



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



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

ALINORM 70/18
(CX 5/35.3)
November 1969

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX ALIMENTARIUS COMMISSION

Seventh Session, Rome

7-17 April 1970

REPORT OF THE

CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS

Fourth Session

29 September - 8 October 1969

Bergen Norway

TABLE OF CONTENTS

	<u>Paragraph</u>
Introduction, Election of Rapporteur and Adoption of Provisional Agenda	1-4
Report on Matters of Interest to the Committee (Codex Alimentarius Commission and other Committees)	5,6
Use of the Spanish Language in the Codex Committee on Fish and Fishery Products	7
Report on the Second Ad Hoc Consultation on Codes of Practice for Fish and Fishery Products, Rome, 17-22 March 1969	8,9
Report on the FAO Technical Conference on Fish Inspection and Quality Control, Halifax, Canada, 15-25 July 1969	10
Decision of the Committee on the Proposed Draft Provisional Guidelines on Fish, Crustaceans and Molluscs and Products thereof	11-13
Sampling Plans for Prepackaged Foods	
- General	14
- Specific - Sampling Plans for the Examination of Physical Defects for Quick Frozen Fillets of Fish	15,16
Draft Standard for Quick Frozen Guttled Pacific Salmon	17-22
- Status of the Standard	22
Application of Decisions of the Joint ECE/Codex Alimentarius Group of Experts on the Standardization of Quick Frozen Foods	23,24
Draft Standard for Quick Frozen Fillets of Cod and Haddock	25-30
- Methods of Analysis. TMA and other Methods	27-29
- Status of the Standard	30
Draft Standard for Canned Shrimp and Prawns	31-37
- Status of the Standard	37
Proposed Draft Standard for Quick Frozen Fillets of Ocean Perch	38-40
- Status of the Standard	40
Proposed Draft Standard for Quick Frozen Fillets of Plaice	41-43
- Status of the Standard	43
Canned Sardines	44-47
- Request for Comments on Questionnaire	47
Proposed Draft Standard for Canned Crab Meat	48-54
- Status of the Standard	54
Proposed Draft Standard for Canned Tuna and Bonito in Brine or Oil	55
Status of the Standard	56
Proposed Draft Standard for Frozen Shrimp or Prawns	57, 58
Other Business	59-63
- Future Work	59
- Declaration of Net Contents	60-63
Printed Texts of Adopted Recommended Standards	64

APPENDICES

- Appendix I - List of Participants
- Appendix II - Draft Standard for Quick Frozen Guttled Pacific Salmon
- Appendix III - Draft Standard for Quick Frozen Fillets of Cod and Haddock
- Appendix IV - Draft Standard for Canned Shrimp or Prawns
- Appendix V - Proposed Draft Standard for Quick Frozen Fillets of Ocean Perch
- Appendix VI - Proposed Draft Standard for Quick Frozen Fillets of Plaice
- Appendix VII - Proposed Draft Standard for Canned Crab Meat
- Appendix VIII - Proposed Draft Standard for Canned Tuna and Bonito in Brine or Oil

REPORT OF THE CODEX
COMMITTEE ON FISH AND FISHERY PRODUCTS
Fourth Session
29 September - 8 October 1969
Bergen, Norway

INTRODUCTION

1. The Codex Committee on Fish and Fishery Products held its fourth session in Bergen, Norway, from 29 September to 8 October 1969 by courtesy of the Government of Norway. Dr. O.R. Braekkan was in the chair and Delegations and Observers from 24 countries and 6 International Organizations attended the session. The List of Participants is included as Appendix I to this Report.
2. The Chairman welcomed the participants in the name of the Director-General of Fisheries of Norway. He informed the Committee of the recent death of Mr. H.V. Dempsey (Canada), a former Vice-Chairman of the Codex Alimentarius Commission. The Chairman paid tribute to the outstanding work which Mr. Dempsey had done for the Commission and especially as leader of the Canadian Delegation to the sessions of the Codex Committee on Fish and Fishery Products. The Committee rose and observed a few minutes silence in memory of the late Mr. Dempsey.

ELECTION OF RAPPORTEUR AND ADOPTION OF THE PROVISIONAL AGENDA

3. On the proposal of the Chairman, the Committee appointed Mr. L.G.. Hanson (U.K.) as Rapporteur of the session.
4. The Committee adopted the Provisional Agenda with a slight re-arrangement of items.

REPORT ON MATTERS OF INTEREST TO THE COMMITTEE (CODEX ALIMENTARIUS COMMISSION AND OTHER COMMITTEES)

5. The Representative of the FAO/WHO Food Standards Programme, brought to the attention of the Committee the following matters:
 - (a) the adoption by the Codex Alimentarius Commission, at its sixth session, of the Draft Standard for Canned Pacific Salmon as a Recommended International Standard for Canned Pacific Salmon for acceptance by governments;
 - (b) the adoption by the Commission at Step 5 of the Procedure for the Elaboration of World-Wide Standards of the Draft Standards for (i) Frozen Guttled Pacific Salmon, (ii) Frozen Fillets of Cod and Haddock, and (iii) Canned Shrimp and Prawns;
 - (c) the decisions of the Commission with regard to the General Principles of the Codex Alimentarius and, in particular, the inclusion in the scope of the Codex Alimentarius of documents of an advisory nature (Codes of Practice, Guidelines, Recommended Measures, etc.) and the clarification of the acceptance procedure in respect of acceptance with minor deviations;
 - (d) the decisions of the Codex Committee on Food Hygiene at its sixth session with regard to the Elaboration of Codes of Hygienic Practice dealing with the handling of fresh and frozen fish at sea and on shore,

fresh and frozen processed fishery products, canned fish products, molluscan shellfish, and smoked and semipreserved fish products.

The Committee was informed that the first drafts of these Codes of Hygienic Practice would be before the Codex Committee on Food Hygiene at its 1971 meeting. The Codex Committee on Food Hygiene had also requested Canada and the U.S.A. to prepare basic guidelines for the micro-biological analysis and sampling for canned fish.

6. The Committee was informed about the discussions of the Joint ECE/Codex Alimentarius Group of Experts on the Standardization of Quick Frozen Foods which had held its fifth session during the previous week in Rome. The Joint Group had considered the implications of the decision of the Codex Alimentarius Commission regarding the General Standard for Quick Frozen Foods (please see the Report of the sixth session of Commission, ALINORM 69/67, paras 158, 159). The Joint Group of Experts had noted that its terms of reference which provided for the coordination of work on all quick frozen products had not been changed by the Commission. The Group had re-affirmed its belief that the quick frozen food industry should be treated as a whole and had agreed to redraft the old General Standard in such a way as to enable it to be used as a guideline in its work and in the work of other Committees or Groups. The Group of Experts had adopted a new provision relating to the scope of standards for quick frozen fruit and vegetables and a revised definition of the freezing process and the maintenance of temperature during the cold chain. (See also: paragraphs 17, 23 and 24 of this Report.)

USE OF THE SPANISH LANGUAGE IN THE CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS

7. The Chairman reported that the question of Spanish as a working language had been discussed at the sixth session of the Codex Alimentarius Commission and would be fully examined at the seventh session of the Commission where a report on the matter by the Directors-General of FAO and WHO would be available. The Delegations of the Argentine, Peru and Spain said how much they would welcome the provision of Spanish in the Committee.

REPORT ON THE SECOND AD HOC CONSULTATION ON CODES OF PRACTICE FOR FISH AND FISHERY PRODUCTS, ROME, 17-22 MARCH 1969 (Doc. FAO Fisheries Reports, No. 73, FE/R73)

8. A Report was given to the Committee by a representative of FAO's Fisheries Department. Since the last meeting of the Committee, FAO had convened a second Ad Hoc Consultation on Codes of Practice for Fish and Fishery Products. This Consultation had agreed on the final version of a Code of Technological Practice for Fresh Fish which will be issued as an FAO Fisheries Report in 1969. The Consultation had also agreed on a draft version of the Code of Technological Practice for Frozen Fish to be circulated for comments in 1969. Comments received at the request of the third session of the Codex Committee on Fish and Fishery Products on the revised OECD/IIR draft were taken into consideration in redrafting this Code. These and other Codes would be submitted, as they were completed, to the Secretariat of the Commission for reference to the Codex Committee on Fish and Fishery Products. The Ad Hoc Consultation had been informed that when a Code of Practice elaborated by the FAO Department of Fisheries with the assistance of an appropriate group of

experts was completed, it should be submitted through the Secretariat of the Commission to the Codex Committee on Fish and Fishery Products. If this Committee considered that a code was satisfactory, the Committee should submit the code to Codex Alimentarius Commission with a recommendation that it be accepted as a Code of Practice to be published in the Codex Alimentarius.

9. The Consultation also reviewed a preliminary Code of Technological Practice for Canned Fish which would be sent out by the FAO Department of Fisheries for a first round of comments by mid 1970. In relation to future work priority was to be given to Codes of Technological Practice for retail handling, smoked, pre-cooked, breaded and fried fishery products as well as for shrimp. The Committee placed on record its view that the work by FAO on Codes of Practice was important and that all these codes should be completed and submitted to the Committee as soon as possible. Special attention should be paid by FAO to those parts of the Codes which contained overlapping provisions.

REPORT ON THE FAO TECHNICAL CONFERENCE ON FISH INSPECTION AND QUALITY CONTROL, HALIFAX, CANADA, 13-25 July 1969

10. A short review was given of the highlights of the FAO Technical Conference on Fish Inspection and Quality Control (15-25 July 1969, Halifax, Canada). The Codex Committee on Fish and Fishery Products was informed that there were 220 participants from 43 countries. Among the 105 papers reviewed and discussed were some of particular interest to the Committee such as the documents on definition of terms used in inspection and quality control and on current methods of analysis for freshness testing. The report of the Working Group on TMA was made available to the Committee (document FE: FIC/69/Rep 3, Rev 1, 22 July 1969); (see: Paragraph 27 below). Great interest had been shown by the Technical Conference in the standards work of the Codex Alimentarius Commission and in the Codes of Practice being elaborated by FAO. Participants from developing countries had stated their need for assistance in establishing training programmes and fish inspection services. In this connection the Working Group on Quality Control and Inspection Programme Development of the Conference had elaborated a set of guidelines and had recommended that FAO should undertake the task of expanding them into a model framework on which any country could base its fishery inspection programme.

DECISION OF THE COMMITTEE ON THE PROPOSED DRAFT PROVISIONAL GUIDELINES ON FISH, CRUSTACEANS AND MOLLUSCS AND PRODUCTS THEREOF (Codex/Fish/Gen. 1/3 Sept. 1969)

11. The Committee examined in general terms the above document which had been revised by the author country (Federal Republic of Germany) on the basis of the replies received from Members of the Committee. It was noted that the document consisted of sections containing definitions of terms, classifications (e.g. "frozen fish"), ingredients, weights and measures, labelling, methods of analysis, and a detailed Appendix on food additives. It was pointed out that at this stage there was no question of elaborating a general standard and, therefore, sections on weights and measures, labelling and methods of analysis would be included, as appropriate, in individual standards. The detailed Appendix on food additives was recognised as being a very useful aide-mémoire for the Committee although the individual standards would have to include sections on food additives which would be subject to endorsement by the Codex Committee on Food Additives.

12. Some Delegations thought that the remaining parts of the document would be of value if they were examined again in the light of the discussions of the Committee and of the detailed comments which Members of the Committee had provided. Other Delegations were not convinced that it was necessary or practicable to draw up definitions of terms in a general document since it would be better to define a term when considering it in an individual standard. Moreover, some of the terms had already been fully discussed, e.g. fillets. On the other hand, it was pointed out that certain provisions, e.g. those relating to the use of salt, were worded differently in individual standards.
13. The Committee concluded that it would be best to ask the author country to revise those parts of the general document which the discussion had indicated might be useful taking into account in particular the written comments relating to the definition of terms. Members of the Committee were asked to send their considered views on the nature and scope of the document and any further suggestions relating to the definition of terms to the Chief Delegate of the Delegation of the Federal Republic of Germany not later than 1 December 1969.

SAMPLING PLANS FOR PREPACKAGED FOODS (ALINORM 69/27)

General

14. Following its discussion at its Third Session (ALINORM 69/18, paragraph 13) that the General Sampling Plans for Prepackaged Foods (ALINORM 69/27) could be made applicable to canned fish products, the Committee took these Plans into account when elaborating the sampling and defects in the individual standards for quick frozen fish. The Delegation of Japan made a general reservation about the application of the Plans (ALINORM 69/27) as a mandatory referee sampling method for all fish products as the Plans included two levels of inspection. The Committee was of the opinion that the Sampling Plans (ALINORM 69/27) needed very careful consideration before inclusion in individual standards. The decisions taken by the Committee in this respect on each standard are dealt with below.

