each piece greater than 5 cm² up to and including 10 cm²</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Over 10 cm², every additional 5 cm²</td>
<td>2</td>
</tr>
</tbody>
</table>

A sample of one kilo will be considered defective if the demerit points total more than 24.
1. SCOPE

This standard applies to canned flesh, pre-cooked or not, of tuna or bonito in water or oil. It does not apply to speciality products where tuna or bonito only constitutes a portion of the edible content.

2. DESCRIPTION

2.1 Canned Tuna and Bonito are the products consisting of the flesh of any of the appropriate species listed below, packed with water or oil and seasoning in hermetically sealed containers and so processed by heat as to prevent spoilage.

The products are prepared from the following species:

Thunnus atlanticus
Thunnus alalunga
Thunnus thynnus thynnus
Thunnus thynnus orientalis
Thunnus thynnus maccoyii
Thunnus obesus
Thunnus albacares
Thunnus tongol
Euthynnus pelamys (Syn. Katsuwonus pelamys)
Euthynnus lineatus
Euthynnus affinis
Euthynnus aletteratus
Sarda sarda
Sarda velox
Sarda chilensis
Sarda orientalis

2.2 Presentation

2.2.1 Style

(a) Regular - packs prepared from cooked fish without skin.
(b) Natural - solid packs prepared directly from raw fish, which may be presented as "skin-on".

2.2.2 Form of pack

(a) Solid - fish cut into transverse segments to which no free fragments are added. In containers of 450 g (one pound) or less of net contents, such segments are cut into lengths suitable for packing into one layer. In containers of more than 450 g (one pound) net contents, such segments may be cut into lengths suitable for packing in one or more layers of equal thickness. No layer shall have a thickness less than 2.5 cm (1 inch). Segments are placed in the can with the planes of their transverse cut ends parallel to the ends of the can. A piece of segment may be added if necessary, to fill a container.
(b) **Chunk or chunks** - a mixture of pieces of cooked fish cut into pieces, most of which have dimensions of not less than 1.2 cm (one-half inch) in each direction and in which the original muscle structure is retained.

(c) **Flake or flakes** - a mixture of particles of cooked fish in which the muscular structure of the flesh is retained.

(d) **Grated or shredded** - a mixture of particles of cooked fish that have been reduced to a uniform size, and in which particles are discrete and do not comprise a paste.

### 3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

#### 3.1 Raw material

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

#### 3.2 Packing media

- **(a) Olive oils** - in conformity with the relevant standard elaborated by the Codex Alimentarius Commission.

- **(b) Other vegetable oils** - clear, refined, deodorized, edible vegetable oil in conformity with the relevant standards elaborated by the Codex Alimentarius Commission.

- **(c) Potable water** - of properties in accordance with the WHO (1963) requirements contained in the "International Standard for Drinking Water".

#### 3.3 Ingredients

- **(a) Salt**
- **(b) Hydrolyzed protein**
- **(c) Spices, spice oils or spice extracts, vegetable seasonings and natural flavourings.**

#### 3.4 Final product

On opening, the cans shall appear well filled. The product shall be reasonably free from skin (except for the style skin-on), scales, prominent blood streaks, blood-clots, bones, bruises, the red non-striated muscle known as red meat, dark meat and honeycombing. The finished product shall have a pleasing appetizing appearance, odour, flavour and texture characteristic of the fish. The proportion of free flakes broken in the canning operation shall not exceed 18 percent of the weight of the flesh in the case of solid form of pack.

### 4. FOOD ADDITIVES

The following provisions in respect of food additives have been endorsed by the Codex Committee on Food Additives*:

*See report of the Seventh Session of the Codex Committee on Food Additives ALINORM 71/12, (paragraph 50, October 1970).*
HYGIENE

It is recommended that the product covered by the provisions of this standard be prepared in accordance with the appropriate sections of the Recommended General Principles of Food Hygiene (CAC/RCP 1-1969) recommended by the Codex Alimentarius Commission.

LABELLING

In addition to sections 1, 2, 4 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/R3 1-1969) the following specific provisions which have to be endorsed by the Codex Committee on Food Labelling shall apply.

6.1 The name of the food

6.1.1 The name of the food shall be tuna and/or bonito, whether qualified or not, used in accordance with the law and custom of the country in which the food is sold and in a manner so as not to mislead the consumer. The description tuna and/or bonito shall not be applied to fish of any species other than those listed in sub-section 2.1.

6.1.2 The name of the food may be qualified or accompanied by a term descriptive of the colour of the food provided that the term "white" shall only be used for Thunnus alalunga and the terms "light", "dark", and "blend" shall be used only in accordance with any rules of the country in which the food is sold.

6.2 Style and form of pack

The style and form of the pack as described in sub-section 2.2 and the reference to the packing medium, i.e. water or oil shall be included on the label.

6.3 List of ingredients

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

6.4 Net contents

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

6.5 Name and address

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

6.6 Lot identification

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

7. METHODS OF ANALYSIS AND SAMPLING

The methods of analysis and sampling described hereunder are international referee methods which are to be endorsed by the Codex Committee on Methods of Analysis and Sampling (To be developed).
PROPOSED DRAFT STANDARD FOR FROZEN SHRIMPS OR PRAWNS
(Going forward to Step 3 to obtain government comments)

1. SCOPE

This standard applies to frozen raw shrimps or prawns and those which have been steamed, parboiled or fully boiled during processing. It does not apply to speciality products where shrimps or prawns only constitute a portion of the edible contents, and does not apply to the species Nephrops norvegicus.

2. DESCRIPTION

2.1 Product Definition

2.1.1 Quick frozen shrimps or prawns are obtained from species of the families Penaeidae, Pandalidae, Crangonidae and Palaemonidae.

2.1.2 Shrimps or prawns of comparable size and colour may be mixed. Shrimps or prawns of obvious visual differences or sizes shall not be mixed.

