

Food and Agriculture Organization of the United Nations

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PROPOSALS FOR A
STANDARD INTERNATIONAL STATISTICAL CLASSIFICATION
OF FISHING AREAS

FAO Fisheries Division, Economics Branch, Statistics Section

0. INTRODUCTION

- 0.1 Section 1 of this paper describes the world-wide need for an international standard statistical classification of fishing areas to be used for the reporting and publication of effort-and-catch data by national offices and also by international secretariats serving various intergovernmental fishery organizations, commissions, councils, advisory committees, working parties, etc.
- 0.2 In sections 2, 3, 4 and 5 the basic concepts and definitions are reviewed and proposals for the classification and numbering of the various types of fishing areas are presented.
- 0.3 All the proposals made in the various section of this paper are provisional. This paper has been prepared and is being circulated in an attempt to obtain comments and suggestions urgently needed by the FAO Secretariat for further work in this field. Readers may find in it many shortcomings and it is hoped that they would bring these to the attention of FAO. Examples of topics on which FAO would like to obtain suggestions and comments are given in section 0.5 (see overleaf).
- 0.4 Suggestions and comments should be sent to the following address, preferably before 30 July:

The Chief
Fisheries Statistics Section
Economics Branch
Fisheries Division
FAO
ROME, Italy

0.5 The following list gives examples of some of the topics on which FAO would like to obtain comments:

- (a) General comments on the main proposals to establish (i) seven Inland Statistical Areas; (ii) approximately nineteen Marine Statistical Areas.
- (b) Comments on the proposed breakdown of each "Inland Statistical Area" (corresponding to a continent) into inland "sub-areas" (corresponding to countries).
- (c) Changes in the names of the Marine Statistical Areas to introduce where required more appropriate names.
- (d) Improvements in the additional designations (alphabetic letters and numbers) of the seven Inland and approximately nineteen Marine Statistical Areas.
- (e) Proposals for "streamlining" and further improvement of the (i) four-digit numbering system for sub-areas; (ii) five-digits for divisions; (iii) seven-digits for standard sub-divisions.
- (f) Should Statistical Area (21) - the Arctic - be replaced by three Statistical Areas as suggested in the second and third paragraphs of section 4.3.4 (page 12)?
- (g) Should Statistical Area Z (71) - the Antarctic - be eliminated by extending Statistical Areas H, J, P, Q, X and Y southwards below 60°00 south latitude to the edge of the antarctic continent as suggested in the last paragraph of section 4.3.4 (page 12)?
- (h) In section 4.2.3 it is indicated that the letter V and the two-digit number 66 are kept in reserve for use in case Statistical Area M (55) requires splitting. Should this Statistical Area M be divided into (i) Northeastern Indian Ocean Statistical Area M (55); (ii) Western Equatorial Pacific Statistical Area V (66)?
- (i) Should new Statistical Area V (66), proposed in the preceding paragraph (h), include any of the sub-areas now covering the western part of Statistical Area T?

1. GENERAL

- 1.1 National focal points, located either in fisheries administrations or in central statistical institutes, in many cases provide a breakdown of their national annual production into (a) freshwater fisheries; and (b) marine fisheries. This classification provides a rough indication of the origin of the fish catch as (a) the rivers, lakes, ponds, etc., and (b) the seas. The classification of the fish catch by marine species or freshwater ones also throws in some instances further light on the origin of the primary production. Difficulties, however, arise in the case of diadromous species (for example anadromous salmon, trouts, shads, etc., and catadromous eels). In these instances it is sometimes difficult to determine whether the quantities for these migratory species were caught in freshwater or in marine areas.
- 1.2 Catch and landings statistics are often shown in national statistics according to the states, provinces, counties, districts, cantons and other political and administrative units covering the national territory. For the freshwater fisheries this type of breakdown, which is normally used also in agriculture, forestry and industrial statistics, appears to be satisfactory, especially if the territorial details are further broken down according to rivers systems, swamps, lakes, dams, ponds, etc.
- 1.3 Data on the catches of marine species and on diadromous species caught in marine areas are also often given according to maritime states, provinces, counties, districts and other political and administrative territorial units with borders along the coast. The national fishery data might also be arranged according to specially designated fishery districts, fishery harbours, merchant marine "captaincies", specially defined stretches of coastline, and other territorial concepts pertinent to the local fishing industry. This kind of breakdown might also take into account foreign ports where the domestic fishing fleet may regularly, or from time to time, land directly (and thereby export directly) catches made either in domestic waters or on the high-seas.
- 1.4 The breakdown according to territorial units of national totals for catches of marine and diadromous species, described in the preceding section, is a useful cross-classification of the primary production series. Where fishing craft are restricted by size or by the absence of mechanical propulsion (in the form of either inboard or outboard engines) and have to depend on oars or sails, these technical limitations on their operating radius permit the assumption that a breakdown of landings statistics according to maritime districts, ports, harbours, etc., indicate at least approximately and broadly the fishing areas where the catches were made.
- 1.5 The picture described in the preceding section is now being changed very rapidly through the increasing mechanization of the inshore and coastal fishing fleets. In almost all maritime countries rafts and canoes have been or are being replaced by larger mechanized craft and the sailboats and rowboats by motorboats capable of comparatively much longer-range operations. More and more units of many national fleets are no longer restricted to the grounds in the vicinity of their home ports. Large fishing craft with full-scale processing facilities on board, factory ships and mother ships accompanied by fleets of seaworthy fishing craft are enabling the fishing industries of an increasing number of countries to extend fishing operations to grounds in distant waters. The long-distance fishing fleets of some countries are now already operating in all oceans on a world-wide basis and the flags of various fishing countries are now being seen in hemispheres where, up to a few years ago, they were quite unknown.
- 1.6 To obtain the data required for national fisheries research programs many national administrations with developed and developing fisheries establish defined fishing areas to be used for statistical reporting of effort and catch data relating to their fishing fleets' activities. Such purely national systems are used in many fishing areas throughout the world; they are, however, only local in extent, significance and application. In only a few areas have there been instituted through intergovernmental action at the international level programs to introduce and to standardize for common statistical reporting "systems of designated fishing areas" to be used by the national offices of all participating countries.
- 1.7 In the Northeastern Atlantic this work of dividing and defining the waters around the Baltic and the Atlantic coasts of the European continent and adjacent islands, has been initiated by the International Council for the Exploration of the Sea (ICES) early this century. When the International Commission for the Northwest Atlantic Fisheries (ICNAF) was established in 1952 immediate action was taken to establish sub-areas and divisions for the statistical reporting of catches in the ICNAF Convention Area. In the Northeast Pacific statistical areas were also created for the recording of Pacific halibut catches by the International Pacific Halibut Commission (IHPHC). Along the North and South America coasts the Inter-American Tropical Tuna Commission (IATTC) developed a grid system based on five-degree statistical rectangles, which in turn are sub-divided in 25 one-degree rectangles.