Specific - Sampling Plans for the Examination of Physical Defects for Quick Frozen Fillets of Fish

15. In accordance with the request of the Committee at its Third Session the Delegation from Canada had provided a table of defects for all fish covered by standards for quick frozen fillets. In order to take full account of the Sampling Plans for Prepackaged Foods (ALINORM 69/27) the Committee asked a small Group under the chairmanship of the U.K. to draw up a plan which could be generally applied to all quick frozen fillets with appropriate differences in the defect provisions for individual standards.
16. The Group drew up a plan which was suitably modified to take account of the large number of pack sizes for quick frozen fillets. (See Explanatory Note annexed to standards.) The Committee decided, subject to review, that the AQL (Acceptable Quality Level) for all fillets should be 6.5 and that a provisional table of defects should be included in each of the standards. The delegation of Japan reserved its position with regard to the applicability of the Sampling Plans and to the AQL of 6.5¹ It was agreed that Members of the Committee would do their best to obtain practical experience of the operation of the defect tables. It was agreed that Members should send their comments on the plan and the figures for cod and haddock, ocean perch and plaice to the Head of the U.K. Delegation,

with a copy to the FAO Secretariat by 31 March 1970. A paper including, if necessary, revised defect tables would then be distributed before the next meeting of the Committee.

- ¹ Mr. M. Yamamoto of the Delegation of Japan visited FAO Headquarters 13 October 1969 and advised the FAO Secretariat that the Japanese reservation should read as follows:
"A figure of 6.5 is acceptable, but Japan has some doubt about sample sizes and acceptance numbers which are provided for in the Sampling Plan as defined with an AQL of 6.5 for all quick frozen fillets of fish."

DRAFT STANDARD FOR QUICK FROZEN GUTTED PACIFIC SALMON

17. The Committee agreed to change the title of the standard to include the words "quick frozen" in order to make it clear that the standard did not relate to a product that had merely been "frozen" but not quick frozen. The Committee placed on record its view that it would be left to countries who did not use an official language to translate the term "quick frozen" in the appropriate way wherever it was used in this and in other standards for "quick frozen" fish. The Committee reaffirmed the decision that the standard should apply to products in bulk shipment, and amended the "Scope" section to make it clear that the product could be in bulk or in bulk containers such as cases or boxes. The provisions relating to temperature requirements during transportation, distribution and storage were deleted and the revised definition of the freezing process which had been adopted by the Joint ECE/Codex Alimentarius Group of Experts on Quick Frozen Foods was included in the "Definition" section with amendments appropriate to this product. Under the section "Essential Composition and Quality Factors" the Committee agreed to replace the present text dealing with the final product by a text recommended by the Delegation of the Netherlands in which the quality characteristics of the final product were brought in closer relation to the definition of defects.
18. Since the standard applied to a product packed in bulk, the Committee considered after detailed discussion that there was no need for a section on labelling but that it would be sufficient to lay down what the name of the product should be. It was considered to be neither necessary nor appropriate that the common names for the species should in each case be identical to those laid down for the canned product sold to the consumer. The Committee also did not consider it necessary to specify requirements for information to be placed on the bulk container (if any) or the information (e.g. weight, country of origin, name of packer) which ought to be included in the commercial documents accompanying the product. The Committee considered that these matters could be left to the buyer and seller.
19. The Delegation of Japan reserved its position on the decision not to make a provision for weights and measures as provided for in the format for Codex Standards. In its view such a provision was necessary, especially in regard to net weight being exclusive of glaze. The other members of the Committee considered that this was also a matter which could be left to the buyer and seller.
20. The Committee agreed not to provide an additive section as no additives were being used at present in this product.
21. The Committee discussed the section dealing with sampling and examination and decided that the Sampling Plans for Prepackaged Foods (ALINORM 69/27) were not suitable for inclusion in this standard. The Committee agreed to place on record that the recommended Sampling Plan included in the standard had been specially drawn up with regard to the characteristics of the product and so

- to apply to it in bulk. Although the commercial buyer and seller could be relied on to agree on how to check the product in bulk, the Committee considered it appropriate to include this Plan which was drawn up in relation to defects as specified in the standard. The recommended Sampling Plan should be used as an international referee method or otherwise as agreed between the buyer and seller. The Committee was informed that the Sampling Plan of this standard would be sent for endorsement to the next session of the Codex Committee on Methods of Analysis and Sampling to be held in December 1969.
22. The Committee decided to advance the standard to Step 8 of the Procedure for the Elaboration of World-Wide Standards and to submit the standard for adoption to the Seventh Session of the Codex Alimentarius Commission. The amended text of the standard appears as Appendix II to this Report.

APPLICATION OF DECISIONS OF THE JOINT ECE/CODEX ALIMENTARIUS GROUP OF EXPERTS ON THE STANDARDIZATION OF QUICK FROZEN FOODS

23. The Committee considered the decisions of the Joint ECE/Codex Alimentarius Group of Experts on the Standardization of Quick Frozen Foods (see: paragraph 6) and the latest version of the provisions included by that Group in its standards. It was decided to include the new "Scope" section elaborated by the Joint Group of Experts and the revised definition of the quick freezing process subject to the amendment referred to below. In respect of labelling, the section relating to the mandatory inclusion of information on retail packs about keeping and thawing and, optionally, about utilization of the product, was not included. The Delegation of Sweden, with support of the Delegation of Kenya, said that in its view such information would be valuable to the consumer.
24. Some members of the Committee thought that reference to the "recognized practice of thawing and refreezing" in the last part of the definition of the quick freezing process might no longer be appropriate in view of the reference to "further processing" in the new Scope section and might also lead to evasion of the standard because it might be considered to apply to products which had not first been quick frozen. The Committee agreed, therefore, to attach the reference to the recognized practice of thawing as an exception to the sentence which required the product to be kept "at a low temperature".

DRAFT STANDARD FOR QUICK FROZEN FILLETS OF COD AND HADDOCK

25. The Committee discussed again the definition of "fillets" and decided to maintain a slightly amended version of the first part of the existing definition. It agreed to insert the reference to small pieces in the section on final product in the standard and to ask for comments on the figures to be sent at the same time as those asked for in paragraph 16. It was also agreed to delete all references to "portions of fillets" from the standard which applied only to fillets. The reference to pin bones was moved to the section on presentation.
26. The Committee agreed, subject to endorsement by the Codex Committee on Food Additives, to include the following additional additives into the standard: Calcium tripolyphosphate, Potassium pyrophosphate and Sodium and Potassium orthophosphate, singly or in combination, expressed as P₂O₅ in the total amount of 5000 mg/kg in the finished product. The Committee agreed to include the sodium and potassium salts of ascorbic acid expressed as ascorbic acid as antioxidants in the amount of 1000 mg/kg of the finished product.

METHODS OF ANALYSIS TMA

27. The Committee, at its Third Session, had agreed to revise the paragraph on chemical examination when the views of the experts attending the FAO Technical Conference in Halifax, Canada, were available. The Report of the Working Group III (Trimethylamine) of the Conference held in July 1969 had been circulated and it was welcomed as a very useful survey of the use of TMA. determination as a method of examination of quick frozen cod and haddock fillets. However, it was noted that the experts had concluded that although there is a strong correlation between the TMA value and the sensory quality, the relationship is not a direct one and the TMA value can give only an approximate guide to quality. The experts had discussed what the limits of TMA value might be in certain circumstances (e.g. for fish stored in specific conditions) but had not been able to agree on a figure. The Working Group had recorded that sensory assessment must always be done alongside the TMA estimations and had concluded that the information presently available indicated that it would be difficult at this time to establish a single maximum acceptable level for TMA for cod and haddock fillets.
28. After full discussion the Committee agreed that TMA determination could not be included in the standard as a referee method although it was a very useful way of supplementing the sensory examination of the product. The hope was expressed that the experts would continue to work on methods of objective quality assessment including chemical examination and particularly on collaborative studies of TMA determination. The Committee decided to delete the references to chemical examination in the standard.

Other Methods

29. The Committee decided to retain all three cooking methods, namely steaming, baking and boiling in bag. These methods are international referee methods which would be referred for endorsement to the Codex Committee on Methods of Analysis and Sampling. The methods of thawing were discussed and the Committee agreed to adopt the method proposed by the USA.
30. The Committee decided to circulate the standard for a second round of comments at Step 6 of the Procedure for the Elaboration of World-Wide Standards. The standard as revised is attached as Appendix III to this Report.

DRAFT STANDARD FOR CANNED SHRIMP OR PRAWNS

31. The Committee noted that the standard included the same wording in respect of prevention of spoilage as that adopted by the Codex Alimentarius Commission at its 5th Session for all canned products. After some discussion on whether heating should take place before or after sealing the can the Committee agreed that this provision should be retained without alteration since any further hygienic requirements would be covered by the Code of Hygienic Practice for Fresh and Frozen Processed Fishery Products being elaborated by the Codex Committee on Food Hygiene. The Committee also decided that the shrimp or prawns in a container should be generally uniform in size whether or not the pack was size-graded and agreed that this requirement should be mentioned among the quality factors of the finished product. The Committee discussed again the problem of odour and flavour naturally occurring in this product and reminiscent of iodoform.

It concluded that such odours and flavours were not a defect unless they were excessive.

32. The Committee was informed that the author country (USA) in consultation with some of the other producer countries had found that it was not practical in a standard which covered a wide variety of species to express tolerances for "shells, legs, and antennas" by either number or weight. The Committee agreed to provide for these defects by a general statement.
33. During the discussion on additives the Committee decided, in line with the recommendation of the Codex Committee on Food Additives, to delete tartaric acid from among the list of additives permitted for use in the product. It noted the recommendation of the Codex Committee on Food Additives that calcium disodium EDTA should either not be used in this product or that a lower limit of use should be agreed upon. The Committee decided to retain this additive in the standard at the maximum level of use of 250 mg/kg in the final product as this would be in accordance with technological requirements. The Committee agreed to add citric acid as a pH adjuster without any upper limit since the use of this substance was limited in practice by technological factors. The Committee also decided to add Monosodium glutamate at 800 mg/kg in the final product to the list of permitted additives in this standard. The Committee agreed that colours should not be used to conceal adverse quality changes of the product and included a new statement to that effect in the standard.
34. The Committee decided to delete the section on "Contaminants" until such time as the Codex Committee on Pesticide Residues specified a tolerance for this product.
35. Provisions were included for the application of the Sampling Plans for Prepackaged Foods (ALINORM 69/27) in the standard. It was pointed out that these plans mainly referred to visible quality defects of the product and were intended to be used as referee methods in international trade either for normal inspection or for litigation. Provisions defining a "defective" unit were developed which covered the requirements for size, odour and flavour, texture and peeling. The Acceptable Quality Level (AQL) of 6.5 percent of the Sampling Plans for Prepackaged Foods was accepted for this product. The delegations of France and Japan expressed doubts about the AQL of 6.5.
36. The Committee decided to adopt a Danish proposal for the Method for Determining Water Capacity of containers replacing the one in the standard. In connection with the drained weight determination the Committee was informed that the packing medium in this product might form a jell in cases of shrimp and prawns from Northern Pacific Waters as a result of the natural coagulation of protein and brine. The Committee was informed that a suitable method for drained weight determination for a jelled packing medium was under study.
37. The Committee agreed to advance the standard to Step 8 of the Procedure for submission to the Seventh Session of the Codex Alimentarius Commission. The standard as revised is attached to this Report as Appendix IV.

PROPOSED DRAFT STANDARD FOR QUICK FROZEN FILLETS OF OCEAN PERCH

38. The Committee decided that the same provisions as had been developed in the standard for Quick Frozen Fillets of Cod and Haddock should, wherever appropriate, be included in the standard for Ocean Perch. The necessary

- amendments were therefore made to this standard. The species *Scorpaena dactyloptera* Delaroche was added, but it was decided not to add any other at this stage. The attention of governments was specially directed towards the need to comment on the title of the standard and the labelling provision. The Committee noted some of the current practices in selling the various species under the names "Ocean Perch", "Redfish" and "Rosefish" and made an appropriate reference in the labelling section. The section on "Presentation" was suitably amended for this standard. The same provisions for defects were inserted as for Cod and Haddock but with different demerit figures.
39. In the discussion on the "Additives" section some delegates pointed out that the levels of phosphates were high (5000 mg/kg). The Delegation of the Federal Republic of Germany suggested that certain additional antioxidants (e.g. tocopherols) should be added and agreed to provide further details about levels of use for consideration by the Committee. Meanwhile the Committee agreed not to include them in the standard.
 40. The Committee agreed to advance the standard to Step 5 of the Procedure so that, if the Commission advanced it to Step 6, it could be commented on at the same time as the standard for Quick Frozen Fillets of Cod and Haddock. The tentative nature of the provisions relating to defects was specially noted. The standard as revised is attached to this Report as Appendix V.

PROPOSED DRAFT STANDARD FOR QUICK FROZEN FILLETS OF PLAICE

41. The Committee decided to follow the same line for Plaice as for Ocean Perch and made amendments to bring the standard for Quick Frozen Fillets of Plaice into conformity with the other standards, where appropriate. It was agreed to list *Hippoglossoides platessoides* and *Pleuronectes quadrituberculatis* among the species listed in the section "Definition". Governments should be asked to comment specially on the name under which the species were at present being sold and whether it might be appropriate to extend the scope of the standard by adding other species of flat fish, e.g. flounder which were being quick frozen. The section on "Presentation" was suitably amended to apply to Plaice as defined. The section on "Final Product" was changed to read under paragraph 3.2 (b) "its texture shall be reasonably firm".
42. The same reference used in the other standards to "undesirably small pieces" was included as in the other standards, but it was pointed out that the problem of packing Plaice was not necessarily the same as for the larger fish and governments were asked to comment on whether the same provision was suitable for the standard on Plaice.
43. The Committee agreed to advance the standard to Step 5 of the Procedure and again took special note of the tentative nature of the provision for defects. The standard as revised is attached to this Report as Appendix VI.