2.2 Process Definition

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

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

2.2.2 Shrimps or prawns shall be either individually quick frozen or quick frozen in mass. If individually quick frozen the shrimps or prawns shall be maintained individually separate until the time of final sale.

2.3 Presentation

2.3.1 Whole - head and shell on

2.3.2 Headless - head removed, shell on

2.3.3 Fantail or cutlet - shrimps or prawns from which the heads have been removed and which additionally have been peeled (shell removed) down to the last segment, leaving the shell on the last segment as well as on the telson (tail).

(i) Round - prepared as described in 2.3.3.

(ii) Round and deveined (cleaned) - in addition to the preparation as described in 2.3.3, the back of the peeled segments of the shrimps or prawns has been cut open and the dorsal tract removed.

(iii) Split (butterfly) - in addition to the preparation as described in 2.3.3 the peeled segments of the shrimps or prawns have been split longitudinally and laid open.
(iv) Western style - in addition to the preparation as described in 2.3.3 the peeled segments of the shrimps or prawns have been split longitudinally completely through the shrimps or prawns of four segments starting with the anterior or segment number one.

2.3.4 Peeled - shrimps or prawns from which both the head and all the shell have been totally removed.

(i) Deveined (cleaned) - in addition to peeling, the back has been cut open and the dorsal track removed at least up to the last segment next to the telson (tail).

(ii) Split (butterfly) - in addition to peeling, the shrimps or prawns have been split longitudinally at least up to the last segment next to the telson (tail) and laid open.

(iii) Western style - in addition to peeling, the shrimps or prawns have been split longitudinally completely through the shrimps or prawns of four segments starting with the anterior or segment number one.

2.3.5 Broken or pieces - pieces of the product consisting of less than four segments. Such pieces may occur within the various size designations provided they do not occur in excess of the tolerance provided in sub-section 3.3.7. When pieces are packed as a special class or merchandise they shall be designated in accordance with the provision of sub-section 7.1.2.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material

Quick frozen shrimps or prawns shall be prepared from clean and sound shrimps or prawns of the designated species.

3.2 Ingredients - Lemon juice and sugars 1/ may be added to the glaze water of quick frozen raw shrimps or prawns.

3.3 Final Product

3.3.1 Appearance

- Clean, generally uniform in size, and prepared with care;
- Colour characteristic of the species and habitat or areas from which harvested;
- Practically free of desiccation dehydration, and blackening or other abnormal colouration.

3.3.2 Odour and Flavour

After thawing and where applicable cooking, shrimps or prawns shall have a good characteristic odour and flavour and shall be free of objectionable odours or flavours of any kind. A natural odour or flavour reminiscent of iodoform is not a defect unless excessive.

1/ Sugars means any carbohydrate sweetening matter.
### 3.3.3 Texture

The shrimps or prawns characteristically are not tough. They shall be relatively firm and free from mushiness. Quick frozen shrimps or prawns will be judged for texture only after thawing in accordance with the procedure as set forth in this standard.

### 3.3.4 Glazing

Shrimps or prawns may be glazed either individually or in bulk. When glazed the coating of ice shall totally cover the shrimps or prawns so as to provide protection from dehydration. The water used for 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, 1963.

### 3.3.5 Count

Quick frozen shrimps or prawns in any style of presentation may be packed by count, i.e., the average number of shrimps or prawns expressed either in the metric system ("Système International" units) or avoirdupois or both systems or measurement as required by the country in which the product is sold, and may be so declared as shown below:

<table>
<thead>
<tr>
<th>Number of shrimps or prawns per kilogramme</th>
<th>Number of shrimps or prawns per pound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ungraded</td>
<td>Ungraded</td>
</tr>
<tr>
<td>Under 22</td>
<td>Under 10</td>
</tr>
<tr>
<td>22 to 33 inclusive</td>
<td>10 to 15 inclusive</td>
</tr>
<tr>
<td>More than 33 but not more than 44</td>
<td>More than 15 but not more than 20</td>
</tr>
<tr>
<td>More than 44 but not more than 55</td>
<td>More than 20 but not more than 25</td>
</tr>
<tr>
<td>More than 55 but not more than 66</td>
<td>More than 25 but not more than 30</td>
</tr>
<tr>
<td>More than 66 but not more than 77</td>
<td>More than 30 but not more than 35</td>
</tr>
<tr>
<td>More than 77 but not more than 88</td>
<td>More than 40 but not more than 50</td>
</tr>
<tr>
<td>More than 88 but not more than 110</td>
<td>More than 50 but not more than 60</td>
</tr>
<tr>
<td>More than 110 but not more than 132</td>
<td>More than 60 but not more than 70</td>
</tr>
<tr>
<td>More than 132 but not more than 154</td>
<td>More than 70 but not more than 80</td>
</tr>
<tr>
<td>More than 154 but not more than 176</td>
<td>More than 80 but not more than 100</td>
</tr>
<tr>
<td>More than 176 but not more than 198</td>
<td></td>
</tr>
</tbody>
</table>
Number of shrimps or prawns per kilogramme
More than 198 but not more than 220
More than 220 but not more than 440
More than 440 but not more than 660

Number of shrimps or prawns per pound
More than 90 but not more than 100
More than 100 but not more than 200
More than 200 but not more than 300

(i) The count designation of quick frozen shrimps or prawns shall apply to the unglazed shrimps or prawns in the style of presentation designated on the label.

3.3.6 Defect factors
Other defect factors applicable to quick frozen shrimps or prawns are as follows:
(i) Cut or torn, damaged, or pieces (does not apply to 2.3.5)
(ii) Improperly peeled in relation to the style of presentation
(iii) Heads, except in the case of whole shrimps or prawns
(iv) Legs and loose shell
(v) Foreign material

3.3.7 Tolerances
The quick frozen shrimps or prawns in the various styles of presentation shall comply with the definition and essential quality factors as set forth in this standard, subject to tolerance allowances as set forth in Annex B.