- 1.8 There are many factors contributing to the urgent and growing world-wide need of national offices and international secretariats for the reporting according to designated FISHING AREAS, by classes of fishing units, of (a) catches by species and (b) effort. In the previous paragraph it has been indicated that only in a few parts of the world's seas and oceans is this need being met at present by an established internationally accepted system of fishing areas used in the national statistical collection and reporting to inter-governmental regional fisheries councils or commissions.
- 1.9 As early as 1945 the Technical Committee on Fisheries in its Report to the Interim Commission of the United Nations on Food and Agriculture stated:
- "Statistics of capture by locality are important in studies relevant to the conservation of fisheries. These would be useful also in acquainting fishermen with the location of especially productive grounds. For the North Atlantic the fisheries have been divided into named or numbered zones and records are kept by zones. Similar data are needed for the other fisheries of the world."
- 1.10 During its first session the FAO Advisory Committee on Marine Resources Research (ACMRR) in January 1963 recommended that the FAO Secretariat obtain from the various countries information on their long-distance fisheries operations according to fishing areas not covered by active existing regional fisheries agencies.
- 1.11 FAO's requests by correspondence and through personal visits to countries for information on their long-distance fisheries operations, for example in the Eastern and Central Atlantic and elsewhere, have been hampered and complicated by the lack at the present stage of clearly specified fishing areas for statistical reporting purposes to be used by the reporting countries when providing catch and possibly effort data.
- 1.12 FAO intends to extend the STANA reporting system which has now been introduced in the North Atlantic region also to the Mediterranean and the regions of the Central and South Atlantic and the Indian Ocean. However, this work will only be successful if statistical areas are established for the whole of the Central and South Atlantic. The need for the breakdown of the Mediterranean statistical area into sub-areas, divisions and sub-divisions is under consideration by the General Fisheries Council for the Mediterranean.
- 1.13 During its second session the ACMRR noted that response by countries to the request made in 1963 for submission of catch statistics broken down by broad fishing regions had not been such as to permit publication of tables for 1962 catches by regions. FAO is requesting statistics for 1963 by designated regions, and areas within regions, and working to extend the North Atlantic STANA reporting system to other regions. The Committee thereupon recommended that, as the success of this work depends on the ability and willingness by countries to report promptly the data, all possible encouragement and assistance to countries in this task should be provided as a matter of urgency.
- 1.14 The following paragraphs appeared in a paper called "Fishing Areas for Statistical Purposes in the North, Central and South Atlantic Regions", ACMRR/2/WP.12:
- (a) In establishing these statistical area boundaries the need for further sub-divisions into five-degree squares has been taken into account. Each of these five-degree squares could in turn be subdivided into one-degree squares, half-degree squares, etc. The need for such further sub-divisions of the five-degree squares would depend on national and international research programs covering particular fish stocks, species, gear, etc.
 - (b) Ten-degree squares appear to be too large for research purposes, but many countries fishing in the Central and South Atlantic Regions may not yet be in a position to report on a five-degree square basis in the near future. The boundaries between the statistical areas of the Central and South Atlantic Regions have been drawn along the five-degree squares boundaries. However, it will be noticed that fortunately no difficulties would be encountered should ten-degree squares be used as an interim reporting measure.
 - (c) The boundary line separating (i) the North Atlantic Region, and (ii) Central and South Atlantic Regions does not follow the five-degree or ten-degree square boundaries. The squares bordering on this line would have to be adjusted slightly.
 - (d) As soon as the Statistical Areas and the five-degree squares breakdown has been accepted, it should be possible to proceed with the introduction of a coding system for fishing areas.

1.15 Until the end of 1963 the Production and Fishing Craft volumes of the *Yearbook of Fishery Statistics* appeared annually and the International Trade volumes biennially. Beginning with 1964 two volumes of the *Yearbook* will be published annually: one volume, entitled "Catches and Landings", will include also data on fishing craft and fishermen; the other volume, "Fishery Commodities", will cover both production and international trade. In re-planning the contents of the even-numbered volumes beginning with Volume 16 it is intended to devote more space and staff to the tabulation of catch data by species and countries according to fishing areas. This expansion of the existing table A3 of volume XV into a section consisting of several detailed tables requires the establishment of a standard classification of fishing areas to be used by the countries in reporting data by areas.