CANNED SARDINES

44. The Committee had before it the alternative Proposed Draft Provisional Standards (Alternative I - three different standards for sardine type products - CODEX FISH 6/7, 6/8, 6/9 (1969) and Alternative II - one single standard for sardine type products - CODEX FISH 6/10 (1969)), which had been submitted for Government Comments at Step 3. Due to the late arrival of several of the comments it had not been possible to provide a summary of comments (CODEX

FISH 6/11) before the beginning of the meeting, and because of translation difficulties some comments could not be made available.

45. The Committee had a detailed discussion of the main issues which have already been fully reported in the Reports of the 1st, 2nd and 3rd sessions of the Committee. Although the demonstration at the 3rd session and the accompanying technical information had shown clear differences in the products it was not possible at this time to agree on whether there should be one standard or more than one standard to cover sardines and sardine-type products. Some delegations maintained that because of the differences it was essential to have one standard for sardines from the small *Sardina pilchardus* (Walbaum) and at least one for the other products. Other delegations considered that the differences could best be tackled by appropriate labelling requirements (as indicated in some of the written comments and in a Conference Room document), and that it was right to deal with all the products in one standard. Other delegations expressed the view that it would be appropriate to apply common provisions in one standard and that differences should be provided for by labelling requirements and, to the extent necessary, by dividing other sections of the standard into more than one part. These delegations maintained that the problem of how best to deal with sardines and sardine-type products could not be solved without examining in detail the sort of provisions that might be included and the extent to which differences had to be provided for other than in the labelling requirements. It was pointed out that all the alternative documents circulated at Step 3 had not been drawn up by the Committee and that to some extent they did not reflect current Codex philosophy and practice.
46. As a majority of those commenting had expressed the wish to see whether one standard could be elaborated, the Committee decided to examine Alternative II (Codex Fish 6/10 (1969)) as a working document and without prejudice as to the final decision about the number of standards. A number of countries had also prepared a revised version of Codex Fish 6/10 and this Conference Room document was taken into account. A very tentative list of genera and species was drawn up intended to cover all the small fish packed as sardines and sardine-type products.
47. After some discussion of the working document, it was recognised that the basic differences referred to in paragraph 45 could not be resolved at this stage. The Committee finally agreed to return the alternative standards to Step 2; all the documents, including the Conference Room document, would be kept available for future sessions. The Committee also agreed to ask members of the Committee to reconsider all the documents relating to the subject and to send their up-to-date views on the problem by 31 March 1970 with particular attention to the questions listed below. The Secretariat were asked to prepare appropriate working documents for the next session on the basis of the replies:
 1. 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?
 2. Is the following tentative list of genera and species for sardines and sardine-type products satisfactory?

- a. Small *Sardina pilchardus* (Walbaum)
 - b. Small *Sardina sardina*
 - c. *Sardinops caerulea*
 - d. *Sardinops melanosticta*
 - e. *Sardinops sagax*
 - f. *Sardinops neopilchardus*
 - g. *Sardinops ocellata*
 - h. *Clupea harengus* (small)
 - i. *Sprattus sprattus* (*Clupea sprattus*)
 - j. *Clupea fuequencis*
 - k. *Clupea antipodum*
 - l. *Sardinella aurita*
 - m. *Sardinella eba*
 - n. *Engraulis* (various species)
3. 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.
4. 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?
5. Is it necessary to develop "defects" provisions for all these products and, if so, can it be done?
6. How should the qualifying labelling terms be applied in the case of products other than the small *Sardina pilchardus* (Walbaum):
- a. Country of origin as a prefix?
 - b. Geographical area as a prefix?
 - c. Common name of species (e.g. sild)?
 - d. Should a. b. and c. be used alone or in combination so as to distinguish between the various different species?
7. 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 terra "sardines" suitably qualified for the sardine-type products.

PROPOSED DRAFT STANDARD FOR CANNED CRAB MEAT

48. The author country (Japan) had provided a recast text in Codex format of the above standard which the Secretariat in Rome had slightly revised to take account of the Recommended International General Standard for the Labelling of Prepackaged Foods and incorporating certain provisions on methods of analysis which had been considered by the Committee in other standards for similar canned products. The Committee agreed to add a "Scope" section to the standard and to expand the list of species to include *Lithaodes antarcticus*. The

author country agreed also that it would be appropriate to delete the name of *Chionoectes phalanguim* and to insert *Chionoectes japonicus*.

49. The Committee was informed that there would be difficulties in translating into French and probably into other languages such expressions as "Twin-face Pack" or "Single-face Pack" and that these expressions would also be difficult to be understood by consumers in English speaking countries. The expression "Custom Pack" or "Regular Pack" would therefore be preferable. On the proposal of the USA two new types "Lump Pack" and "Claw Pack" were added to the type of pack and countries could, in their comments, suggest the addition of other types of pack.
50. The Committee noted that in the previous version of the standard essential details of processing had been included and that these did not appear in the latest draft. The Delegation of Japan agreed to consider again the need for such details and supplied a suitable text. The Committee agreed to delete any reference to cans being free from tin black since this was not included in other standards for canned fish products. The USA agreed to provide further information on packing materials for this product.
51. The Committee decided to retain the proposed section on additives for the time being and subject to comments by governments and review by the Codex Committee on Food Additives. It agreed that if there was no real technological need to add tartaric acid to this product it might at a later stage be excluded. It also agreed tentatively to add Calcium disodium EDTA, Sodium hexametaphosphate and Sodium pyrophosphate and specifically to request governments to comment on the use of these substances in this product.
52. The Committee decided that it was not necessary to make it compulsory for the product to be designated according to the common name of the species e.g. "King" Crab. They therefore provided that the product should be called "crab" and that the specified common name could be included optionally for certain designated species. It was noted that all "Paralithodes" could be called "King crab".
53. The Delegation of Japan informed the Committee that the incubation test as provided in the present text would not necessarily be required in the test procedures for this product and that they would provide further information on test procedures. The USA agreed to comment on and provide a text for sampling and lot inspection so that this section could be brought into relationship with the Sampling Plans for Prepackaged Foods (ALINORM 69/27).
54. The Committee decided to circulate this standard for comments by Governments at Step 3 of the Procedure. The revised text of the standard is attached as Appendix VII to this Report.

PROPOSED DRAFT STANDARD ON CANNED TUNA AND BONITO

55. The Committee examined the proposed draft standard which had been circulated as CODEX/FISH/7/6 (1969), and agreed to change the title to "Canned Tuna and Bonito in Brine or Oil" and to list all the species of fish to which it might be applied so that Governments could comment on the scope of the standard as revised. It was recognized that countries followed different labelling practices at present and the labelling section was drafted so that Governments could provide information on existing practices and on the need for more specific requirements.

The Committee was informed that the "Thunnus alalunga" was generally regarded as being of a unique quality and it was agreed that the designation "white" should be restricted accordingly. The Committee also decided that the colour classification should be optional so as to allow some flexibility in labelling but that where the terms "light" and "dark" were used they would have to comply with the proposed classification system. The Committee made several other amendments and included a reference to "Drained weight" in square brackets so that Governments could consider the need for it. The US pointed out that a satisfactory method of determining the drained weight for canned tuna was not available. The delegation of France said that a method could be developed. It was decided to change the reference to "vegetable broth" in the ingredients to read "vegetable seasonings". It was decided to include Sodium pyrophosphate and Calcium disodium EDTA but to make it clear that they were alternatives; either could be used to inhibit the development of struvite crystals.

56. The Committee agreed to advance the standard to Step 3 of the Procedure. The standard as revised is attached as Appendix VIII to this Report.

PROPOSED DRAFT STANDARD FOR FROZEN SHRIMP OR PRAWNS

57. The Committee examined proposed draft provisional standard for Frozen Shrimps or Prawns, CODEX/FISH/9/5(1969) circulated at Step 2. This standard was intended to cover both cooked and raw products. Some delegations were of the opinion that two separate standards for these products would be preferable. The Committee therefore considered a draft standard for Quick Frozen Raw Shrimp and Prawns prepared as a Conference Room document "by Australia, Canada, France and USA. After some discussion the Committee noted that the cooked product which figured largely in international trade, and for which a standard would therefore be most useful, was a "plain boiled" or "steamed" shrimp or prawn product for which further processing was optional. It was not appropriate at this stage to elaborate standards for the very large variety of speciality cooked products on the market e.g. shrimp in mayonnaise. Some delegates expressed the view that the Draft Standard for Quick Frozen Raw Shrimp or Prawns could appropriately be extended to cover both "raw" and "cooked" products, so long as a definition of "cooked" was included.
58. It was agreed that the title of the Conference Room document should be amended to Proposed Draft Standard for Quick Frozen Shrimp or Prawns and that the scope should be revised to include those products which had undergone a preliminary boiling or steaming process before freezing. It was agreed that comments should be sought on the need for one or two standards, and on the range of products which should be covered, in addition to general comments on the Conference Room document. These comments should be sent to the Chief Delegate of the US delegation by 1st January 1970, who would then revise the draft, in consultation with Australia, Canada and France. The revised proposed draft standard would be circulated at Step 2 of the Codex procedure. The Delegate of Ireland drew attention to the need to provide at the appropriate time for the species "Nephrops norvegicus", as one of the names under which it was sold in many countries was "Dublin Bay Prawn".

OTHER BUSINESS

Future Work

59. The Delegation of Spain proposed that the future work of the Committee should include the elaboration of a standard for Quick Frozen Fillets of Hake. Several delegations supported the idea. The Chairman drew the attention of the Committee to the section on "work priorities criteria" in the Procedural Manual of the Codex Alimentarius Commission, which required the Committee to have regard to such "criteria" before starting any new work. He invited the delegation of Spain to submit a proposal on Quick Frozen Fillets of Hake in time for it to be considered at the next meeting. He also invited other members of the Committee to send him their views on the proposal together with observations on the need for, and the relative priority of, the standard which had not yet been advanced beyond Step 2 i.e. Quick Frozen Crayfish and Lobster, Quick Frozen Blocks of Cod, Haddock and Ocean Perch for further processing, Frozen Tuna for further processing, Frozen herring, Canned Mackerel in Brine or Oil, Salted Anchovy Fillets in Oil, Canned Herring, Salted Cod and Salted Herring.

Declaration of Net Contents

60. The Delegation of Canada supported by the other major producing countries called the attention of the Committee to the need to make it quite clear that the declaration of net contents as required in the Recommended General Standard for the Labelling of Prepackaged Foods (Doc. CAC/RS 1-1969) and the Recommended Standard for Canned Pacific Salmon (Doc. CAC/RS 3-1969) applied to the whole of the content and not only to part of it.
61. Difficulties had arisen in the case of canned salmon which is packed without the addition of any added liquid packing medium because, during its processing, liquids were exuded from the fish so that when the can was opened the content consisted of fish and liquid.
62. It had been suggested elsewhere that the declaration of the weight of the net contents should be taken as applying to the fish alone and not to the fish plus the liquid. This was wrong. The Committee had decided not to require declaration of drained weight and had included the usual provision relating to net contents which means the entire contents i.e. fish plus liquid.
63. It was thought that the problem might best be raised in the Codex Committee on Food Labelling so that they could consider the need for including a definition of "net contents" in any future revision of the General Standard.

Printed texts of adopted recommended standards

64. The Secretariat informed the Committee that a few copies of the above standards had been sent from Rome and had been made available to the members of the Committee for the purpose of demonstration. The Secretariat stressed that the official distribution to Governments of authorized final versions of the standards would be made by the Secretariat in Rome in the near future.

DATE OF FUTURE MEETING

65. The Committee considered that the next Session of the Committee should be held early in October 1970 and that the duration of the meeting should be 5 or 6 days.

Summary of Status of Work
prepared by the Secretariat

1. STANDARDS CONSIDERED AT THE FOURTH SESSION OF THE CODEX
COMMITTEE ON FISH AND FISHERY PRODUCTS

- (a) Draft Standard for Quick Frozen Guttled Pacific Salmon
Appendix II to this Report
Advanced to Step 8 for adoption by the Seventh Session of the Codex Alimentarius Commission
- (b) Draft Standard for Quick Frozen Fillets of Cod and Haddock
Appendix III to this Report
Returned to Step 6 for a second round of comments
- (c) Draft Standard for Canned Shrimp or Prawns
Appendix IV to this Report
Advanced to Step 8 for adoption by the Seventh Session of the Codex Alimentarius Commission
- (d) Proposed Draft Standard for Quick Frozen Fillets of Ocean Perch
Appendix V to this Report
Advanced to Step 5 for submission to the Seventh Session of the Codex Alimentarius Commission
- (e) Proposed Draft Standard for Quick Frozen Fillets of Plaice
Appendix VI to this Report
Advanced to Step 5 for submission to the Seventh Session of the Codex Alimentarius Commission
- (f) Proposed Draft Standard for Canned Crab Meat
Appendix VII to this Report
Sent for comments at Step 3 of the Procedure
- (g) Proposed Draft Standard for Canned Tuna and Bonito in Brine or Oil
Appendix VIII to this Report
Sent for comments at Step 3 of the Procedure
- (h) Canned Sardines
Proposed Draft Standards Alternative I and Alternative II returned to Step 2 of the Procedure.
Secretariat to prepare new working papers on the basis of replies to questionnaire. Replies to be sent by 31 March 1970 to the Chief, Food Standards Branch, Rome, in three copies. (Please see para 47 of the Report.)
- (i) Proposed Draft Standard for Quick Frozen Shrimp or Prawns
US, in consultation with Australia, Canada and France to prepare a new working document on the basis of comments on the Conference Room document.
Comments to be sent to Mr. J.W. Slavin, Chief Delegate of the US Delegation with copy to the Chief, Food Standards Branch, Rome, by 1 January 1970. (Please see paragraph 58 of this Report.)