4. FOOD ADDITIVES
4.1 The following additives to parboiled shrimps or prawns will be permitted subject to endorsement by the Codex Committee on Food Additives.

(1) Citric acid .......................... not limited
(2) Ammonia-magnesium phosphates ................ limit to be established
(3) Colours ................................ limit to be specified with limits

5. HYGIENE
It is recommended that the product covered by the provisions of this standard be prepared in accordance with the Recommended International Code of Practice General Principles of Food Hygiene (CAC/RCP 1-1969) developed by the Codex Committee on Food Hygiene.
6. WEIGHTS AND MEASURES

The minimum weight as declared upon the label shall be the weight of the shrimps or prawns exclusive of water used for glazing. Compliance with this provision shall be determined in accordance with the method set forth in this standard.

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 of the Codex Committee on Food Labelling.

7.1 Name of the Food

7.1.1 The name of the product as declared on the label shall be "shrimp" or "shrimps" or "prawns" 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.

7.1.2 In addition, there shall appear on the label in conjunction with the name of the product the style of presentation as indicated below:

<table>
<thead>
<tr>
<th>Style of presentation</th>
<th>Labelling designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole</td>
<td>Whole Shrimp, Shrimps or Prawns; or Head-on Shrimp, Shrimps or Prawns</td>
</tr>
<tr>
<td>Headless</td>
<td>Headless Shrimp, Shrimps or Prawns</td>
</tr>
<tr>
<td>Fantail Round</td>
<td>Fantail Shrimp, Shrimps or Prawns</td>
</tr>
<tr>
<td>Fantail Round and Deveined</td>
<td>Deveined Fantail Shrimp, Shrimps or Prawns; or Cleaned Fantail Shrimp, Shrimps or Prawns</td>
</tr>
<tr>
<td>Fantail Round and Split</td>
<td>Butterfly Fantail Shrimp, Shrimps or Prawns</td>
</tr>
<tr>
<td>Peeled</td>
<td>Peeled Shrimp, Shrimps or Prawns; or Raw Peeled Shrimp, Shrimps or Prawns</td>
</tr>
<tr>
<td>Peeled and Deveined</td>
<td>Peeled and Deveined Shrimp, Shrimps or Prawns; or Peeled and Cleaned Shrimp, Shrimps or Prawns</td>
</tr>
<tr>
<td>Peeled and Split</td>
<td>Peeled and Split Shrimp, Shrimps or Prawns; or Peeled Butterfly Shrimp, Shrimps or Prawns</td>
</tr>
<tr>
<td>Broken</td>
<td>Broken Shrimp, Shrimps or Prawns, or Pieces of Shrimp, Shrimps, or Prawns</td>
</tr>
<tr>
<td>Peeled Pieces</td>
<td>Shrimp meat (with a qualification as to whether deveined or not).</td>
</tr>
</tbody>
</table>
7.1.3.1 In addition there shall appear on the label the term "frozen" or "quick frozen" whichever is customarily used in the country of sale, to describe a product subjected to the freezing process as defined in sub-section 2.2.1.

7.1.3.2 Shrimps or prawns in any style of presentation may be individually quick frozen, and in such case the labelling shall be "individually frozen" or "individually quick frozen".

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

7.1.5 Nothing in this standard or in this section shall prevent the species Nephrops norvegicus from being labelled as "Dublin Bay Prawns" in those countries where such labelling is customary.

7.2 Count

7.2.1 If the quick frozen shrimps or prawns are labelled as to count, the count must comply with the provisions of 3.3.5.

7.2.2 Quick frozen shrimps or prawns in any style of presentation shall be free of broken shrimps or prawns or pieces subject to the tolerances as provided in 3.3.7.

7.3 List of Ingredients

When the shrimps or prawns are glazed no specific label declaration shall be required unless the glazing water contains additives, in which case a complete list of ingredients shall be declared on the label in descending order of proportion. The provisions of sub-section 3.2(b) and 3.2(c) of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969) shall also apply.

7.4 Net Contents

7.4.1 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.

7.4.2 Where products have been glazed the net contents concern the product exclusive of the glaze.

7.5 Name and Address

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

7.6 Country of Origin

(a) The country of origin of the food shall be declared if its omission would mislead or deceive the consumer.

(b) 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.
7.7 Lot Identification

There may be an indication in code or in clear of the date of production, that is, the date the final product was packaged for final sale.

7.8 Bulk Packs for Retail Units

In the case of packs containing a number of retail units the information required in 7.1 to 7.7 must be placed on the pack.

8. METHODS OF EXAMINATION

8.1 Thawing

[Method to be developed]

8.2 Cooking

Methods for cooking the product by steaming or boiling are set out in Annex C of this standard.

9. METHODS OF ANALYSIS AND SAMPLING

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

9.1 Sampling

Sampling shall be in accordance with the Sampling Plans for Prepackaged Foods (1969).

9.2 Determination of Net Contents of Products Covered by Glaze

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

9.3 Examination of Physical Defects

The sample shall be examined for defects according to Annex B.

9.4 Organoleptic Examination

Organoleptic assessment shall take place after the sample has been cooked by the method set out in Annex C.
DETERMINATION OF NET CONTENTS OF PRODUCTS COVERED BY GLAZE

Place the frozen shrimps or prawns in a container into which fresh water at room temperature is introduced from the bottom at a flow of approximately 25 litres per minute. After all glaze has been removed and the shrimps or prawns separate easily, empty the contents of the container on a tared sieve. The sieve should have a diameter of 30 cm (12 inches) and made by weaving wire of 1.00 mm (0.0394 inches) diameter so as to form square openings 2.38 mm (0.0937 inches) by 2.38 mm (0.0937 inches). Incline the sieve at approximately 20° and drain for two minutes. Weigh the sieve and contents. The net weight is the weight of the sieve and contents minus the weight of the sieve.