1.16 The paper presented to the ACMRR and quoted in section 1.14 dealt only with the proposed statistical areas of the North, South and Central Atlantic regions. There appears, however, to be an urgent need for a STANDARD INTERNATIONAL STATISTICAL CLASSIFICATION OF FISHING AREAS covering the world as a whole. This proposed SISCFA must be closely related to the other "standard international statistical classifications" already developed by FAO Fisheries Division in, for example, the following fields:

- (a) Aquatic Animals and Plants;
- (b) Fishery Commodities;
- (c) Fishing fleets;
- (d) Fishermen, etc.

2. BASIC CONCEPTS AND DEFINITIONS

2.1 North Atlantic Region (ICES and ICNAF Statistical Areas)

2.1.1 The Continuing Working Party on Fishery Statistics in the North Atlantic Area during its First Session in Bergen, Norway, May 1960, considered the standardization of terminology for fishing areas in statistical reporting by countries fishing in the North Atlantic Region. During that Session the importance of uniformity of terms as well as the desirability of making the least possible changes in the then current usage of the various international agencies concerned was stressed. It was unanimously agreed to recommend to the various international organizations responsible for fishery statistics in the North Atlantic Region to introduce in their publications the terms listed in the tabulations below in Section 2.1.2.

2.1.2

Terms for "fishing areas"	Definitions	
	ICNAF	ICES
"Region"	North Atlantic	
"Area"	The whole of the statistical area for which ICNAF statistics are collected.	The whole of the statistical area for which ICES statistics are collected.
"Sub-area"	Sub-area as defined in the Convention (area covered by one panel) designated by arabic numeral.	Fishing area designated by roman numeral.
"Division"	First subdivision of sub-area designated by capital letter.	First subdivision of sub-area; designated by roman numeral plus lower case letter.
"Sub-division"	...	Further breakdown of "divisions"; designated by roman numeral plus lower case letter plus arabic numeral.

2.1.3 The ICES Statistical Committee in October 1962 noted that the terms "region", "statistical area", "sub-area", "division" and "sub-division" have specific meanings for ICES, ICNAF and FAO. There is, however, a need to refer to any or all of these units by means of a general term. The 1962 ICES Statistical Committee suggested the term "fishing areas" as the general one to be used to refer to any kind of "spatial" or "fishing water" units. It noted the world-wide implication of such terminological adjustments and requested that the Continuing Working Party should give some thought to this question at its Third Session.

2.1.4 The Continuing Working Party, during its Third Session, Rome, 18-22 March 1963, considered the appropriate designation of "fishing area". It considered proposals for the use of the term "zone" but this was not acceptable because of the rather wide and vague connotation.

The Continuing Working Party, after the consideration of various alternatives, agreed to continue with the use of "fishing area" as a general descriptive term and also confirmed the use of the definitions given by ICES and ICNAF to the terms "statistical area", "sub-area", "division" and "sub-division".

It was also recognized that sometimes research is being carried out on particular fishing grounds that do not coincide with the "fishing areas" as defined by the terms listed in the preceding paragraph. Although this is unavoidable in some cases, the demarcation of statistical fishing areas should, when possible, take account of discrete fishing grounds.

2.2 A world-wide "areal terminology"

2.2.1 The first step towards an international standard statistical classification of fishing areas requires the adoption of the basic terminology to be used to specify each of the different size "classes" of spatial units within the required ranking order.

The terms (see Section 2.1) already used by ICES, ICNAF and FAO in the North Atlantic can be adopted without any difficulty for use in a much broader world-wide system. Such a system must take into account:

- 1(a) for inland (mainly freshwater) fishing areas: the standard seven continents and the individual national territories (including adjacent islands) which vary in number per continent from 60 in Africa to 14 in America South;
- (b) for marine fishing areas: the broad areas established by various intergovernmental conventions and agreements and the need for a detailed world-wide grid-wise breakdown, based wherever feasible on latitudinal parallels and longitudinal meridians;
- 2(a) the need for "large"-size statistical areas corresponding to the broad extensive areas covered by conventions and approximating to the large biogeographical and ecological zones;
- (b) the need for "small"-size areas suitable for statistical reporting on catch/effort statistics and for detailed biological studies, stock appraisal and assessment and similar analytical work.

2.2.2 Using the terms now applying to the North Atlantic, the following standard terminology is proposed for the use of defining the different areal and spatial units in both inland and marine waters on a world-wide basis:

Areal class in Ranking order	Description	
	Inland	Marine
"Region" any two or more Statistical Areas	
"STATISTICAL AREA"	Any one of the seven continents	Any one of nineteen "large"-size marine areas
"Sub-area"	Any one of a continent's national territories (countries)	Ten-degree statistical rectangle
"DIVISION"	State, province, county, district, etc., or lake, swamp, river system, etc.	Five-degree statistical rectangle
"Sub-division"	Any breakdown of an inland "Division"	One-degree statistical rectangle

2.3 Coding system

2.3.1 The data on catches and effort reported according to the ranking order indicated in 2.3.2 will undoubtedly become very voluminous at the national and international levels. Developments and improvements of the reporting system, requiring in the near future the introduction of mechanical and electronic processing procedures, make it desirable to introduce a numerical coding system even at the early stages. This multi-digit code is to be as follows:

Areal class	Numbers of digits	Code
Region (some)	one	X- or -X of the "XX" used for Statistical Area
Statistical Area	two	XX
Sub-area	four	XX XX
Division	five	XX XX X
Sub-division	seven	XX XX X XX