2. PROPOSED DRAFT STANDARDS NOT CONSIDERED AT THE FOURTH SESSION OF THE CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS

- (a) Quick Frozen Fillets of Hake
The Delegation of Spain to submit a working paper for the next Session of the Committee.
- (b) Quick Frozen Crayfish and Lobster
- (c) Quick Frozen Blocks of Cod, Haddock and Ocean Perch for further processing
- (d) Frozen Tuna for further processing
- (e) Frozen Herring
- (f) Canned Mackerel in Brine or Oil
- (g) Salted Anchovy Fillets in Oil
- (h) Canned Herring
- (i) Salted Cod
- (j) Salted Herring

Members of the Committee to state their views on priority.

3. SPECIFIC REFERRALS TO OTHER COMMITTEES

- A. Codex Committee on Methods of Analysis and Sampling
 - (a) Sampling Plan for Quick Frozen Guttled Pacific Salmon shipped in bulk or in bulk containers. (Please see paragraph 21 of this Report)
 - (b) Cooking Methods, i.e. steaming, baking and boiling in bag, and Thawing Methods for Quick Frozen Fillets of Cod and Haddock, Ocean Perch and Plaice. (Please see paragraph 29 of this Report.)
- B. Codex Committee on Food Additives
 - (a) Proposed additional additives for Quick Frozen Fillets of Cod and Haddock. (Please see paragraph 26 of this Report.)
 - (b) Proposed additional additives for Canned Shrimp or Prawns. (Please see paragraph 33 of this Report.)
 - (c) Proposed additional additives for Canned Tuna and Bonito in Brine or Oil. (Please see paragraph 55 of this Report.)
- C. Codex Committee on Food Labelling
Definition of "net contents". (Please see paragraphs 60 to 63 of this Report.)

4. SPECIFIC COMMENTS TO BE SENT TO AUTHOR COUNTRIES FOR THE PREPARATION OF WORKING PAPERS

- (a) Comments on the Proposed Draft Provisional Guidelines on Fish, Crustaceans and Mollusks and Products thereof to be sent to the Chief Delegate of the Delegation of the Federal Republic of Germany, with a copy to the Secretariat, Rome, by 1 December 1969. (Please see paragraph 13 of this Report.)
- (b) Sampling Plans for the Examination of Physical Defects for Quick Frozen Fillets of Fish. Comments to be sent to the Chief Delegate of the Delegation of the UK with a copy to the Secretariat, Rome, by 31 March 1970. (Please see paragraph 16 and also paragraphs 25 and 41 of the Report.)

LIST OF PARTICIPANTS *
LISTE DES PARTICIPANTS
LISTA DE PARTICIPANTES

* Heads of Delegations are listed first
Les chefs des délégations figurent en tête
Figuran en primer lugar los Jefes de las Delegaciones

ARGENTINA
ARGENTINE

L.R. Vásquez
Médico Veterinario
Servicio Nacional de Pesca
Secretaria de Estado de Agricultura y
Ganadería
Paseo. Colón 922
Buenos Aires

AUSTRALIA
AUSTRALIE

K.R. Constantine
Deputy Chief Veterinary Officer
Dept. of Primary Industry
Canberra

BELGIUM
BELGIQUE
BELGICA

Dr. W. Vyncke
Fisheries Research Station
Stadhuis Oostende

CANADA

R.S. Bolton
Acting Assistant Director
Inspection Branch
Dept. of Fisheries and Forestry
Ottawa 8, Ont.

J.P. Hennessey
Chief, Inspection Branch
Newfoundland Region
Dept. of Fisheries and Forestry
St. John's, Newfoundland

R.J. McNeill
Chief, Inspection Branch
Dept. of Fisheries and Forestry
Maritimes Region
PO Box 550
Halifax, N.S.

A. Nadeau
Direction of Fisheries
Dept. of Industry and Commerce
Quebec City, Que.

C.H. Ashdown
Sales Manager
The Canadian Fishing Co. Ltd.
Foot of Gore Avenue
Vancouver. B.C.

DENMARK
DANEMARK
DINAMARCA

H.D. Pyke
General Manager
High Liner Division
National Sea Products Ltd.
Lunenburg, N.S.

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

J.A. Stewart
General Sales Manager
Connors Bros. Limited
Black's Harbour, N.B.

P.F. Jensen
Director
Inspection Service for Fish Products
Danish Ministry of Fisheries
Gothergade 2
D.K. 1123 Copenhagen K

Villy Andersen
Civ. eng.
The Royal Greenland Trade Dept.
Strandgade
Copenhagen K

E.L. Dyekjæ r
Civ. eng.
Dansk Fiskeindustriforening
Dyekjæ rs Hus
6700 Esbjerg

J. Sieverts
Civ. eng.
Bornholms Konservesfabrik A/S
Sigurdsgade 39
2200 Kørbenhavn N

K. Hoydal
Laboratorieforstander
Torshavn
Færøiene

FRANCE
FRANCIA

Mile F. Soudan
Chef du service de technologie et des
contrôles
Institut scientifique et technique des pêches
maritimes
Route de la Jonellière
Nantes

GERMANY, FED. REP.
ALLEMAGNE, REP. FED.
ALEMANIA, REP. FED.

D.J. Rémy
Conseiller Technique
Confédération des Industries de Traitement
des Produits des pêches maritimes
28 rue des Sablons
Paris (XVI)

Dr. Gousset
Chef du Bureau Inspection des Produits de la
Pêche
Direction des Services Vétérinaires
Ministère de l'Agriculture
3 Rue Barbet de Jouy - Paris 7^e

Dr. K. Bahr
Ministerialrat
Bundesernährungsministerium
53 Bonn

Dr. H.G. Nowack
Dipl. Chem.
Löningstrasse 12
285 Bremerhaven

Dr. Gerigk
Wissenschaftl. Oberrat
Bundesgesundheitsamt
Max von Pettenkofer-Institut
Unter den Eichen 82-84
1 Berlin 33

Dr. J. Genschow
Vice President of Association of German
Trawlerowners
Preussenstrasse 3
Bremerhaven 2

Dr. K. Seumenicht
Hauptgeschäftsführer
Museumstrasse 18
Hamburg 50

Prof. Dr. V. Meyer
Bundesforschungsanstalt für Fischerei
Palmaille 9
2 Hamburg 50

Dr. Krane
Head of the Central-Laboratory of "Nordsee"
Deutsche Hochseefischerei
Klussmannstrasse 3
285 Bremerhaven

ICELAND
ISLANDIA

Dr. S. Pétursson
Icelandic Fisheries Laboratories
Department of Bacteriology
Reykjavik

IRELAND
IRLANDE
IRLANDA

C.J. McGrath
Inspector and Engineer
Department Agriculture and Fisheries
Cathal Brugha St.
Dublin

Miss J.P. O'Donovan
Scientific Officer
Institute of Industrial Research and Standards
Dublin 9

JAPAN
JAPON

Toji Iida
Counsellor of Embassy of Japan in Norway
Riddervoldsgate 3
Oslo

Tadashi Imai
Aquatic Products Section
Fishery Agency
1-2-1, Kasumigaseki, Chiyoda-ku
Tokyo

Makoto Yamamoto
Chief, Fishery Section
Tokyo Export Commodities Inspection Institute
Ministry of Agriculture and Forestry
4-7, 4 chome, Konan
Minatoku, Tokyo

Tadashi Iizuka
Assistant Director
Japan Canned Salmon and Crab Packers
Association
Naigai Bldg.
Marunouchi, Chiyoda-ku
Tokyo

Motokichi Morisawa
Managing Director of Japan Fisheries
Association
Sankaido Build. Akasaka
Tokyo

Eiichi Ashikawa
Vice President
Tuna Packers Association of Japan
Ida Bldg.
No. 1, 2-chome, Yausu
Chuoku, Tokyo

KENYA
KENIA

S.C. Masita
Fisheries Development Officer
Quality Control
Fisheries Department
PO Box 1146
Mombasa

J. Haug
Fisheries Officer
Quality Control
Fisheries Department
PO Box 241
Nairobi

NETHERLANDS
PAYS-BAS
PAISES BAJOS

Dr. D.J. van Dijk
Chairman Produktschap voor Visen
Visprodukten
20 Wassenaarseweg, Haag

Dr. J. van Mameren
Director Institute for Fishery Products
Haringkade 1
Ijmuiden

D.M. van Ijsselstein
Technical Director
Iglo N. V.
Neyenoord
Utrecht

NEW ZEALAND
NOUVELLE ZELANDE
NUEVA ZELANDIA

Dr. A. Ginsberg
Veterinary Adviser
New Zealand High Commission
New Zealand House, Haymarket
London, S.W.1

NORWAY
NORVEGE
NORUEGA

E. Heen
Director
Norwegian Fisheries Research Institute
PO Box 187
Bergen

F.J. Grahl
Chief Inspector
Directorate of Fisheries
PO Box 185, Bergen

P. Haram
Counsellor
Ministry of Fisheries
Oslo

S. Skilbrei
Chief Inspector
Directorate of Fisheries
PO Box 185 Bergen

O. Chr. Sundsvold
Director
Norwegian Quality Control Institute for Canned
Fish Products
4000 Stavanger

K. Bakken
Senior Scientific Adviser
Norwegian Fisheries Research Institute
PO Box 187, Bergen

O. Karsti
Scientific Adviser
Norwegian Fisheries Research. Institute
PO Box 187, Bergen

Leif B. Knutrud
Civ. Eng.
Frionor Norwegian Frozen Fish Ltd.
Oslo

C.F. Kolderup
Secretary General
Norwegian Cannery Association
Stavanger

J. Morland
Chief Chemist
A/s. Findus
Hammerfest

T. Kvande-Pettersen
Manager, Industrielaboratoriet A/S
Kristiansund N

S. Le Roux C. (Mrs.)
Chief of Standardization Program
INANTIC (National Standards Institute)
Av. República de Chile 698
Lima

A. Bellido D.
Chief Technical Dep.
"Sociedad Nacional de Pesqueria"
Av. Wilson 911, 2º Piso
Lima

Dr. Enrique del Solar
President of the Technical Committee of
National Fisheries Society of Peru
PO Box 254
Lima

C. Vecorena
Biólogo
Av. Pershing 890
Magdalena

PERU
PEROU

POLAND
POLOGNE
POLQANIA

E. Kordyl
Chief, Technology Department
Sea Fisheries Institute
Gdynia, Zjednoczenia 1

W. Pieniazek
Ministry of Foreign Trade
Quality Inspection Office
Gdynia, Ul. Polska 24

Prof. Dr. J. Wierzchowski
Department of Bromatology
Medical Academy
Gdansk-K. Marksa 107

PORTUGAL

L. Torres
Researcher
Instituto Portugues de Conserves de Peixe
Av. 24 de Yulho
76 Lisboa

SOUTH AFRICA
AFRIQUE DU SUD
SUDAFRICA

S.P. Malherbe
Head Food Inspection Division
South African Bureau of Standards
Private Bag 191
Pretoria

(Observer Country)
(Pays observateur)
(País observador)

SPAIN
ESPAGNE
ESPANA

Dr. D.G. del Real Gómez
School of Public Health
Ciudad Universitaria
Facultad de Medicina
Madrid

Dr. J.L. Fernández Espinosa
Ministerio de Comercio
Huesca 23
Madrid 20

Dr. D.F. Bordallo
Sindicato do Pesca
M. Valladares-41
Vigo

J.J. Varona
Dr. vet.
Pescanova, S.A. Apart.
424 Vigo

SWEDEN
SUEDE
SUECIA

A. Folkving
Chief of Section
The National Agricultural Marketing Board
Box 16384
S-10327 Stockholm

E. Christiansen
Fish Processing Technologist
Nordreco AB
267 00 Bjuv

P. Goll-Rasmussen
Head of Laboratory
Abba-Fyrtornet AB
450 40 Kungshamn

G. Liljegren
Engineer
Svenska Konservkontrollen
Fack
400 25 Gøteborg 52

B.K. Beckman
Svenska Västskustfiskarnas
Centralförbund
PO Box 4092
400 40 Gøteborg 4

O. Agren
Secretary General
Swedish Codex Contact Point
National Veterinary Board
Fack
Stockholm 3

Prof. Y. Bunnag
Ministry of Industry
Department of Science
Rama VI Street
Bangkok 4

L.G. Hanson
Chief Executive Officer
Food Standards, Science and Safety Division
Ministry of Agriculture, Fisheries and Food
Horseferry Road
London S.W.1

Dr. A. Banks, Ph.D.
Torry Research Station
PO Box 31
Aberdeen

J.C. Early
Torry Research Station
Humber Laboratory
Wassand Street
Hull

THAILAND
TAILANDE
TAIUNDIA

UNITED KINGDOM
ROYAUME-UNI
REINO UNIDO

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

Miss R.E. Falvey
Ministry of Agriculture, Fisheries and Food
Horseferry Road
London 8.W.I

R.C.W. Banks
Stone House
501, Shaúwell Lane
Leeds 17

J.R. Crook
Associated Fisheries and Foods Ltd.
PO 96
Brighton St.
Hull

G.N. Wheeler
Quality Control Manager
Findus Ltd.
Pelham Rd.
Brimsby, Lincs.