Note by the Secretariat: In the Recommended International Standard for Canned Shrimps or Prawns (CAC/RS 37-1970) in sub-section 8.4 Determination of Drained Weight (CAC/RM 28-1970) specifications are given for a circular sieve in accordance with ISO Recommendation R 565; such a sieve can be replaced by U.S. sieve with No. 8 standard screen (size opening 2.38 mm).

Specifications for circular sieves

(i) If the quantity of the total contents of the container is less than \( \sqrt{7} \) g (\( \sqrt{7} \) pounds) use a sieve with a diameter of 20 cm (8 inches).

(ii) If the quantity of the total contents of the container is \( \sqrt{7} \) g (\( \sqrt{7} \) pounds) or more, use a sieve with a diameter of 30 cm (12 inches).

(iii) The meshes of such sieves are made by so weaving wire as to form square openings of 2.8 mm by 2.8 mm. (a), (b)

(a) Ref. ISO Recommendation R 565.

(b) Such sieves could be replaced by U.S. sieves with No. 8 Standard Screen (size of opening 2.38 mm).
DEFECTS IN QUICK FROZEN SHRIMPS OR PRAWNS

Definition of defects:

1. Dehydration/Desiccation - the shrimps or prawns shell or meat contains whitish areas which seriously affect its appearance.

2. Black spot - the shrimps or prawns shell or meat contains darkened areas which seriously affect its appearance.

3. Other discolouration - colouration abnormal to the characteristic colour of the species thus seriously affecting its appearance.

4. Deteriorated or sour shrimps or prawns which have a definite off-odour of spoilage or sourness.

5a. Cut or torn - a shrimp or prawn having a break in the meat greater than 3/4ths of the thickness of the shrimp or prawn at the location of the cut or tear.

5b. Damaged - a shrimp or prawn which is crushed or mutilated so as to seriously affect its appearance.

5c. Piece - a portion of a shrimp or prawn that contains less than 5 segments.

6. Improperly peeled shrimps or prawns are those which have shell or pieces of shell on the meat in excess of that warranted by the style of presentation.

7. Heads or parts of heads.

8. Legs, loose shells, and antennae.

8a. Legs - walking legs either loose or attached to the shrimps or prawns.

8b. Loose shell - any piece of shell which is completely detached from the shrimps or prawns.

9. Foreign material - any extraneous material.

10. Uniformity of size - determined by computing the actual count per kilo or pound of the shrimps or prawns in the sample unit, and then allowing a tolerance of 10% to fall into either the next larger or smaller bracket.

11. Soft shell - shrimps or prawns without unhardened shell.

12. Incompletely deveined.

13. Toughness.


15. Iodoform-like odour - excessive means objectionable to the taste and may be considered as a foreign flavour.

Tolerances and demerit points relating to the above are to be formulated and developed along the lines of the Sampling Plans for Prepackaged Foods (1969).
COOKING METHODS

Steaming
Steam the sample in a closed dish of 18 cm (7 inches) diameter over boiling water for 35 minutes if frozen, or for 18 minutes after thawing the product.

The dish should be covered and should be kept in a water bath at +60°C (+140°F) during testing.

Boiling in bag
Place the thawed sample into a boilable film-type pouch and seal. Immerse the pouch and its contents into boiling water and cook until the internal temperature of the product reaches 70°C (160°F). Remove from bag and drain.
SYNOPSIS OF GOVERNMENTS REPLIES ON THE QUESTIONNAIRE ON "CANNED SARDINES"

INTRODUCTION

1. At its Fourth Session (1969), the Codex Committee on Fish and Fishery Products had before it alternatives for Proposed Draft Standards at Step 3:

   Alternative I  - three different standards for sardine type products  
                   (CODEX FISH 6/7, 6/8, 6/9, 1969)

   Alternative II - one single standard for sardine type products (CODEX FISH 6/10, 1969 and a Conference Room document containing a revised version of CODEX FISH 6/10)

2. The Committee recognized that there were basic differences of opinion between the delegations and agreed to return the alternatives to Step 2.

3. The Committee also agreed to ask governments to reconsider all the documents relating to the subject and to give their up-to-date views on the problem, with particular attention to the questions listed in paragraph 47 of ALINORM 70/18.

4. Seventeen governments sent a reply to this questionnaire:

   Argentina  Iceland  South Africa 1/
   Australia  Japan  Spain
   Canada  Morocco  Sweden
   Denmark  Norway  United Kingdom
   Fed. Rep. of Germany  Poland  United States of America
   France  Portugal

5. The Secretariat prepared the following synopsis of replies:

   QUESTION I - IS IT ACCEPTED THAT EXISTING PRACTICES WHEREBY SARDINE-TYPE PRODUCTS ARE OFTEN LABELLED AS SARDINES BUT WITH AN APPROPRIATE QUALIFYING PHRASE SHOULD BE TAKEN FULLY INTO ACCOUNT AND PROVIDED FOR SO LONG AS THE CONSUMER IS NOT DECEIVED? IF NOT, WHAT IS THE ALTERNATIVE?

   Argentina, Australia, Denmark, Iceland, Norway, S. Africa, Sweden, the United Kingdom and the United States answer the question affirmatively. They consider that this way of designating the sardine-type products as sardines has been in use for about one century in many countries. The largest importer in the world of sardine-type products, the USA, has accepted and used this designation for the imported products; another practice would not facilitate, but on the contrary severely restrict international trade and be contrary to the purpose of the Codex (Norway).

   In the opinion of France the designation "sardine" has been wrongly applied to products which are not sardines; only the species recognized as sufficiently near to Sardina pilchardus might be designated as "sardine" followed or preceded by a qualifying term.

   Australia understands "sardine" as a generic term to apply to any small fish.