2.3.2 The term "region" is to be considered as a fairly "loose" concept to be used when referring to any two or more Statistical Areas, marine or inland. It appears possible, see Section 4.1.2 for examples, to identify some of the "regions" (i.e. varying combinations of two or more "Statistical Areas") by means of one-digit code. This coding identification is not possible for all regions unless an unduly complicated multi-digit system is introduced for such a purpose. The "regions" are therefore to be assigned descriptive names of which a few examples are listed below:

- the Inland (Freshwater) Region: Inland Statistical Areas I1, I2, I3, I4, I5, I6 and I7
- the Eurasian Inland Region: Inland Statistical Areas I4, I5, I7
- the Atlantic Region: Marine Statistical Areas B, C, D, E, H and J
- the North Atlantic Region: Marine Statistical Areas B and C
- the Central Atlantic Region: Marine Statistical Areas D and E
- the South Atlantic Region: Marine Statistical Areas H and J
- the Marine Region of the West African Fisheries Commission: Marine Statistical Areas E and J
- the Indian Ocean Region: Statistical Areas L, M (part), P, Q
- the Pacific Region: Statistical Areas M (part), R, S, T, U, X, Y
- the Indo-Pacific Region: Statistical Areas L, M, R, T
- the Tropical and Equatorial Regions: Marine Statistical Areas D, E, K, L, M, T, U
- the Polar Regions: Marine Statistical Areas A and Z.

From these examples it is clear that any particular Statistical Area could be included in more than one region; for example, Statistical Area E could form part of the Central Atlantic Region, the Atlantic Region and the Marine Region of the West African Fisheries Commission, as well as of the ICES Statistical Region, should ICES decide to extend its statistical coverage as far south as 10°00' south latitude.

2.3.3 Each of the seven Inland Statistical Areas and the nineteen Marine Statistical Areas will be designated as follows: (a) by a two-digit code; (b) by a descriptive name; (c) and also by an alphabetic capital letter.

The proposed use of an alphabetic capital letter represents an alternative designation to facilitate reference. Single capital alphabetic letters are to be assigned to each of the nineteen Marine Statistical Areas; the seven Inland Statistical Areas will all be assigned a capital "I" to be followed by the respective one-digit continental number as suffix.

2.3.4 Inland sub-areas designated by means of their 4-digit code correspond to territories or countries in each continent and, therefore, are also given the respective country name. It might also be possible to assign local names to inland divisions and sub-divisions.

2.3.5 In the case of marine sub-areas, divisions and sub-divisions the introduction of descriptive names would not be as easy as in the case of the inland units. It is very likely that in the normal course these marine units would be designated by means of their respective 4-digit, 5-digit and 7-digit codes. It is expected, however, that in some cases where the unit covers a bay or a fishing bank or surrounds an island, such names might be attached to the particular marine sub-area, division or sub-division.

3. DESIGNATION AND NUMBERING OF INLAND FISHING AREAS

3.1 Inland "Regions"

The term "region" as indicated in Section 2.2.2 could be used when referring to any two or more Statistical Areas. The following are examples of the way in which the term "inland region" could be used:

the Inland (Freshwater) Region: Inland Statistical Areas I1, I2, I3, I4, I5, I6 and I7
 the Eurasian Inland Region: Inland Statistical Areas I4, I5, I7

3.2 Inland "Statistical Areas"

In addition to descriptive names each of the seven Inland Statistical Areas would be assigned the capital alphabetic letter "I" followed by a single numeral prefix to indicate the seven Inland Statistical Areas each of which would correspond to a continent. This alphabetic letter "I" corresponds to the number "1" which is used as the first digit in the two-digit system for the coding of the seven Inland Statistical Areas. The seven Inland Statistical Areas are assigned as second digits the same numbers adopted for the corresponding continents in country codes.

The seven Inland Statistical Areas are assigned the following two-digit numbers, letter designations and names:

Continent		Inland Statistical Area		
Name	One-digit code	Two-digit code	Letter designation	Descriptive name
Africa	1	1 1	I 1	African Inland Statistical Area
America, North	2	1 2	I 2	North American Inland Statistical Area
America, South	3	1 3	I 3	South American Inland Statistical Area
Asia	4	1 4	I 4	Asian Inland Statistical Area
Europe	5	1 5	I 5	European Inland Statistical Area
Oceania	6	1 6	I 6	Oceanian Inland Statistical Area
U.S.S.R.	7	1 7	I 7	U.S.S.R. Inland Statistical Area

3.3 Inland "Sub-areas"

Each Inland Statistical Area corresponding to a continent is to be sub-divided into a varying number of "sub-areas", each of these sub-areas is to correspond to a country; the latter vary in number from 14 in South America to 60 in Africa.

In a coding system for continents and countries the three-digit system, generally considered to be adequate, consists of a first digit, for the continent, followed by two digits to identify the individual countries.

In the two-digit system (beginning with "1") to be used to identify the seven Inland Statistical Areas, the second digit is to be used to identify the seven individual continental Statistical Areas. To this is to be added a two-digit system for sub-areas corresponding to individual countries. The numbers assigned are to correspond exactly to the two numbers used for the country in the standard continent/country coding system. In this proposed four-digit system for "Inland Statistical Areas/sub-areas" the first digit would always be "1", then the standard one digit for the continents, followed finally by the two digits for the sub-area (country). The sub-areas for each Statistical Area are listed in Appendix A.

3.4 Inland "Divisions" and "sub-divisions"

Regional, continental, and other intergovernmental and national fisheries agencies concerned with inland fisheries should develop further the coding system for divisions and sub-divisions for each of the inland "sub-areas" (countries).