J.W. Slavin
Bureau of Commercial Fisheries
US Department of the Interior
Washington D.C. 20240

L.M. Beacham
Acting Director
Division of Food Chemistry and Technology,
SC 400
Food and Drug Administration
Washington, D.C. 20204

J.R. Brooker
Chief, Office of Fish Inspection
Bureau of Commercial Fisheries
Washington, D.C. 20240

C.R. Carry
Executive Director
Tuna Research Foundation, Inc.
Terminal Island
California 90731

E.R. Kinney
President
Gorton Corporation
PO Box 361
Gloucester
Massachusetts

H.R. Robinson
American Shrimp Cannery Association
PO Box 50774
New Orleans, LA. 70150

I.I. Somers
Director, Research
National Cannery Association
1133 20th Street N.W.
Washington D.C. 20036

C.L. Stinson
Stinson Canning Co
Prospect Harbor
Main 04669

F. Jermann
Tech. Director
Bumble Bee Sea Foods
PO Box 60
Astoria
Oregon

J.L. Warren
Maine Sardine Council
Batterv.
Eastport
Maine

W.V. Yonker
Association of Pacific Fisheries
Executive Vice President
1600 S. Jackson St.
Seattle, Washington 98144

M. Loewe
Technical Director
Star-Kist Foods, Inc.
Terminal Island
California

E. Day Wood, Jr.
President, Shoreline Seafoods Ltd.
PO Box 5617- Tampa
Florida

YUGOSLAVIA
YOUGOSLAVIE

B. Parac
Scientist
"Jugoriba"
Nehajska 15/111
Zagreb

INTERNATIONAL ORGANIZATIONS
ORGANISATIONS INTERNATIONALES
ORGANIZACIONES INTERNACIONALES

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

D. Rémy
c/o L. Abbattucci
1 Avenue du Congo
Bruxelles, Belgique

E.E.C.	Margot Krohn Administrateur Commission des Communautés Européennes Division Produits de la Pêche Bruxellee 4, 125 rue Stévin, Belgique
F.R.U.C.O.M.	J.J. Mertens Vice President 30 St. Amerbergalei Schoten (B-2120) Belgique
I.I.F.	O. Karsti Scientific Adviser Norwegian Fisheries Research Institute PO Box 187 Bergen, Norway
F.A.O.	R.M. Bond Chief, Fish Preservation Section Fishery Products and Marketing Branch Department of Fisheries FAO, Rome J. Nemeth Liaison Officer FAO/WHO Food Standards Programme Rome Dr. C. Jardin Food Standards Officer FAO/WHO Food Standards Programme Rome
W.H.O.	Dr. Z. Matyas Food Hygienist WHO Avenue Appia. 1211 Geneva 27, Switzerland,

DRAFT STANDARD FOR QUICK FROZEN
GUTTED PACIFIC SALMON

(Submitted to the Seventh Session of the Codex
Alimentarius Commission at Step 8 of the
Procedure for the Elaboration of World-wide Standards)

1. SCOPE

This standard shall apply to fish of the species as defined below with or without head, that have been eviscerated, washed, quick frozen and treated to protect the flesh from oxydation and dehydration. The standard applies to fish shipped in bulk or in bulk containers such as cases or boxes.

2. DESCRIPTION

2.1 Product and Process Definition

- (a) Quick Frozen Guttet Pacific Salmon is the eviscerated carcasse of any of the following species of fish; Oncorhynchus nerka, Oncorhynchus kisutch, Oncorhynchus tshawytscha, Oncorhynchus gorbuscha, Oncorhynchus keta, Oncorhynchus masou. The fish shall be glazed with ice or tightly wrapped in a membrane to protect its flesh from oxydation and dehydration.
- (b) The quick 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°P) at the thermal centre after thermal stabilisation. 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 of the bulk product.

2.2 Presentation

The product shall be presented either without the head as "Dressed Headless" or with the head as "Dressed Head-on".

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material

Quick Frozen Guttet Pacific Salmon shall be prepared from sound fish which have been eviscerated.

3.2 Final Product

- 3.2.1 (a) gill and gill rakers must have been removed,
- (b) the fish must have been opened by cutting through the body wall along the ventral line from the anus to the throat,
- (c) viscera and blood along the backbone must have been removed,
- (d) the body cavity and the carcasse must be clean,
- (e) the longitudinal axis must be straight,
- (f) the product must be free from poisonous or harmful substances,
- (g) the fish must be glazed or tightly wrapped for protection,

- (h) the product must have a normal colour and odour,
- (i) the product must not be excessively dehydrated. The removal of the head is optional

3.2.2 The defects defined in paragraph 3.3 shall not exceed the limits specified for them in paragraph 3.4.

3.3 Definition of Defects for the purposes of the Tolerances in paragraph 3.4

3.3.1 Physical defects

- (a) Body deformation - deformation of the back (hump-tack) or of the head if present (hooked snout) as a result of the extension of cartilaginous material in these areas as the fish approaches spawning condition.
- (b) Damage to protective coating - voids in the ice glaze or tears in the covering membrane.
- (c) Dehydration or freezer burn - loss of moisture from the surface tissue resulting in a dry, porous or spongy condition and in oxidation of the surface tissue.

3.3.2 Surface defects

- (a) Discolouration from bruises - readily discernible localised discolouration caused by diffusion of blood into the flesh.
- (b) Cuts, wounds and other skin breaks - readily discernible damage to the skin.
- (c) Discoloured skin - readily discernible deviation from the characteristic colour of the fish.

3.3.3 Gutting and Cleaning defects

- (a) Gill and body cavity cuts - misplaced cuts made during gutting.
- (b) Viscera - incomplete removal of the viscera.
- (c) Improper washing - inadequate removal of slime, blood and bits of viscera from the surface of the fish and from the body cavity.
- (d) Bellyburn - readily discernible enzymatic damage to the tissues in the area of the belly cavity.

3.3.4 Defects of odour

Odour defects - stale, sour, rancid or other objectionable odours indicative of decomposition or contamination.

34 Tolerances

Each fish in a sample withdrawn under Section 6 shall be examined for the defects listed below and scored accordingly. The shipment is considered acceptable with respect to defects if the average demerit per fish, calculated by dividing the total demerits by the number of fish in the sample, is two or less.

3.4.1 Physical defects	<u>Demerit points</u>
(a) Body deformation - humpback and/or hooked snout	2
(b) Damage to protective coating - 3-10% of the surface area exposed	0.5
over 10% of the surface area exposed	1
(c) Dehydration or freezer burn - 3-10% of the surface area affected	2
over 10% of the surface area affected	3
3.4.2 Surface defects	
(a) Discolouration from bruises	1
(b) Cuts, wounds and other skin breaks	2
(c) Discoloured skin	0.5
3.4.3 Gutting and Cleaning defects	
(a) Gill and body cavity cuts	1
(b) Viscera	3
(c) Improper washing	2
(d) Belly burn	3

3.4.4 Defects of odour

Each fish in the sample shall be free from any objectionable odours resulting from decomposition or contamination.

4. HYGIENE

It is recommended that the products covered by the provisions of this Standard be prepared in accordance with the General Principles of Food Hygiene (CAC/RCF-1-1969) developed by the Codex Committee on Food Hygiene.

5. NAME OF THE PRODUCT

5.1 The name of the product, is the name prescribed for the particular species under para 5.2 with the words "frozen" or "quick frozen" and the words "dressed headless" or "dressed head-on" as appropriate.

5.2 Designation

Quick Frozen Guttled Pacific Salmon shall be designated as follows according to the species packed:

Species	Designation
O. nerka	Sockeye Salmon or Red Salmon
O. Kisutch	Coho Salmon or Silver Salmon
O. tschawytscha	Spring Salmon or King Salmon or Chinook Salmon
O. gorbuscha	Pink Salmon
O. keta	Chum Salmon
O. masou	Cherry Salmon

6. SAMPLING AND EXAMINATION

The Sampling method described hereunder is a recommended international referee method which is to be endorsed by the Codex Committee on Methods of Analysis and Sampling. The method is recommended for use with the Tolerances in paragraph 3.4 but the buyer and seller may agree to use other methods.

6.1 Sampling

An initial random sample of frozen salmon shall be withdrawn according to the following table:

<u>Number of fish in shipment</u>	<u>Number of fish in sample</u>
15 to 50	2
51 to 150	4
151 to 500	6
501 to 1,500	8
1,501 and over	12

In a shipment of salmon where each fish weighs 5.5 kilograms (12 pounds) or less, this table applies. However, where the salmon weighs over 5.5 kilograms (12 pounds) each of number of samples shall be reduced so that the total weight of the samples shall not be greater than the number of fish indicated in the table multiplied by 5.5 kilograms (12 pounds). If a shipment does not meet this standard on the basis of examination of the initial sample, the shipment may, at the request of the buyer or seller be resampled, in which case the sample size (initial sample plus resample) shall be increased to a total of 20 fish. The average demerit per fish shall be determined from the total demerit for the 20 fish.

6.2 Examination

The samples shall be examined for damage to the protective coating, body deformation and dehydration or freezer burn. The samples shall be thawed and examined for surface defects, gutting and cleaning defects and defects of odour.

DRAFT STANDARD FOR QUICK FROZEN FILLETS OF COD AND HADDOCK
(For circulation at Step 6 of the Procedure for a second round of comments)

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 and Process Definition

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

Cod : Gadus morhua L. (synonym Gadus callarius 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.

(c) 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 stabilisation. 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, except that the recognised practice of thawing and repacking products under controlled conditions followed by the application of the quick freezing process as defined is permitted.

2.2 Presentation

Fillets shall be presented as:

- (a) skin-on, unscaled OR
- (b) skin-on, scaled, where the fillet is practically free of scales 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 all internal organs, fins and significantly discoloured flesh, and shall be reasonably free from ragged edges, tears and flaps.
- (b) After cooking by steaming, baking or boiling, as set out in Annex B, the product shall have a flavour characteristic of the species and shall be free from any objectionable flavours and odours, and its texture shall be firm and not tough, soft or gelatinous.
- (c) The final product shall conform with the test for physical defects as set out under Section 7 of this Standard.
- (d) 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 4 per kg.
- 3.2.2 The sample size and acceptance numbers are as set out in the Sampling Plan, attached to this standard as Annex A.

4. FOOD ADDITIVES

The following provisions in respect of food additives are subject to endorsement by the Codex Committee on Food Additives; they may be used singly or in combination:¹

<u>Additives</u>	<u>Maximum level of Use</u>	
sodium or potassium or calcium tri-polyphosphates	Expressed as P ₂ O ₅	maximum 5000 mg/kg of the final product
sodium hexametaphosphate		
sodium or potassium pyrophosphate	expressed as ascorbic acid	maximum 1000 mg/kg of the final product
sodium or potassium orthophosphate		
sodium or potassium ascorbate		

¹ Secretariat Note: The food additive provisions have been endorsed by the 6th Session of the Codex Committee on Food Additives, 15-22 October 1969.

5. HYGIENE

It is recommended that the products covered by the provisions of this standard be prepared in accordance with the 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, 5 and 6 of the 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 shall be "cod fillets" or "haddock fillets" as appropriate. The words "quick frozen" shall also appear on the label.

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

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 Section 3.2(b) and 3.2(c) of the Recommended International General Standard for the Labelling of Prepackaged Foods shall also apply*

6.3 Net Contents

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

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

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

(b) When a 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 clear of the date of production, that is, the date the final product was packaged for final sale.

7. METHODS OF ANALYSIS AND SAMPLING

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

7.1 Methods of Sampling and Preparation of Sample

Sampling shall be carried out in accordance with the Sampling Plans in Annex A which is a modification of the Sampling Plans for Prepackaged Foods (ALINORM 69/27) approved by the Codex Committee on Methods of Analysis and Sampling.

7.2 Removal of the 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 8 inches in diameter for samples less than 2 pounds, and 12 inches for those more than 2 pounds. Without shifting the product incline the sieve at an angle 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).

7.3 Thawing

The sample is thawed by enclosing it in a film type bag and immersing in an agitated water bath held at 20°C - 1 (68°F ± 2°F). The complete thawing of the product is determined by gently squeezing the bag occasionally until no hard core or ice crystals are felt.

7.4 Examination for Physical Defects

The sample shall be examined for physical defects and judged according to the provisions set out in Annex A. The acceptance levels for defects as contained in Annex A, Part I are laid down in Annex A, Part II.

7.5 Examination for odour, flavour and texture

Examination for odour, flavour and texture shall be made after a reasonable quantity of the sample has been cooked by an approved method, as set out in Annex B.

EXPLANATORY NOTEExplanation of the Proposed Method for the Examination for Physical Defects
(Not part of the Standard)

Acceptance levels for the defects as contained in Part I are laid down in Part II. The acceptance levels have been taken from the Sampling Plans for Prepackaged Foods (ALINORM 69/27), modified to take into account the large number of pack sizes produced in the various countries.

The defects table in Part I ascribes demerit points to the various defects contained in 1 kilo of fish fillets. An example of the sampling procedure is given below:

Lot size	48,000 x 250 gram packs
Lot size in kilos	12,000
Inspection level	1
Sample size	13 kilos (52 packs)

The 52 packs are grouped at random into 13 samples each of 1 kilo. The samples are each examined in accordance with Part I.