1/ In an observer capacity.
Canada and Japan are in favour of designating any kind of clupeoid fish as "sardines" when canned, without a qualifying phrase. Canada is of the opinion that consumers of canned sardines are far less sensitive to the species of fish than to other factors such as style of pack, absence of defects, presence or absence of smoke, type of sauce and size of fish.

In the opinion of Australia, France, the Federal Republic of Germany, Morocco, Portugal, Spain and the U.K., only small fish of the species Sardina pilchardus (Walbaum) can be designated or labelled under the term "sardines" without a qualifying term. The U.K. consumers would be prejudiced if other fish could be sold as "sardines". The Federal Republic of Germany, Portugal, and Spain referring to their national legislation do not accept any designation of "sardines" even with a qualifying term for species other than Sardina pilchardus (Walbaum).

Poland indicates that it does not produce sardine-type products, but it has on its market imported "Sardines" (Sardina pilchardus) from Mediterranean countries and some so-called "Atlantic sardines" (Sardinops ocellata) from the U.S.S.R.

Spain mentions condemnatory judgements in importing countries such as the U.K. and the Fed. Rep. of Germany for the use of the name "Sardine" in designating species other than Sardina pilchardus (Walbaum).

QUESTION II - IS THE FOLLOWING TENTATIVE LIST OF GENERA AND SPECIES FOR SARDINES AND SARDINE-TYPE PRODUCTS SATISFACTORY?

- Small Sardina pilchardus (Walbaum)
- Small Sardina sardina
- Sardinops caerulea
- Sardinops melanosticta
- Sardinops sagax
- Sardinops neopilchardus
- Sardinops ocellata
- Clupea harengus (small)
- Sprattus sprattus (Clupea sprattus)
- Clupea fuegensis
- Clupea antipodum
- Sardinella aurita
- Sardinella eba
- Engraulis (various species)

Argentina, Canada, Denmark, Norway, South Africa and the United States consider this tentative list to be satisfactory. Canada mentions its regulations which provide that any kind of small clupeoid fish may be designated as sardines when canned. Sweden considers that this list may be satisfactory, if products made from these species prove to be comparable with Swedish sardines of the species Sprattus sprattus or with the Portuguese brands of Sardina pilchardus.

The following additional species have been proposed to be included in this list:

- Sardinella brasiliensis
- Engraulis anchoita
The following species have been proposed to be deleted from the list because, it is felt that the nature of the species and the processing do not permit the obtaining of products similar to sardines:

- *Clupea harengus* (h) Fed. Rep. of Germany, Poland
- *Clupea antipodum* (k) Poland
- *Engraulis* (various (species) not included in this list)
- all *Sardinella* spp. (1)+(m) France, Fed. Rep. of Germany
- all *Engraulis* spp. (n)
- all *Clupeoid Fish* (o)

All species other than

- *Sardina pilchardus* (a) U.K.
- *Clupea harengus* (h) U.K.
- *Sprattus sprattus* (i)

Iceland is of the opinion that including *Engraulis* (n) on the list is opening the door for many other species, e.g. *Mallotus villosus* (Capelin).

Iceland and Poland propose that only smaller fish of the species listed (mainly *Sardinops, Sardinella*) should be canned as "sardine-type" products, and their dimensions should be defined. For the U.K., only small *Clupea harengus* (h) and fish of the species *Sprattus sprattus* (i) are "sardine-type" fish.

In the opinion of the Federal Republic of Germany only the following can be regarded as "sardine-type" products, i.e. fish belonging to the Pilchard family on which the production techniques can be applied:

- large *Sardina pilchardus* (Walb.) or synonymously *Sardina sardina*
- *Sardinops caerulea* (c), *S. melanosticta* (d), *S. sagax* (e), *S. neopilchardus* (f), *S. ocellata* (g).

Morocco cannot accept the tentative list, except for species of the genus *Sardinops* (c) to (g), on the condition that labelling provisions would avoid confusion between products made from *Sardinops* (c) to (g) and *Sardina pilchardus* (a).

Referring to "sardines" the Federal Republic of Germany, France, Portugal, Spain, and the U.K. consider that only small sardines of the species *Sardina pilchardus* (a) can be designated under this name. Regarding the species enumerated under question II Spain is of the opinion that if a group of products were allowed to be designated as 'sardine', it would possibly create confusion for the consumer not only now, but possibly also in the future, in areas of commercial development.
QUESTION III - UNDER WHAT NAMES AND DESCRIPTIONS ARE THE ABOVE FISH SOLD
(a) IN YOUR COUNTRY
(b) BY YOUR EXPORTERS
PLEASE ALSO GIVE FULL DETAILS OF ANY OF THESE SPECIES AND OF ANY OTHERS WHICH SHOULD BE INCLUDED — i.e. NAMES UNDER WHICH THEY ARE TRADED, THE PACKING MEDIA, AND EXTENT OF INTERNATIONAL TRADE.

The species are designated as follows:

(a) Sardina pilchardus (immature): Sardina (Australia 1/; Denmark, France, Fed. Rep. of Germany, Morocco, Poland, Portugal, Spain, U.K.). In Denmark and South Africa the name is "Portuguese, French ... Sardines" 2/.

(b) Sardina sardina (immature): Sardine (Fed. Rep. of Germany). In the U.K. small Sardina sardina cannot be designated "Sardine".

(c) Sardinops caerulea: Pilchard (France); Californian pilchard (U.K.);
Sardine (U.S.A.).

(d) Sardinops melanosticta: Pilchard (France); Iwashi (= Sardine)(Japan);
Japanese pilchard (U.K.).

(e) Sardinops sagax: Pilchard (France), Chilean pilchard (U.K.).

(f) Sardinops neopilchardus: cannot be designated Sardine or Pilchard (U.K.).

(g) Sardinops ocellata: Pilchard (France, S. Africa); Atlantic sardine (Poland);
sardine (when smoked and packed in oil, S. Africa 2/) South African pilchard (U.K.).