In certain continents it might be possible to establish on an inter-country basis a continental ("Inland Statistical Area") numbering system for divisions and sub-divisions and, in such a proposed standard system, distinguish between "divisions" and "sub-divisions" on the following grounds:

- | | | |
|--|---|-----------------------------------|
| A. WATERCOURSES | 1. Rivers, brooks, streams and related drainage systems | (a) national
(b) international |
| | 2. Natural lakes and ponds | (a) national
(b) international |
| | 3. Swamps | (a) national
(b) international |
| B. STANDING WATERS
(Fresh waters) | 4. Dams and reservoirs | (a) national
(b) international |
| | 5. Artificial ponds and fish-farming dams | (a) national |
| | 6. Rice fields and similar cultivated areas temporarily under water | (a) national |
| | 7. Natural lakes and ponds | (a) national
(b) international |
| C. STANDING WATERS
(Brackish and saline waters) | 8. Swamps | (a) national
(b) international |
| | 9. Artificial ponds and fish-farming dams | (a) national |

These inland bodies should pay particular attention to a standard numbering of "Divisions" and "sub-divisions" for those "international" rivers, lakes, swamps, etc., which have more than one country on their banks.

4. DESIGNATION AND NUMBERING OF MARINE FISHING AREAS

4.1 Marine "Regions"

4.1.1 The term "region" as indicated in Section 2.2.2 is to be used when referring to any two or more marine Statistical Areas:

- the North Atlantic Region: marine Statistical Areas B and C
- the Central Atlantic Region: marine Statistical Areas D and E
- the South Atlantic Region: marine Statistical Areas H and J
- the Atlantic Region: marine Statistical Areas B, C, D, E, H and J
- the West African Fisheries Commission Region: marine Statistical Areas E and J
- the Indian Ocean Region: Statistical Areas L, M (part), P, Q
- the Pacific Region: Statistical Areas M (part), R, S, T, U, X, Y
- the Indo-Pacific Region: Statistical Areas L, M, R, T
- the Tropical and Equatorial Regions: marine Statistical Areas I, E, K, L, N, T, U

4.1.2 A two-digit code is required for the nineteen marine Statistical Areas. A careful selection of these first and second digits within this proposed two-digit system facilitates the identification of at least a few of the "marine regions" listed in 4.1.1 above. For example:

First digit

- 3- : Atlantic Region, consisting of Statistical Areas 32, 33, 34, 35, 38, 39
- 5- : Indian Ocean Region, consisting of Statistical Areas 54, 55 (part), 58, 59
- 6- : Pacific Region, consisting of Statistical Area 55 (part), 62, 63, 64, 65, 68, 69

4.1.2 (concluded)

Second digit

- 1: Polar Region, consisting of Statistical Areas 21, 71,
- 2,-3: Northern Temperate Region, consisting of Statistical Areas 32, 33, 62, 63
- 4,-5: Tropical and Equatorial Region, consisting of Statistical Areas 34, 35, 46, 54, 55, 64, 65
- 8,-9: Southern Hemisphere Temperate Region, consisting of Statistical Areas 38, 39, 58, 59, 68, 69

4.2 Marine "Statistical Areas"

4.2.1 In addition to the descriptive names of the nineteen Marine Statistical Areas, single capital alphabetic letters are to be assigned to facilitate reference.

4.2.2 The nineteen Marine Statistical Areas are to be assigned the following two-digit numbers, letter designations and names:

Code	Letter	Names of Marine Statistical Areas
21	A	Arctic Statistical Area
32	B	Northwest Atlantic Statistical Area
33	C	Northeast Atlantic Statistical Area
34	D	Caribbean and Western Central Atlantic Statistical Area
35	E	Eastern Central Atlantic Statistical Area
38	H	Southwest Atlantic Statistical Area
39	J	Southeast Atlantic Statistical Area
46	K	Mediterranean and Black Sea Statistical Area
54	L	Northwest Indian Ocean Statistical Area
55	M	Central Equatorial Indo-Pacific Statistical Area
58	P	Southwest Indian Ocean Statistical Area
59	Q	Southern Australian Statistical Area
62	R	Northwest Pacific Statistical Area
63	S	Northeast Pacific Statistical Area
64	T	Central Oceania Statistical Area
65	U	Eastern Central Pacific Statistical Area
68	X	Southern Oceania Statistical Area
69	Y	Southeast Pacific Statistical Area
71	Z	Antarctic Statistical Area

4.2.3 The capital alphabetic letter "I" is used for the seven Inland Statistical Areas and the capital alphabetic letter "O" is not used to avoid confusion with the "zero". Of the remaining twenty-four alphabetic letters, five are kept in reserve for use whenever any of the equatorial and tropical Statistical Areas requires a splitting; these letters and two-digit numbers are as follows:

- F (36) for the splitting, if needed, of Statistical Area D (34)
- G (37) for the splitting, if needed, of Statistical Area E (35)
- N (56) for the splitting, if needed, of Statistical Area L (54)
- V (66) for the splitting, if needed, of Statistical Area M (55)
- W (67) for the splitting, if needed, of Statistical Area T (64)

The numbers 22-29 are to be kept in reserve for the further breakdown of the Northern Hemisphere Temperate "Statistical Areas" and 72-79 for that of the "Statistical Areas" in the Southern Hemisphere Temperate Region. For these additional Statistical Areas two-alphabetic letter designations will be required.