Acceptance number	2 x 1 kilo samples
-------------------	--------------------

DEFECT TABLE

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

One bone 5 mm or less = 2 points
Two bones 5 mm or less = 4 points

	Demerit Points
1. <u>Bones</u>	
a. <u>Boneless fillets</u>	
5mm or less in any dimension	2
Greater than 5 mm up to and including 25 mm in any dimension	4
Greater than 25 mm in any dimension	8
b. <u>Fillets not designated as boneless</u>	
Bones, other than pin bones which are objectionable and/or dangerous, i.e. capable of causing injury	8
2. <u>Discolouration</u>	
Any significant discolouration of the fish flesh!	
3 sq. cm. or less	0
Greater than 3 sq. cm. up to and including 10 sq. cm.	4
Greater than 10 sq. cm.	8
3. <u>Blood clots</u>	
5 mm or less in any dimension	0
Greater than 5 mm in any dimension	4
4. <u>Parasitic worms</u>	
Capsular diameter of 2 mm or less, or worms not encapsulated 1 cm in length or less	0
Capsular diameter greater than 2 mm or worms not encapsulated greater than 1 cm in length	4
5. <u>Fins or part fins</u>	
3 sq. cm. or less in aggregate area	4
Greater than 3 sq. cm. in aggregate area	8
6. <u>Skin (skinless fillets)</u>	
3 sq. cm. or less	0
Greater than 3 sq. cm. up to and including 10 sq. cm.	4
Greater than 10 sq. cm.	8
7. <u>Black membrane (belly wall)</u>	
6 sq. cm. or less	0
Greater than 6 sq. cm. up to and including 12 sq. cm.	4
Greater than 12 sq. cm.	8

A sample of 1 kilo will be considered defective if the demerit points total more than 16.

SAMPLING PLAN AND INSPECTION LEVELS

(AQL 6.5)

LOT SIZE (in kilos)	INSPECTION LEVELS			
	I		II	
	N	C	N	C
4,800 or less	6	1	13	2
4,801 - 24,000	13	2	21	3
24,001 - 48,000	21	3	29	4
48,001 - 84,000	29	4	48	6
84,001 - 144,000	48	6	84	9
144,001 - 240,000	84	9	126	13
over 240,000	126	13	200	19

N = number of samples or 1 kilo
C = acceptance number

COOKING METHODS

STEAMING

Steam in a closed dish on 7 inches (17-8 cm) diameter over boiling water for 35 minutes, 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

Baking pans, approximately 12" x 8" x 2 1/2 (30 x 10 x 6 cm) are 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 232°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 71°C (160°F) which requires about 20 minutes.

DRAFT STANDARD FOR CANNED SHRIMP OR PRAWNS

(Submitted to the Seventh Session of the Codex Alimentarius Commission
at Step 8 of the Procedure for the Elaboration of World-wide Standards)

1. SCOPE

This standard applies to canned shrimp or canned prawns in transparent or non-transparent containers, and does not apply to speciality products where the shrimp or prawns only constitute a portion of the edible contents.

2. DESCRIPTION

2.1 Definition

Canned shrimp or prawns is the processed meat of shrimp or prawns of the Penaeid, Pandalid, Crangonid, and Palaemonid species in any combination of the species of similar size. The prepared product in various packing media is processed by heat in an appropriate manner before or after being sealed in a container so as to prevent spoilage.

2.2 Designation

The product shall be designated and labelled under the name "shrimp" or under the name "prawns".

3. PRESENTATION

3.1 Styles

- (a) Conventional, or regular - shrimp or prawns which have been peeled and subsequently canned without intentional removal of the dorsal tract.
- (b) Cleaned, or deveined - shrimp or prawns which have been peeled and in addition the back has been cut open and the dorsal tract removed at least up to the last segment next to the tail.

3.2 Type

Wet pack - in addition to the meat of the shrimp or prawns, the container also contains a liquid in sufficient volume to cover the shrimp or prawns.

3.3 Sizes

Canned shrimp or prawns in either "conventional" or "cleaned" styles may be designated as to size in accordance with the following:

Size Designation	Number of shrimp or prawns per ounce of drained weight		Number of shrimp or prawns per 100 g of drained weight	
	Conventional	Cleaned	Conventional	Cleaned
Extra Large or Jumbo	Less than 3.5	Less than 3.8	Less than 12.3	Less than 13.4
Large	3.5 to 5.0 inclusive	3.8 to 5.4 inclusive	12.3 to 17.7 inclusive	13.4 to 19.1 inclusive
Medium	More than 5.0 but not more than 9.0	More than 5.4 but not more than 9.8	More than 17.7 but not more than 31.8	More than 19.1 but not more than 34.6
Small	More than 9.0: but not more than 17.0	More than 9.8 but not more than 18.4	More than 31.8 but not more than 60.0	More than 34.6 but not more than 65.3
Tiny or Minuscule	More than 17.0	More than 18.4	More than 60.0	More than 65.3

3.4 Sizes, as designated in the preceding chart, shall consist of whole shrimp or whole prawns and shall not contain pieces in excess of the tolerance provided in 4.3 (f).

3.5 Broken Shrimp or Broken Prawns

Broken shrimp or broken prawns are 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 4.3 (f). When pieces are packed as a separate class of merchandise they shall be designated in accordance with the provision of 8.1.3 (b).

4. ESSENTIAL COMPOSITION AND QUALITY FACTORS

4.1 Ingredients

The packing medium consists of water and salt. Other ingredients such as lemon juice and sugars may also be added.

4.2 Raw Material

Canned shrimp or prawns are prepared from clean and sound fresh, frozen or cooked shrimp or prawns.

4.3 Finished Product

(a) Appearance

Clean, generally uniform in size, and prepared with care. Good (firm) sinuosity making them appear curved. Appetizing appearance. Uniform colour characteristic of the species and habitat or areas from which harvested even in case of artificial coloration. Not smeary; at most a bit sticky. Colour of flesh is clear and typical of shrimp or prawns suitably processed.

(b) Odour and flavour

Canned shrimp or prawns shall have a good characteristic odour and flavour and shall be free of objectionable odours or flavours of any kind. The natural odour and flavour reminiscent of iodoform is not a defect unless excessive.

(c) Texture

Canned shrimp or prawns characteristically are not tough. They shall be relatively firm and free from mushiness.

(d) Peeling

Canned shrimp or prawns shall be free of heads and shall to the extent practicable under good practice of production be nearly free of shells, legs and antennae.

(e) Packing Media

When containers are examined at temperatures above 68°F (20°C) the liquid flows and is characteristically cloudy to clear. It will not be dark in appearance. The brine tends to thicken or jell at temperatures below 65°F (18.3°C). If a jelled media be encountered, it shall be cloudy to clear and shall not be dark in appearance. The condition of jell is the result of a natural coagulation of protein with the packing media,

(f) Tolerances

Tolerances for other defects will be allowed as indicated below:

Size Designation	Broken (pieces) % by weight	improperly cleaned and deveined x % by weight	Size (count) Deviation % by number
Extra Large or Jumbo	57%	5%	10%
Large	5%	5%	10%
Medium	5%	5%	10%
Small	10%	5%	10%
Tiny or Minuscule		5%	

x only applies to cleaned or deveined style.

5. FOOD ADDITIVES

The following provisions in respect of food additives are subject to endorsement by the Codex Committee on Food Additives: ¹

Additives	Maximum level of use	
(a) Calcium disodium EDTA	250 mg/kg	of the final product (endorsed) (temporarily endorsed) (endorsed) (Please see footnote)
(b) Orthophosphoric acid:	850 mg/kg	
(c) Citric acid:	no limit	
(d) Monosodium glutamate:	800 mg/kg	
(e) Colours:		

Carotene	CI 75130		(Please see footnote)
Tartrazine	CI 19140		(endorsed)
Orange GGN	CI 15980	30 mg/kg of the final product singly or in combination	(not endorsed)
Ponceau 4 R	CI 16255		(temporarily endorsed)
Ponceau 6 R	CI 16290		(not endorsed)
Azo-rubine	CI 14720		(not endorsed)
Erythrosine	CI 45430		(temporarily endorsed)
Amaranth	CI 16185		(endorsed)
Sunset yellow FCF	CI 15965		(endorsed)

A colour or mixtures of colours may "be added at the above level provided that they are not used to conceal adverse quality changes.

¹ Secretariat Note: The food additive provisions have been examined by the 6th Session of the Codex Committee on Food Additives, 15-22 October 1969 and the decisions reached are indicated above. In respect of Monosodium Glutamate the Codex Committee on Food Additives postponed a decision pending further information. In respect of carotene the Codex Committee on Food Additives endorsed Beta-Carotene.

6. HYGIENE

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

7. WEIGHTS AND MEASURES

7.1 Minimum Total Fill

In addition to the meat of the shrimp or prawns, the container shall contain packing medium in sufficient volume to fill the voids and to cover the shrimp or prawns.

7.2 Minimum Drained Weight

Containers shall be filled so that the cut-out weight of the shrimp or prawns will be not less than 60% of the water capacity of the container.

8. LABELLING

In addition to section 1, 2, 4, 5 and 6 of the Recommended International 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.

8.1 The name of the food

The name of the product shall be either "shrimp" or "prawns" provided that such labelling conforms to the custom and practice of the country in which the product will be distributed, and further provided that the size of the product will not be misleading to the purchaser because of its designation.

8.1.1 Style

The style of pack need be declared only when the contents are of the cleaned or deveined style. Unless so specifically designated, the canned shrimp or prawns will be considered to be of the conventional, or regular, style of pack.

8.1.2 Type

The type of pack may be declared.

8.1.3 Size

- (a) If the canned shrimp or prawns are labelled as to size, the size must comply with the provisions of paragraph 3.3
- (b) Broken shrimp or broked prawns must be labelled and identified as "broken shrimp" or "broken prawns", or alternatively as "pieces of shrimp" or "pieces of prawns".

8.2 List of Ingredients

A complete list of ingredients shall be declared on the label in descending order of proportion. In addition Sections 3.2 (b) and (c) of the Recommended International General Standard for the Labelling of Prepackaged Foods shall also apply.

8.3 Net Contents

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

8.4 Name and Address

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

8.5 Country of Origin

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

8.6 Lot identification

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

9. METHODS OF ANALYSIS AND SAMPLING

9.1 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.

9.2 Sampling

Sampling shall be in accordance with the Sampling Plans for Prepackaged Foods (ALINORM 69/27).

9.3 The number of samples to be taken from all lots for the examination of product (quality and the determination of drained weight or net contents shall be in accordance with the Sampling Plans for Prepackaged Foods (ALINORM 69/27).

9.4 Classification of "Defectives"

A container that fails to meet any of the applicable requirements for size, odour and flavour, texture, peeling, or broken pieces, or, in the case of deveined shrimp or prawns with the requirements for proper deveining, as set out in paragraphs 3.3, 3.4, 3.5 and 4.3 (b), (c) and (d) shall be considered a "defective".

9.5 Lot Acceptance

A lot will be considered as meeting the requirements of this standard when the total number of "defectives" does not exceed the acceptance number (c) of the appropriate sampling plan (AQL-6.5) in the Sampling Plans for Prepackaged Foods (ALINORM 69/27) and when the average drained weight of all containers examined is not less than the specified minimum.

10. TEST PROCEDURES

10.1 Drained Weight (1)

- (1) This procedure for determining drained weight is not workable when the packing medium is jelled as described in paragraph 4.3 (e). Experimental work is being conducted to develop a suitable procedure:

Fill of container compliance shall be determined by averaging the results from all containers of a sample representing a lot provided that there is no unreasonable shortage in individual containers.

- (a) The drained weight shall be determined by keeping the unopened containers at a temperature of not less than 68 nor more than 75°F (not less than 20 or more than 23.9°C) for a minimum of 12 hours immediately prior to examination.
- (b) After opening, tilt the opened container so as to distribute the contents over the meshes of a circular sieve which has been previously weighed. Some canned shrimp may contain a jelled medium due to canning shrimp from Northern Pacific waters.
- (c) Incline the sieve at an angle of approximately 17-20 degrees and allow the shrimp or prawns to drain for two minutes as measured from the moment they are dumped into the sieve.
- (d) Weigh the sieve containing the drained product. Subtract the weight of the sieve. The resultant figure shall be considered to be the drained weight of the shrimp or prawns.

10.2 Net Contents

- (a) Net contents shall be determined by first weighing the unopened container.
- (b) Open the container, then pour out the contents and allow the container to drain for two minutes.
- (c) Weigh the empty container, including the top.
- (d) Subtract the weight of the empty container from the weight of the unopened container. The resultant figure shall be considered to be the net contents.

10.3 Specification for Circular Sieve

- (a) If the quantity of the total contents (net contents) of the container is less than 1.5 kg (3 pounds), use a sieve with a diameter of 20 cm (8 inches).
- (b) If the quantity of the total contents (net contents) of the container is 1.5 kg (3 pounds) or more, use a sieve with a diameter of 30 cm (12 inches).

- (c) The meshes of such sieves are made by so 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).

10.4 Size determination

Size compliance shall be determined by averaging the results from all containers of a sample representing a lot provided that there is no unreasonable deviation in individual containers. After weighing, count the number of shrimp or prawns which were in the container. Divide that number by the drained weight. The resultant figure should be compared to the chart under paragraph 3.3. A tolerance will be allowed as indicated in paragraph 4.3 (f).