(h) Clupea harengus (immature): Sardine (Canada, Denmark); Canadian, or Norwegian, or British, or Maine, or Danish, or Sild sardine (Canada, Denmark, Iceland, Norway 3/, U.K. / export only/; U.S.A. 4/ herring, hareng, arenque (France, Fed. Rep. of Germany 3/, Morocco, Portugal, Spain); sild (Fed. Rep. of Germany, U.K.).

(i) Clupea (Sprattus) Sprattus: Sardine (Denmark, Sweden 6/) Norwegian or Brisling sardine (Norway 3/); Brisling sardine (Denmark); Norwegian (or Danish, or Swedish) Brisling Sardines (Denmark), British or Brislig sardine (U.K., export only); sprat, spratos (France, Fed. Rep. of Germany, Portugal, U.K.); espadin (Spain); brisling (U.K.).

1/ Australia: other small fish may be described as "Sardines" with a qualifying adjective denoting the country where the fish was caught and canned.
2/ S. Africa: imported sardines are called: "Portuguese", "Norwegian" "Canadian" etc. "Sardines". There is no objection to this continuing. Exported Sardinops ocellata in brine or sauces is labelled "pilchardus" or "Sardines" as required.
3/ Norway: other names used for Clupea sprattus or Clupea harengus either for domestic consumption or for export: "Norwegian Brisling Sardines, Norwegian Sild Sardines, Norwegian Sild, Norwegian Brisling, Brisling Sardines, Sild Sardines, Brisling Sild".
4/ U.S.A.: exports of Clupea harengus are labelled "Maine Sardines". Imported products are designated as "Norwegian Sild Sardines, Norwegian Sardines, Sild Sardines, Brisling Sardines, Norwegian Brisling, Canadian Sardines". Products from S. Africa are designated as "Sardines".
6/ Sweden: the name used for export is "Brisling sardines".
Appendix VII

(j)+(k) Clupea (Sprattus) fuegensis, Clupea antipodum: Falkland sprat (Fed. Rep. of Germany); Sardinas argentinas (Argentina); these two species cannot be designated Sardine, Pilchard, Sild, Brisling or Sprat (U.K.).

(1) Sardinella aurita: Sardinelle (France, Fed. Rep. of Germany); Alacha (Spain); Alache (Morocco); cannot be designated Sardine, Pilchard, Sild, Brisling or Sprat (U.K.).

(m) Sardinella eba: Sardinelle (France, Fed. Rep. of Germany); cannot be designated Sardine, Pilchard, Sild, Brisling or Sprat (U.K.).

(n) Sardinella brasiliensis: Sardinas argentinas (Argentina).

(o) Engraulis (various species): anchois (France, Morocco); anchovy (Fed. Rep. of Germany, Japan, U.S.A.).

Engraulis encrasicholus: sardelle (Fed. Rep. of Germany);
Boquerón, bocarde (Spain).

Engraulis japonica: Anchovy (Japan).

Engraulis anchoita: Sardinas argentinas (Argentina).

Etrumeus micropus: Iwashi (= Sardine, Japan).

Concerning Question III (b) regarding the name given by exporters, it was generally replied that the labelling was that required by the importing country.

Some information on the international trade of sardine-type products:

Argentina

Export (1969): 23 000 kg of "Sardinas argentinas", in oil, in brine or sauces

Canada (one of the major suppliers of "canned sardines" in international trade)

Export (1968): 20 000 000 pounds of Canadian sardines in oil or in sauce
Import (1968): 1 600 000 pounds of "sild", "brisling", "Portuguese sardines"

France

Export: only Sardina pilchardus in oil
Import: sprats, anchovies

Fed. Rep. of Germany

Export: small Clupea harengus and sprat

Iceland

Export (1965): 110 metric tons Sild sardine in oil or in tomato. Export very small now

Japan

Export (1967): 86 780 Sardine in tomato (Sardinops, Etrumeus);
52 598 Anchovy (Engraulis)
Import (1967): 8,787 Sardine
Norway

Export: Norwegian Sardines (Sild and Brisling)

Poland

Import: Sardines (small Sardina pilchardus) and Atlantic sardines (Sardinops ocellata) packed mostly in oil

Portugal

Import: herrings and sprats

S. Africa

Import: "Portuguese", "Canadian" ... "sardines"

Export: "Pilchardus" or "Sardines" (Sardinops) in brine or sauces

Sweden

Import (1968): 2 048 tons; (1969) ca. 2 000 tons

Export (1968): 488 tons; (1969) 515 tons

Total production (tomato sauce, oil): ca. 2 600 tons

United Kingdom

Import (1969): 131 315 Cwt Sardina pilchardus; 20 468 Cwt Brisling; 16 288 Cwt Sild

Reexports (1969): 3 861 Cwt Sardina pilchardus; 530 Cwt Brisling; 176 Cwt Sild

U.S.A.

Import (1969): "Norwegian", "Portuguese", "Canadian" ... "sardines" canned in oil 27 219 000 lbs; "South African Sardines" and others canned not in oil 18 147 000 lbs

Export (1969): Maine Sardines in oil, or sauces: 2 094 000 lbs

QUESTION IV - DO YOU CONSIDER THAT A SINGLE STANDARD, SIMILAR TO CODEX FISH 6/10 AND THE CONFERENCE ROOM DOCUMENT, WOULD BE ACCEPTABLE AND HOW WOULD YOU PROVIDE FOR ANY PROCESSING AND PRESENTATION DIFFERENCES E.G. SIZE AND STYLE OF PACK, BETWEEN THE PRODUCTS?