4.2.4 The following considerations were taken into account when the proposed boundaries, as shown in the attached map, for the nineteen Marine Statistical Areas were established:

- (a) Boundaries described in existing international conventions and agreements, existing regional commissions, councils and committees, by groups of governments;
- (b) Boundaries for "Statistical Areas" established by statistical committees and other advisory bodies serving existing councils, commissions and committees in particular regions;
- (c) Generally recognized boundaries of geographical, ecological, and oceanographic faunal zones;
- (d) Natural configurations of a bordering coastline, for example straits, bays, gulfs, archipelagos, islands groups;
- (e) Latitudes and longitudes which coincide with the proposed boundaries for "sub-areas" (ten-degree statistical rectangles) and "divisions" (five-degree statistical rectangles).

4.3 Marine "Sub-areas"

4.3.1 Each marine "Statistical Area" (except B and C for which the sub-area patterns are already established) is to be subdivided into a number of "sub-areas"; each of these proposed "sub-areas" would correspond to a ten-degree rectangle.

4.3.2 The following considerations were taken into account in the selection of the ten-degree statistical rectangle as the "sub-area" within the "Statistical Area":

- (a) Ten-degree statistical rectangles, also called "Marsden statistical rectangles", are used for the reporting of oceanographic data.
- (b) The ten-degree statistical rectangles used for fishery statistical reporting of catch and effort data coincide as "sub-areas" with the oceanographic Marsden squares.
- (c) It is recognized that ten-degree statistical rectangles are too large for biological research purposes and that it is more useful to obtain catch/effort data on a five-degree statistical rectangle basis.
- (d) Many countries, when initiating national reporting on the proposed international grid system, might not be immediately in a position to introduce collecting and reporting on a five-degree statistical rectangle basis, but might, as an intermediate measure, report on a ten-degree statistical rectangle basis, pending the further refinement of the national statistical system for reporting eventually on the divisional basis using five-degree statistical rectangles.

4.3.3 It is proposed to allocate a two-digit number to individual sub-areas as part of the general coding system for fishing areas. This two-digit number for sub-areas is to be preceded by the two-digit number of the Statistical Area. The selection of the two digits to be assigned to each sub-area is to be based on the following:

		<u>Two-digit</u> <u>code</u>					
<u>Sub-areas</u> <u>between:</u>	<u>Sub-areas</u> <u>between:</u>	<u>First</u> <u>digit</u>	<u>Second</u> <u>digit</u>	<u>Sub-areas</u> <u>between:</u>	<u>Sub-areas</u> <u>between:</u>	<u>Sub-areas</u> <u>between:</u>	<u>Sub-areas</u> <u>between:</u>
	Equator - 10°S	1-	-1	0° 1/2 - 10°W	90°W - 100°W	180° - 170°E	90°E - 80°E
	10°S - 20°S	2-	-2	10°W - 20°W	100°W - 110°W	170°E - 160°E	80°E - 70°E
70°N - 60°N	20°S - 30°S	3-	-3	20°W - 30°W	110°W - 120°W	160°E - 150°E	70°E - 60°E
60°N - 50°N	30°S - 40°S	4-	-4	30°W - 40°W	120°W - 130°W	150°E - 140°E	60°E - 50°E
50°N - 40°N	40°S - 50°S	5-	-5	40°W - 50°W	130°W - 140°W	140°E - 130°E	50°E - 40°E
40°N - 30°N	50°S - 60°S	6-	-6	50°W - 60°W	140°W - 150°W	130°E - 120°E	40°E - 30°E
30°N - 20°N	60°S - 70°S	7-	-7	60°W - 70°W	150°W - 160°W	120°E - 110°E	30°E - 20°E
20°N - 10°N		8-	-8	70°W - 80°W	160°W - 170°W	110°E - 100°E	20°E - 10°E
10°N - Equator		9-	-9	80°W - 90°W	170°W - 180°	100°E - 90°E	10°E - 0°E

1/ Greenwich meridian.

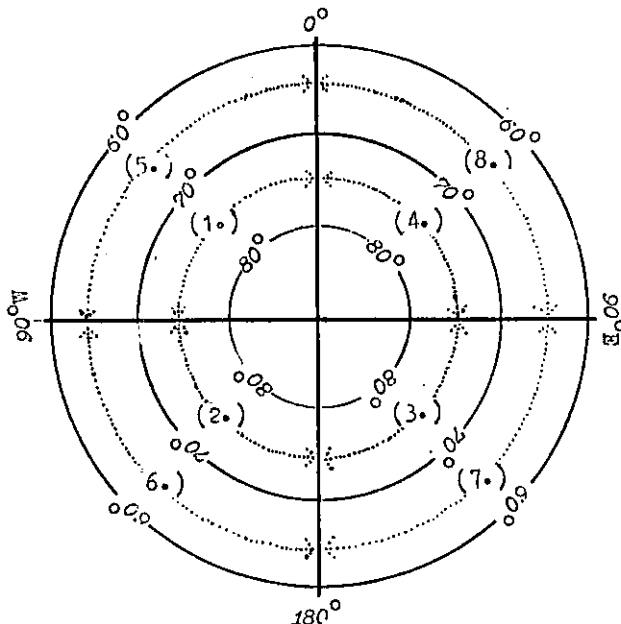
4.3.3 (concluded)

For example the "sub-area", or ten-degree statistical rectangle, in the Southeastern corner of Statistical Area D (34) would be numbered 94, and its complete numbering would be 34.94. The "sub-area" in the northeastern corner of Statistical Area H (38) would be numbered 13, and its full code would be 38.13. The exact two-digit number for each "sub-area" is established by using as the first digit the number shown in parentheses along the right and left margin of the map and as the second digit the number in parentheses along the bottom of the map.