10.5 Method of Determining Water Capacity of a Container

Wash, dry and weigh the empty container. Fill the container with distilled water at 20°C (68°F) to 5 mm (3/16 ins.) vertical distance below the top level of the container, and weigh the container as thus filled. Having followed the above steps, subtract the weight of the empty container from the weight of the filled container. The difference shall be considered the weight of water required to fill the container.

PROPOSED DRAFT STANDARD FOR QUICK FROZEN FILLETS OF OCEAN PERCH

(Submitted to the Codex Alimentarius Commission at Step 5
of the Procedure for the Elaboration of World Wide Standards)

1. SCOPE

This standard shall apply to quick frozen fillets of 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 and Process Definition

- (a) Quick Frozen Fillets of Ocean Perch are obtained from fish of the following species: *Sebastes marinus*, *Sebastes mentella*, *Sebastodes alutus* or *Scorpaena dactyloptera* Delaroche.
- (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.
- (c) 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°) at the thermal centre after thermal stabilisation. 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, except that the recognised practice of thawing and repacking products under controlled conditions followed by the application of the quick freezing process as defined is permitted.

2.2 Presentation

Fillets shall be presented as:

- (a) skin-on, scaled, where the fillet is practically free of scales OR
- (b) 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 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 all internal organs, fins and significantly discoloured flesh, and shall be reasonably free from ragged edges, tears and flaps.
- (b) After cooking by steaming, baking or boiling, as set out in Annex B, the product shall have a flavour characteristic of the species and shall be free from any objectionable flavours and odours, and its texture shall be firm and not tough, soft or gelatinous.
- (c) The final product shall conform with the test for physical defects as set out under Section 7 of this standard.
- (d) 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 4 per kg.
- 3.2.2 The sample size and acceptance numbers are as set out in the Sampling Plan attached to this standard as Annex A, Part II.

4. FOOD ADDITIVES

The following provisions in respect of food additives are subject to endorsement by the Codex Committee on Food Additives; they may be used singly or in combination: (1)

<u>Additives</u>	<u>Maximum level of use</u>	
sodium or potassium or calcium tri-polyphosphate	expressed as P ₂ O ₅	Maximum 5000 mg/kg of the final product
sodium hexametaphosphate		
sodium or potassium pyrophosphate	expressed as ascorbic acid	Maximum 1000 mg/kg of the final product
sodium or potassium orthophosphate		
sodium or potassium ascorbate		

- (1) Secretariat Note: The food additive provisions have been endorsed by the 6th Session of the Codex Committee on Food Additives, 15-22 October 1969.

5. HYGIENE

It is recommended that the products covered by the provisions of this standard be prepared in accordance with the General Principles of Food Hygiene (CAC/RCPI-1969) developed by the Codex Committee on Food Hygiene.

6. LABELLING

In addition to Sections 1, 2, 4, 5 and 6 of the International Recommended General Standard for the Labelling of Prepackaged Foods (CAC/RSI-1969) the following specific provisions apply:

6.1 Name of the Food

- 6.1.1 The name of the product shall be "fillets of ocean perch" (1). The words "(quick frozen)" shall also appear on the label.

- (1) The Committee ask specially for comments on the use of the name ocean perch, redfish and rosefish (or any others) for the species covered by this standard.

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

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 Section 3.2 (b) and 3.2 (c) of the Recommended International General Standard for the Labelling of Prepackaged Foods shall also apply.

6.3 Net Contents

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

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

- (a) The country of origin of a food shall be declared if its omission would mislead or deceive the consumer.
- (b) When a 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 ANALYSIS AND SAMPLING

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

7.1 Methods of Sampling and Preparation of Sample

Sampling shall be carried out in accordance with the Sampling Plans for Prepackaged Foods (ALINORM 69/27) approved by the Codex Committee on Methods of Analysis and Sampling.

7.2 Removal of the 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 8 inches in diameter for samples less than 2 pounds, and 12 inches for those more than 2 pounds. Without shifting the product incline the sieve at an angle approximately 17-20 to facilitate drainage, and drain exactly 2 minutes (stop watch). Immediately transfer the product to a tarred pan and weigh. (Methods of Analysis of AOAC 18.001).

7.3 Thawing

The sample is thawed by enclosing it in a film type bag and immersing in an agitated water bath held at 20°C -1 (68°F ± 2°F). The complete thawing of the product is determined by gently squeezing the bag occasionally until no hard core or ice crystals are felt.

7.4 Examination for Physical Defects

The sample shall be examined for physical defects and judged according to the provisions set out in Annex A. The acceptance levels for defects as contained in Annex A Part I are laid down in Annex A, Part II.

7.5 Examination for odour, flavour and texture

Examination for odour, flavour and texture shall be made after reasonable quantities of the sample have been cooked by an approved method, as set out in Annex B.

EXPLANATORY NOTEExplanation of the Proposed Method for the Examination for Physical Defects
(Not part of the Standard)

Acceptance levels for the defects as contained in Part I are laid down in Part II. The acceptance levels have been taken from the Sampling Plans for Prepackaged Foods (ALINORM 69/27), modified to take into account the large number of pack sizes produced in the various countries.

The defects table in Part I ascribes demerit points to the various defects contained in 1 kilo of fish fillets. An example of the sampling procedure is given below:

Lot size	48,000 x 250 gram packs
Lot size in kilos	12,000
Inspection level	I
Sample size	13 kilos (52 packs)

The 52 packs are grouped at random into 13 samples each of 1 kilo. The samples are each examined in accordance with Part I*

Acceptance number	2 x 1 kilo samples
-------------------	--------------------

DEFECT TABLE

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

One bone	5 mm or less	= 2 points	
Two bones	5 mm or less	= 4 points	
1.	<u>Bones</u>		<u>Demerit Points</u>
a.	<u>Boneless fillets</u>		
	5 mm or less in any dimension		2
	Greater than 5 mm up to and including 25 mm in any dimension		4
	Greater than 25 mm in any dimension		8
b.	<u>Fillets not designated as boneless</u>		
	Bones, other than pin bones which are objectionable and/or dangerous, i.e. capable of causing injury		8
2.	<u>Discolouration</u>		
	Any significant discolouration of the fish flesh: 3 sq. cm. or less		0
	Greater than 3 sq. cm. up to and including 10 sq. cm.		4
	Greater than 10 sq. cm.		8
3.	<u>Blood clots</u>		
	5 mm or less in any dimension		0
	Greater than 5 mm in any dimension		4
4.	<u>Parasitic worms</u>		
	Capsular diameter of 2 mm or less, or worms not encapsulated 1 cm, in length or less		0
	Capsular diameter greater than 2 mm or worms not encapsulated greater than 1 cm. in length		4
5.	<u>Fins or part fins</u>		
	3 sq. cm. or less in aggregate area		4
	Greater than 3 sq. cm. in aggregate area		8
6.	<u>Skin (skinless fillets)</u>		
	3 sq. cm. or less		0
	Greater than 3 sq. cm. up to and including 10 sq. cm.		4
	Greater than 10 sq. cm.		8
7.	<u>Black membrane (belly wall)</u>		
	6 sq. cm. or less		0
	Greater than 6 sq. cm. up to and including 12 sq. cm.		4
	Greater than 12 sq. cm.		8

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

SAMPLING PLAN AND INSPECTION LEVELS

(AQL 6.5)

LOT SIZE (in kilos)	INSPECTION LEVELS			
	I		II	
	N	C	N	C
4,800 or less	6	1	13	2
4,801 - 24,000	13	2	21	3
24,001 - 48,000	21	3	29	4
48,001 - 84,000	29	4	48	6
84,001 - 144,000	48	6	84	9
144,001 - 240,000	84	9	126	13
over 240,000	126	13	200	19

N = number of samples of 1 kilo
C = acceptance number

COOKING METHODS

STEAMING

Steam in a closed dish on 7 inches (17.6 cm) diameter over boiling water for 35 minutes, 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

Baking pans, approximately 12" x 8" x 2 1/2" (30 x 10 x 6 cm) are 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 232°C (459°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 71°C (160°F) which requires about 20 minutes.

PROPOSED DRAFT STANDARD FOR QUICK FROZEN FILLETS OF PLAICE

(Submitted to the Codex Alimentarius Commission at Step 5
of the Procedure for the Elaboration of World-wide Standards)

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 and Process Definition

- (a) Quick Frozen Fillets of Plaice are obtained from fish of the following species: *Pleuronectes platessa*, *Hippoglossoides platessoidea* (American Plaice), and *Pleuronectes quadrituberculatis* (Alaska Plaice).
- (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.
- (c) 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 stabilisation. 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, except that the recognised practice of thawing and repacking products under controlled conditions followed by the application of the quick freezing process as defined is permitted.

2.2 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 including the removal of pin bones.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material

Quick Frozen Fillets of Plaice 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 all internal organs, fins and abnormally-discoloured flesh, and shall be reasonably free from ragged edges, tears and flaps.
- (b) After cooking by steaming, baking or boiling, as set out in Annex B, the product shall have a flavour characteristic of the species and shall be free from any objectionable flavours and odours, and its texture shall be reasonably firm.
- (c) The final product shall conform with the test for physical defects as set out under paragraph 7 of this standard.
- (d) The final product shall be reasonably free from undesirably small fillet pieces. [A piece weighing less than ... g is classed undesirably small. The maximum number of small fillet pieces permitted is 4 per kg.]*

* See: paragraph 42 of the Report

3.2.2 The sample size and acceptance numbers are as set out in the Sampling Plan attached to this standard as Annex A.

4. FOOD ADDITIVES

The following provisions in respect of food additives are subject to endorsement by the Codex Committee on Food Additives: they may be used singly or in combination: (1)

<u>Additives</u>		<u>Maximum level of use</u>
sodium or potassium or calcium tri-polyphosphates	expressed as P ₂ O ₅	Maximum 5000 mg/kg of the final product
sodium hexametaphosphate		
sodium or potassium pyrophosphate		
sodium or potassium orthophosphate		
sodium or potassium ascorbate	expressed as ascorbic as	1000 mg/kg d of the final product

(1) Secretariat Note: The food additive provisions have been endorsed by the 6th Session of the Codex committee on Food Additives, 15-22 October 1969.

5. HYGIENE

It is recommended that the products covered by the provisions of this standard be prepared in accordance with the General Principles of Food Hygiene (CAC/RCPI-1969) developed by the Codex Committee on Food Hygiene.

6. LABELLING

In addition to Sections 1, 2, 4, 5 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (ref. CAC/RSI-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 shall be "fillets of plaice". The words "quick frozen" shall also appear on the label.

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

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 Section 3.2 (b) and 3.2 (c) of the Recommended International General Standard for the Labelling of Prepackaged Foods shall also apply.

6.3 Net Contents

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

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

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

(b) When a 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 ANALYSIS AND SAMPLING

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

7.1 Methods of Sampling and Preparation of Sample

Sampling shall be carried out in accordance with the Sampling Plans for Prepackaged Foods (ALINORM 69/27) approved by the Codex Committee on Methods of Analysis and Sampling.

7.2 Removal of the 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 8 inches in diameter for samples less than 2 pounds, and 12 inches for those more than 2 pounds. Without shifting the product incline the sieve at an angle approximately 17-20 to facilitate drainage, and drain exactly 2 minutes (stop watch). Immediately transfer the product to a tarred pan and weigh. (Methods of Analysis of AOAC. 18.001).

7.3 Thawing

The sample is thawed by enclosing it in a film type bag and immersing in an agitated water bath held at 20°C - 1 (68°F - 2°F). The complete thawing of the product is determined by gently squeezing the bag occasionally until no hard core or ice crystals are felt.

7.4 Examination for Physical Defects

The sample shall be examined for physical defects and judged according to the provisions set out in Annex A. The acceptance levels for defects as contained in Annex A, Part I are laid down in Annex A, Part II.

7.5 Examination for odour, flavour and texture

Examination for odour, flavour and texture shall be made after reasonable quantities of the sample have been cooked by an approved method, as set out in Annex B.

EXPLANATORY NOTEExplanation of the Proposed Method for the Examination for physical Defects
(Not part of the Standard)

Acceptance levels for the defects as contained in Part I are laid down in Part II. The acceptance levels have been taken from the Sampling Plans for Prepackaged Foods (ALINORM 69/27), modified to take into account the large number of pack sizes produced in the various countries.

The defects table in Part I ascribes demerit points to the various defects contained in 1 kilo of fish fillets. An example of the sampling procedure is given below:

Lot size	48,000 x 250 gram packs
Lot size in kilos	12,000
Inspection level	I
Sample size	13 kilos (52 packs)

The 52 packs are grouped at random into 13 samples each of 1 kilo. The samples are each examined in accordance with Part I.