The following countries are in favour of a single standard for all "sardines" and "sardine-type" products, similar to CODEX/FISH 6/10 and the Conference Room document: Argentina, Australia, Canada, Japan, Norway, South Africa, Sweden, the U.K. and the U.S.A. The reasons advocated for this are:

(a) in practice many "sardine-type" products have been internationally traded under the name of "sardines" (Japan);

(b) if two or three more standards should be elaborated for similar products, most of the text will have to be repeated in all the standards (Norway, S. Africa);
Concerning combinations of (a), (b) and (c) the following proposals are made:

France: mention of country of origin would create more confusion (a number of designations for the same species); a less restrictive use of the name "sardine" could be envisaged on the condition that each species is included in a separate standard.

Fed. Rep. of Germany: if necessary the geographical origin must be added to the common name (sild or sprat).

Norway: it must be permissible to add the name of the species, e.g., "Sild sardines, Brisling sardines, Norwegian Brisling sardines", etc.

Poland: the labelling will be clear enough if it provides the trade name of the product, the Latin name of the fish (in brackets) and the country of origin.

Portugal: the labelling to be used is "German herring, Norwegian brisling etc.".

Spain: the correct names would be "Brisling sprat" or "Sild herring" instead of "Brisling-sardine" or "Sild-sardine". The common name of the species could be followed by the qualifying term "Sardine-style".

S. Africa: a combination such as "Norwegian (Packed) North Sea Sild Sardines" should be allowed. S. Africa does not consider it correct to require the "country of origin" in all cases (e.g., where fish is found in waters other than territorial ones).

U.K.: small Clupea harengus L. should be labelled "sild" and Sprattus sprattus L. labelled "sprat". They may be labelled "Sild sardine" or "Brisling sardine" as appropriate, if such product has been customarily so described in the country in which it is sold.

Regarding "sardine" without a qualifying adjective, most governments are of the opinion that this label can be allowed for the small fish of the species "Sardine pilchardus" (Walbaum). Canada and Japan are of the opinion that any "sardine-type" product can be labelled as "sardine" without a qualifying phrase. Canada does not strongly object to the use of a qualifying term.

Denmark, which would prefer the common name of a species to be used as a prefix (Sild sardines, Brisling sardines), proposes, to solve the problem, with a similar approach as for the standard for canned tuna and bonito, i.e.: "The name of the food shall be the name according to the law, custom or practice of the country in which the product is distributed. The name may be qualified by the name of the species and/or in any other way so as to distinguish between the various different species".

QUESTION VII — HAVE YOU ANY FIRM VIEWS ON WHETHER THERE SHOULD BE ONE OR MORE STANDARDS AND, IF SO, WHAT ARE THEY? WOULD YOU BE ABLE TO ACCEPT MORE THAN ONE STANDARD SO LONG AS THE LABELLING QUESTION WAS SETTLED, e.g. BY PROVIDING FOR THE USE OF THE TERM "SARDINES" SUITABLY QUALIFIED FOR THE SARDINE-TYPE PRODUCTS.

The following governments are in favour of a single standard: Argentina, Australia, Canada, Denmark, Japan, Norway, S. Africa, Sweden, the U.K., and the U.S.A.

The following governments are strongly opposed to more than a single standard: Canada and Japan.
The following governments are in favour of more than one standard: France, Federal Republic of Germany, Morocco, Portugal and Spain.

The following governments would accept either one standard or more on the condition that the consumer is not deceived: Iceland and Poland.

The following governments would however accept more than one standard as an alternative:

(i) if it is found more practicable or acceptable (Australia, South Africa),
(ii) providing that scope sections set out the products or species to which they apply and providing that the labelling provisions for the products covered by separate standards are such as to enable a clear distinction to be made between these products (U.K.).

The arguments given in favour of a single standard are as follows:

- To have a standard sufficiently wide to cover all types of sardines (Argentina).

- In spite of the well known divergencies of the various points of view, "sardine standardization" is an integrated unity for which a solution may be worked out or not. Anything between these two extremes does not exist. If two or more standards are elaborated the possibility will arise that a country accepts only one (or some) of these and, in this way, the problem of "sardine standardization" is not solved at all, and full account is not taken of traditional labelling practices (Denmark).

- Canned sardines produced from several species of clupeoid fish have been traded on international markets for about 75 years. These products are in demand largely because they are an attractive but inexpensive fish protein food. Price, availability of supply and type and style of pack are far more important factors influencing sales than is the species of fish from which the product is produced. The introduction of several standards, after so many years of satisfactory trading in these products, will cause confusion and misunderstanding in the markets and might lead to artificial trade barriers. Their introduction, in effect, would impede rather than promote international trade (Canada).

- Several kinds of differences on processing and preservation should be distinguished and stipulated in the labelling section. In practice many sardine type products have been internationally traded under the name of sardines and it is very difficult to set up many standards because of a respective minor deviation of their own (Japan).

- One standard will avoid a lot of work, trouble and misunderstanding for all persons using the standard (Norway). All requirements which are common for the various products need not be repeated (Norway, South Africa). The principles established in the tuna standard may serve as a guide for sardines as to how to merge into one standard (Norway).

- A single standard could well be found to be practicable. It will also simplify matters (South Africa).
More than one standard would be very confusing, repetitive in much of the content of the standard, and would tend to defeat the purposes of the Codex programme as there would be several standards applicable to the same or very similar products, (as shown at the practical demonstration at the 3rd Session and in the accompanying technical information). The matter for resolution substantially concerns designation and this problem must be resolved without consideration of single or multiple standards (U.S.A.).

The reasons given in favour of more than one standard as follows:

- The term Canned clupeoids covers products which differ with regard to:
  
  (a) biologic species processed;
  (b) processing applied to these species;
  (c) packing medium used;
  (d) shape and size of cans currently used;
  (e) tasting characteristics;
  (f) value of the raw product;
  (g) monetary value of the final product.

Therefore one single standard would be either very general and useless (e.g. it would also cover mackerels in oil), or confusing because it would consider all particular cases (e.g. eviscerated or not, scaled or not, smoked or not etc.). One single standard would also be confusing to the consumer who has not been informed (number of fish in a can of the same size, presentation of different products implying a possible substitution from one to another, sale of different products under the same trade designation given by reference to a single standard) (France).