Within each of the nineteen Statistical Areas, with the sole exception of the two polar Statistical Areas, i.e. Statistical Areas A (21) and Z (71), there will be no duplication in the two-digit numbers of the component "sub-areas". None of the Statistical Areas, except the Arctic and Antarctic, measures more than ninety degrees along the same longitude or latitude; this results in a maximum of nine "sub-areas" or ten-degree statistical rectangles along any latitude or longitude for any of the Marine Statistical Areas, with the two aforementioned exceptions.

It is therefore proposed to adopt this two-digit numbering system for all "sub-areas" lying north of 60°00' south latitude and south of 70°00' north latitude. It is also possible to use this system for the second digit as the numbering of the "sub-areas" lying (a) between 80°00' north latitude and 70°00' north latitude and (b) between 40°00' south latitude and 70°00' south latitude. However, because the two polar Statistical Areas stretch horizontally across more than nine ten-degree sub-areas it is necessary to devise another system for allocating the first digits (see paragraph 4.3.4).

4.3.4 In the two-digit numbering system for the sub-areas of the two Polar Statistical Areas (A and Z) the procedures proposed in Section 4.3.3 for the second of the two digits are maintained. For the first digits the following pattern, based on the Antarctic, is suggested for both Polar areas.



This system, however, still requires a special numbering of the sub-areas of the Arctic Statistical Area covering those parts of Hudson Bay (also James Bay) and Ungava Bay lying south of 60°00' north latitude.

The need for introducing this variant of the world-wide system for the first digits of the two-digit sub-area numbers in the Arctic could be avoided by dividing Statistical Area A (21) into three separate Statistical Areas along (i) 130°00' west longitude and (ii) 150°00' east longitude.

The need for introducing this variant also in the Antarctic could be avoided by eliminating Statistical Area Z (71) through the extension of all the adjoining Statistical Areas (H, J, P, Q, X and Y) from their present southern boundaries along 60°00' south latitude to the edge of the permanent ice cap overlying the Antarctic continent.

4.4 Marine "Divisions"

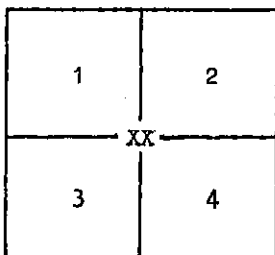
4.4.1 Each "sub-area" (ten-degree statistical rectangle) is to be sub-divided into four "divisions"; the "division" is to correspond to a five-degree statistical rectangle.

4.4.2 The following factors were taken into consideration in the selection of five-degree statistical rectangle as the "division":

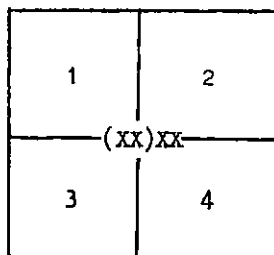
- (a) The Inter-American Tropical Tuna Commission (IATTC) uses for reporting catch statistics in the waters off the West coast of North and South America five-degree statistical rectangles.
- (b) Japan uses five-degree statistical rectangles in its world-wide system for tuna catch statistics.
- (c) The five-degree statistical rectangle appears to be a fairly good compromise between the fishermen's desire for reporting according to large statistical rectangles and the biologists' requirements for data reported by small areal units.
- (d) By a foursome grouping of these "divisions" (or five-degree statistical rectangles) it is possible to arrive without any difficulty at ten-degree statistical rectangles, or "sub-areas", which correspond to the Marsden areal unit for oceanographic data reporting.

4.4.3 Each division is to be numbered by adding 1, 2, 3, or 4 as a third digit to the two-digit number already used in the numbering of the "sub-area". The system shown in example A below is to be used for the numbering of the four "divisions" within each "sub-area" using for the "sub-area" only the 2-digit number shown as "XX". Where it is necessary to show in addition to the 2-digit number for the "sub-area" also the two digits identifying the Statistical Area, the numbering system could follow example B.

Example A



Example B



4.5 Marine "Sub-divisions"

4.5.1 It is not suggested that every division (five-degree statistical rectangle) is to be broken down further into "sub-divisions". The further breakdown of individual "divisions" is left to national committees and statistical bodies of regional fisheries commissions, councils and committees to decide and select the divisions within their Statistical Area that requires breakdowns according to "sub-divisions". It is likely that the "divisions" along coastline bordering on the Statistical Area and those divisions which cover banks and continental shelves might require further breakdown. It might be necessary to establish within certain selected five-degree statistical rectangular "divisions" breakdowns according to "discrete sub-divisions" conforming to the configuration of particular fishing banks or grounds of importance to research of fisheries for particular species or by means of certain types of gear.

4.5.2 It is proposed to call the one-degree statistical rectangle "the standard sub-division". The terms "major sub-division" and "minor sub-division" could be used to designate "sub-divisions" larger or smaller than one-degree statistical rectangles.

4.5.3 Should it be decided to adopt for particular "divisions" at the national or regional level the breakdown by "standard sub-divisions" of one-degree statistical rectangle each, the following numbering system of the twenty-five sub-divisions constituting a five-degree statistical rectangle division might be considered as the international standard pattern which could, with modifications, also be used for numbering "major" and "minor" sub-divisions:

11	12	13	14	15
21	22	23	24	25
31	32	33	34	35
41	42	43	44	45
51	52	53	54	55

4.5.4 The following considerations were taken into account in the selection of the breakdown into sub-divisions:

- (a) The Japanese authorities use for their trawling statistics in the East China Sea thirty-minute statistical rectangles, in the Bering Sea one-degree statistical rectangles.
- (b) The Inter-American Tropical Tuna Commission breaks its five-degree statistical rectangles into twenty-five one-degree statistical rectangles.
- (c) ICES uses for the herring statistics and for demersal fishery statistics in the North Sea and around the British Islands statistical rectangles that measure horizontally one-degree longitude and vertically thirty-minute latitude.
- (d) In May 1963 the Statistical Sub-Committee of the ICNAF Committee on Research and Statistics recommended that the ICNAF Secretariat "make a survey of geographical grid systems now in use by various countries for the ICNAF and ICES Areas, so that the Committee can next year consider the establishment of a general grid system to cover sub-divisions of the present Divisions".