Acceptance number	2 x 1 kilo samples
-------------------	--------------------

DEFECT TABLE

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

One bone	5 mm or less	2 points
Two bones	5 mm or less	4 points

		Demerit Points
1.	<u>Bones</u>	
	a. Boneless fillets	
	5 mm or less in any dimension	2
	Greater than 5 mm up to and including 25 mm in any dimension	4
	Greater than 25 mm in any dimension	8
	b. Fillets not designated as boneless	
	Bones, other than pin bones which are objectionable and/or dangerous, i.e. capable of causing injury	8
2.	<u>Discolouration</u>	
	Any significant discolouration of the fish flesh:	
	3 sq. cm. or less	0
	Greater than 3 sq. cm. up to and including 10 sq. cm.	4
	Greater than 10 sq. cm.	8
3.	<u>Blood clots</u>	
	5 mm or less in any dimension	0
	Greater than 5 mm in any dimension	4
4.	<u>Parasitic worms</u>	
	Capsular diameter of 2 mm or less, or worms not encapsulated 1 cm in length or less	0
	Capsular diameter greater than 2 mm or worms not encapsulated greater than 1 cm in length	4
5.	<u>Fins or part fins</u>	
	3 sq. cm. or less in aggregate area	4
	Greater than 3 sq. cm. in aggregate area	8
6.	<u>Skin (skinless fillets)</u>	
	3 sq. cm. or less	0
	Greater than 3 sq. cm. up to and including 10 sq. cm.	4
	Greater than 10 sq. cm.	8
7.	<u>Black membrane ("belly wall")</u>	
	6 sq. cm. or less	0
	Greater than 6 sq. cm. up to and including 12 sq. cm.	4
	Greater than 12 sq. cm.	8

A sample of 1 kilo will be considered defective if the demerit points total more than 20.

SAMPLE PLAN AND INSPECTION LEVELS

(AQL 6.5)

LOT SIZE (in kilos)	INSPECTION LEVELS			
	I		II	
	N	C	N	C
4,800 or less	6	1	13	2
4,801 - 24,000	13	2	21	3
24,001 - 48,000	21	3	29	4
48,001 - 84,000	29	4	48	6
84,001 - 144,000	48	6	84	9
144,001 - 240,000	84	9	126	13
over 240.000	126	13	200	19

N = number of samples of 1 kilo
 C = acceptance number

COOKING METHODS

STEAMING

Steam An a closed dish of 7 inches (17.8 cm) diameter over boiling water for 35 minutes, 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

Baking pans, approximately 12" x 8" x 2 1/2 "(30 x 10 x 6 cm) are 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 232°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 it's contents into boiling water and cook until the internal temperature of the fillet sample reaches 71°C (160°F) which requires about 20 minutes.

PROPOSED DRAFT STANDARD FOR CANTED CRAB MEAT

(Circulated at Step 3 of the Procedure for the Elaboration
of World-wide Standards)

1. SCOPE

This standard applies to canned crab and does not apply to speciality products where the crab only constitutes a part of the edible contents.

2. DESCRIPTION

2.1 Product definition

Canned Crab Meat is the processed leg, claw, body and shoulder meat from which the shell has been removed of any of the species of crab listed below. The meat, being wrapped or not in parchment paper, is packed in hermetically sealed containers and so processed with heat as to prevent spoilage.

Paralithodes camtschatica
Paralithodes platypas
Paralithodes brevipes
Chionoectes opilio
Chionoectes japonicus
Chionoectes tanneri
Chionoectes bairdi
Erimacrus isenbeckii
Cancer pagurus
Cancer irroratus
Cancer magister
Cancer productus
Cancer borealis
Callinectes sapidus
Geryon quincipiedens
Maia squinads
Lithaodes antarcticus

2.2 Presentation

2.2.1 Two End Leg Pack (Other possible designations: "Twin-face (leg meat) Pack" or "Custom Pack").

The top and the bottom of the content of the pack shall consist of solid pieces of leg, claw and shoulder meat, having their original conformation except leg merus meat which may be cut according to can width. The pieces should appear well arranged with pieces of merus meat placed in the middle between other pieces.

The inner parts of the content of the pack shall consist of solid pieces of body meat and flakes thereof, which have been broken during processing into individual shredded particles. The amount of pieces of leg merus meat shall be not less than 23% and flakes not more than 40% of the total drained weight.

2.2.2 One End Leg Pack (other possible designations: "Single-face (leg meat) Pack" or "Regular Pack").

Either end of the content of the pack shall consist of leg, claw and shoulder meat, having their original conformation except leg merus meat which may be cut according to can width; the pieces should appear well arranged. The remaining content shall consist of solid pieces of body meat and flakes thereof.

- 2.2.3 Chunk Pack - consists of solid pieces and flakes thereof.
- 2.2.4 Flake Pack - consists of flakes only
- 2.2.5 Lump Pack - consists of two large segments of meat from the back fin cavity.
- 2.2.6 Claw Pack - consists of claw meat.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material

Canned Crab Meat shall be prepared from clean and sound crab, which is suitable for human consumption.

3.2 Ingredients Salt.

3.3 Processing

The crab shall have the carapace removed and be well washed. It shall be cooked with or without salt. After cooling in potable water, shuck the meat. The meat shall be divided into leg, claw, body and shoulder meat for preparation. The flakes which have been broken shall be separated. Damaged or discoloured meat associated with bruises or small wounds shall be removed. The meat shall be well cleaned with potable water. The meat may be wrapped or not in parchment paper and packed in accordance with the form of pack desired, in a clean can free from dents, rust or defective seams. The can shall be properly seamed, sterilized and cooled.

3.4 Canned product

On opening the cans shall appear well filled. The finished product shall have a pleasing appetizing appearance and its odour, flavour and texture shall be characteristic of the crab and be free from foreign materials.

4. FOOD ADDITIVES

The following provisions in respect of food additives are subject to endorsement by the Codex Committee of Food Additives:

<u>Additives</u>	<u>Maximum level of use</u>		
Calcium disodium EDTA	250 mg/kg	of the final product	to be endorsed
Sodium hexametaphosphate	1000 mg/kg		
Sodium pyrophosphate	5000 mg/kg		
Citric acid	no limit		
Tartaric acid			
Monosodium glutamate	800 mg/kg	"	"

5. HYGIENE

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

6. WEIGHTS AND MEASURES

Containers shall be filled so that the cut-out weight of the crab will be not less than 69% of the water capacity of the container.

7. LABELLING

In addition to Sections 1, 2, 4, 5 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RSI-1969) the following specific provisions which have to be endorsed by the Codex Committee on Food Labelling shall apply:

7.1 The name of the food

7.1.1 The name of the product is "crab" and the designation appropriate to the species may be included in the name as follows:

Species	Designation
Paralithodes camtschatica	King Crab
Paralithodes platypas	King Crab
Paralithodes brevipes	Hanasaki Crab or King Crab
Chionoectes opilio	Zuwai Crab or Snow
Chionoectes japonicus	Crab or Tanner Crab
Chionoectes tanneri	or Queen Crab
Chionoectes bairdi	
Erimacrus isenbeckii	Kegani Crab
Cancer irroratus	Rock Crab
Cancer borealis	Rock Crab
Cancer magister	Dungeness Crab
Cancer productus
Cancer pagurus
Callinectes sapidus	Blue Crab
Geeryon quipquedens	Deep, Sea. Red. Crab
Maia squinads
Lithaodes antarcticus

7.2 Presentation

The form of the pack shall be declared as specified in paragraph 2.2

7.3 List of Ingredients

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

7.4 Net Contents

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

[The provisions of Section 3.3 of the Recommended International General Standard for the Labelling of Prepackaged Foods shall apply. - The Committee to consider whether the drained weight provision applies.]

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 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.

8. METHODS OF ANALYSIS AND SAMPLING

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

8.1 Sampling for Destructive Examination

The number of samples to be taken from all lots for the examination of product quality for the testing of vacuum [and incubation] and the determination of drained weight shall be in accordance with the Sampling Plans for Prepackaged Foods (ALINORM 69/27).

8.2 Vacuum Tests

8.2.1 Ordinary Vacuum Test

Samples shall be tested for vacuum using a Bourdon tube gauge.

~~8.2.2~~ Incubation Test

8.3 Determination of Drained Weight

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

- (a) The drained weight shall be determined by keeping the unopened containers at about 20°C for a minimum of 12 hours immediately- prior to examination.
- (b) After opening, tilt the opened container so as to distribute the contents over the meshes of a sieve which has been previously weighed. (The meshes of such sieve to consist of square openings 2.38 mm by 2.38 mm). If contents are wrapped in parchment paper, remove the parchment paper.
- (c) Incline the sieve at an angle of about 15 degrees and allow the crab meat to drain for two minutes.
- (d) Weigh the sieve containing the drained products. Subtract the weight of the sieve. The resultant figure shall be considered to be the drained weight of the crab meat.

8.4 Determination of Water Capacity of Container

In the case of a container with lid attached by double seam cut out the lid without removing or altering the height of the double seam. Wash, dry and weigh the empty container. Fill the container with distilled water at 20°C to 5 mm vertical

distance below the top level of the container, and weigh the container thus filled. Subtract the weight of the empty container from the weight of the filled container. The difference shall be considered the weight of water required to fill the container.

8.5 Determination of Wet Content

- (a) Net content shall be determined by first weighing the unopened container.
- (b) Open the container, then pour out the contents and allow the container to drain for two minutes.
- (c) Weigh the empty container, including the top and parchment paper used for wrapping, if present.
- (d) Subtract the weight of the empty container and parchment wrapping, if present, from the weight of the unopened container. The resultant figure shall be considered to be the net content.

8.6 Examination of Product Quality

After examination for vacuum (net content) or drained weight, the sample taken for destructive examination shall be examined organoleptically by persons trained in such examination.

8.7 Classification of "Defectives"

(To be developed)

8.8 Lot acceptance

(To be developed)

PROPOSED DRAFT STANDARD FOR CANNED TUNA AND BONITO IN BRINE OR OIL

(Circulated at Step 3 of the Procedure for the Elaboration of World-wide Standards)

1. SCOPE

(to be developed)

2. DESCRIPTION

- 2.1 Canned Tuna and Bonito are the products consisting of the processed flesh of any of the appropriate species listed below, packed with oil or brine, 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 tongole

Euthynnus pelamis

Euthynnus lineatus

Euthynnus affinis

Euthynnus alletteratus

Sarda sarda

Sarda velox

Sarda chiliensis

Sarda orientalis

2.2 Presentation

- 2.2.1 Style - solid pack may be presented as "skin-on".

2.2.2 Form of pack

- (a) Solid - processed fish freed from any surface tissue discoloured by diffused haemolyzed blood, cut into transverse segments to which no free fragments are added. In containers of 454 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 454 g (one pound) net contents, such segments may be cut into lengths suitable for packing in one or more layers of equal thickness. 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. The proportion of free flakes broken in the canning operation shall not exceed 18 percent.
- (b) Chunk or chunks - a mixture of pieces of cooked fish cut into pieces, most of which have dimensions of not less than one-half inch (1.2 cm) 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 - a mixture of particles of cooked fish that have been reduced to a uniform size, and in which the particles are discrete and do not comprise a paste.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw Material - clean, sound fish suitable for human consumption. It may be either fresh or frozen.

3.2 Packing media

- (a) Olive oils - conforming to the standard being elaborated by the Codex Committee on Fats and Oils
- (b) Other vegetable oils - clear, refined, deodorized, edible vegetable oil conforming to the standard elaborated by the Codex Committee on Fats and Oils.
- (c) Water.

3.3 Ingredients

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

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 honeycombed tissue. The finished product shall have a pleasing appetizing appearance, odour, flavour and texture characteristic of the fish.

3.5 Colour classification (optional)

The colour of canned tuna and bonito may be designated as follows according to the species packed and the colour of the canned product.

- (a) White - this colour designation may only be applied to *Thunnus alalunga*. The reflectance of the tissue shall be not less than 33.7 % of magnesium oxide at 555 m μ .
- (b) Light - may be applied to all tuna and bonito. The reflectance of the tissue shall be not less than 22.6 % of magnesium oxide at 555 m μ .
- (c) Dark - may be applied to all tuna and bonito. The reflectance of tissue shall be less than 22.6 % of magnesium oxide at 555 m μ .
- (d) Blend - this colour designation applies to a mixture of tuna flakes or bonito flakes of which not less than 20 percent by weight meet the colour standard for white or light tuna or light "bonito and the remainder of which fall within the colour standard for- dark tuna or dark bonito.

[A method for the determination of colour to be developed. Governments are asked particularly to report their present practices in their comments and to say

what detailed provisions they would wish to see specified in the standard about species and [or colour.]

4. FOOD ADDITIVES

The following provisions in respect of food additives are subject to endorsement of the Codex Committee on Food Additives:

<u>Additives</u>	<u>Maximum level of use</u>
Sodium pyrophosphate	5000 mg/kg of the final product (to be endorsed)
or	
Calcium disodium EDTA	250 mg/kg " " " (" " ")

5. HYGIENE

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

6. LABELLING

In addition to Sections 1, 2, 4, 5 and 6 of the Recommended International General Standard for the Labelling of Prepackaged Foods (CAC/RS 1-1969) the following specific provisions which have to be endorsed by the Codex Committee on Food Labelling shall apply:

6.1 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 appropriate colour classification if it complies with the tests laid down in 3.5.

6.2 Form of Pack

The form of the pack and the reference to the packing medium, i.e. brine or in 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 ("Système International" Units) or avoirdupois or both systems as required by the country in which the food is sold.[The drained weight shall be given in the case of fish packed in brine - to be further considered and a method of determination to be supplied.]

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.

7.1 Sampling - samples for compliance determination shall be drawn in accordance with the Sampling Plans for Prepackaged Foods (ALINORM 69/27).

7.2 Testing for qualitative criteria and identity - canned tuna and bonito shall be examined organoleptically only by those trained to do so.

7.3 Measurement for Drained Weight and other Criteria

[To be developed.]

7.4 Physical defects

[To be developed.]