- the technological process must be considered: boiling, sterilization, cutting of heads, evisceration, size of species, texture, colour of the muscles, smell, flavour (Portugal).

- the labelling of clupeoid fishes, such as sild or sprat, as "sardines", is regarded as a deception (Fed. Rep. of Germany).

- according to the national legislation the term "Sardine" means exclusively the species Sardina pilchardus (Walbaum) (France, Fed. Rep. of Germany, Portugal, Spain).


The draft standards proposed for further discussion are the standards drafted by OECD (Iceland, Portugal, Spain). There must be a standard for each kind of fish (Portugal). The Fed. Rep. of Germany is in favour of two standards, one for the species "Clupea pilchardus" (Walbaum), the other which would cover the sardine-type products such as sild, and sprat products. For Poland the number of standards is not important, the essential is to identify the product.

Denmark does not consider either the three OECD drafts or the single US draft as appropriate but recommends that a new single standard for "Canned Sardines and Sardine-type Products" be drafted, mainly on the basis of the OECD drafts. Denmark is of the opinion that all those provisions which can in any way be made common provisions should be made so, but in those cases where it is considered necessary the provisions should be divided into more than one section.

For the U.K., the arguments for and against one or more standards are marginal; the difficulties experienced in developing a consensus on how the products should be described are the same whether one or more standard is being developed.
REPORT OF THE CHAIRMAN OF THE AD HOC SUB-COMMITTEE

Formed to consider the Defect Tables for Frozen Cod and Haddock Fillets, Plaice Fillets and Ocean Perch Fillets

Countries represented:

United Kingdom (chairman)          Netherlands
Canada                             Norway
Denmark                            Poland
Iceland                            U.S.A.
Ireland

Terms of reference

The ad hoc sub-committee was asked to review the amended defect tables submitted by the U.K. and contained in Codex Fish 70/Defects, and to consider the applicability of the Plaice Defect Table for the species of flat fish mentioned in Codex Fish 16/6 (1970).

A.Q.L.

The sub-committee agreed that an A.Q.L. of 6.5 should be adopted. The defect tables and total demerit points were revised on the basis of an A.Q.L. of 6.5. Canada agreed to this method of proceeding but reserved the right to suggest a lower figure at some future date.

Sample size

The sub-committee had a lengthy discussion on the proposed sample size of 1 kilogramme. It was accepted that there were difficulties in making up samples of 1 kilogramme but that these difficulties were inherent in any system which relied on a fixed sample weight. The sub-committee agreed on balance that a fixed sample weight was preferable to taking individual consumer packs having a wide weight range and awarding demerit points proportionately according to the size of each pack.

Denmark expressed the view that it was a disadvantage of the fixed sample weight system that grossly deviant packs contained in the bulk sample of 1 kilogramme might not be rejected.

Dehydration

The sub-committee considered the U.S.A. proposal for the inclusion of a dehydration provision in the Defect Tables. The sub-committee agreed that dehydration is a defect which develops during storage, and that it cannot be controlled at the same point as the other defects. It would therefore be difficult to adjust the demerit points to take this progressive developing defect into account. The sub-committee proposed therefore that dehydration should be covered by a general clause in the section on Final Product sub-section 3.2.1 (d) as follows:

"The final product shall be free from deep dehydration (freezer-burn) which cannot be easily removed by scraping."
Scales

The sub-committee proposed that the presence of scales on scaled fillets should be covered by a clause in the section on Final Product, sub-section 3.2.1 (a) as follows:

"The skin-on scaled (scales removed) fillets shall be virtually free from scales".

Defect Table for Frozen Fillets of Cod and Haddock

The sub-committee revised the amended Defect Table for Cod and Haddock in the light of Government comments. The revised table is given in Annex B of Appendix II.

The Fed. Rep. of Germany in its written comments, had stated that the presence of bones in a boneless product was unacceptable. The sub-committee agreed that there were two types of product covered by the standard, one designated boneless in which all bones has been removed within the limits of good commercial practice, and one product not so designated in which no attempt was made to remove certain bones. It was impossible to ensure complete freedom from bones in the "Boneless" product and if there were objections to the use of the term "Boneless" this should be covered in the labelling provisions.

The U.S.A. and the Fed. Rep. of Germany considered the presence of parasitic worms unacceptable. The Fed. Rep. of Germany expressed the view that no tolerance for worms should be included. The sub-committee agreed that as parasites occur naturally in fish flesh, and as it is not commercially practicable to ensure complete freedom from worms in consumer packs, a tolerance must therefore be given.

Defect Table for Frozen Fillets of Ocean Perch

The sub-committee revised the Defect Table for Fillets of Ocean Perch in the light of Government comments. The revised Defect Table is given in Annex B of Appendix III.

The U.S.A. requested the inclusion of copepods in the defect section headed nematodes.

Defect Table for Frozen Fillets of Plaice and similar Species of Flat Fish

The sub-committee revised the amended Defect Table for Fillets of Plaice in the light of Government comments and at the same time considered the applicability of the revised table for all the species of flat fish mentioned in Codex Fish 16/6 (1970).

The revised Defect Table is given in Annex B of Appendix IV.

The sub-committee agreed that with the exception of the defect tolerance for discolouration the defect table was applicable to all the species provided that the section on Final Product, sub-section 3.2.1 (b) was amended to cover milky and chalky fillets:

"After cooking etc. .... and its texture shall be reasonably firm, and free from abnormal conditions such as chalkiness and milkiness".

Further work is required to provide information on the variation in the incidence of discolouration in those species of flat fish contained in Codex Fish 16/6 (1970).

1/ The various defect tables originally attached to the Report of the sub-committee have been appended to the respective Standards as recommended defect tables.