5. APPLICATION OF THE ISSCFA SYSTEM AT THE NATIONAL LEVEL

5.1 The establishment of a world-wide ISSCFA in no way prevents national office from introducing a more simplified and modified fishing area classification for local uses and purposes. These could always be keyed to the world-wide version for reporting to regional and international bodies.

5.2 Countries with fishing fleets restricted to waters in a limited number of sub-areas or even divisions, could reduce the number of digits required. Eventually, with the development of the national fishing industry and the expansion of its operations over an increasing area, the more detailed numbering system could be introduced in stages, taking into account also the steadily improving facilities available at the national level for collecting and processing the catch/effort details by fishing areas. Many countries with developed fishing industries and with advanced statistical services may, in the Statistical Areas near the home ports, be able to obtain effort/catch data according to five-degree Divisions and even one-degree standard Sub-divisions; in the more distant waters they might have to use temporarily, as an intermediate stage, ten-degree Sub-areas.

5.3 Twenty-nine countries, out of a grand total of 230 listed in Appendix A, border on more than one Marine Statistical Area. These twenty-nine countries and the Statistical Areas are as follows:

<u>Country</u>	<u>bordering on</u>	<u>Statistical Areas</u>
Angola		35, 39
Morocco		35, 46
South Africa		39, 54, 58
United Arab Republic (Egypt)		46, 54
Canada		21, 32, 63
Costa Rica		34, 65
Guatemala		34, 65
Honduras		34, 65
Mexico		34, 62, 65
Panama		34, 65
Nicaragua		34, 65
United States		21, 32, 34, 62, 63, 64
Argentina		38, 69
Brazil		34, 38
Colombia		34, 65
Ecuador		65, 69
Ceylon		54, 55
China mainland		55, 62
India		54, 55
Israel		45, 64
Pakistan		54, 55
West New Guinea		55, (eventually 66), 64
France		33, 46
Portugal		33, 35
Spain		33, 35, 46
Australia		55, 59, 64
New Guinea (Austr. Adm.)		55, (eventually 66), 64
Papua		55, (eventually 66), 64
U.S.S.R.		21, 33, 46, 62, 63

The above list shows that, with the exception of the U.S.A. and the U.S.S.R., all countries with coastlines bordering on more than one Marine Statistical Area need to use, at the national level, only the second digit of the two-digit number of the adjoining Statistical Areas.

As mentioned above, the only two exceptions to this rule "no duplications in the second digits in the numbers of the Statistical Areas adjoining national territories" are the United States and the U.S.S.R. However, these two countries also fish in several other Statistical Areas away from their coasts and, therefore, would in any case find it necessary to use the full two-digit system to identify all the Statistical Areas in which their fishermen might be operating.

In addition to the U.S.A. and the U.S.S.R., some of the other countries with long-distance fisheries in distant Statistical Areas may find it necessary to use both digits to distinguish between the various Statistical Areas fished by their fleets.

Appendix A

INLAND STATISTICAL AREAS

The Inland Statistical Areas include all fresh waters as well as certain brackish and saline waters. A classification of the different types of inland waters is given in Section 3.4. From inland waters are excluded all parts of the seas or oceans and "standing" saline waters connected with the sea for any period of time each day, for example at high tides. It includes waters and estuaries of rivers under the influence of the high tides to the extent determined by local considerations and national arrangements for "administrative" regimes covering inland and marine fisheries respectively.

In this Appendix are listed the names of all the "inland sub-areas" according to each of the seven Inland Statistical Areas. The Inland Statistical Areas correspond to continents and the "sub-areas" to countries.

The four-digit sub-area code is identical with the three-digit country code, except that the former has "1" as an additional first digit i.e. 1 + 3-digit country code = 4-digit sub-area code.

Continent/country code: 1 AFRICA
 Fishing area code: 1 1 AFRICAN INLAND STATISTICAL AREA [I 1]

Country code	Names of countries and of inland sub-areas	Inland sub-area code	Country code	Names of countries and of inland sub-areas	Inland sub-area code
1 01	Algeria	1 1 01	1 51	Portuguese Guinea	1 1 51
1 02	Angola	1 1 02	1 52	Réunion	1 1 52
1 03	Basutoland	1 1 03			
1 04	Bechuanaland	1 1 04			
1 05	Burundi	1 1 05			
1 07	Cameroun	1 1 07	1 57	Rwanda	1 1 57
1 10	Cape Verde Islands	1 1 10	1 60	St. Helena and Ascension	1 1 60
1 11	Central African Republic	1 1 11			
1 12	Chad	1 1 12	1 62	São Tomé and Príncipe	1 1 62
1 13	Comoro Islands	1 1 13	1 63	Senegal	1 1 63
1 14	Congo (Brazzaville)	1 1 14	1 64	Seychelles	1 1 64
1 15	Congo (Léopoldville)	1 1 15	1 65	Sierra Leone	1 1 65
1 16	Dahomey	1 1 16	1 66	Somalia	1 1 66
			1 67	South Africa	1 1 67
			1 68	Southern Rhodesia	1 1 68
1 19	Ethiopia	1 1 19	1 69	South West Africa	1 1 69
			1 70	Spanish Equatorial Region	1 1 70
1 21	French Somaliland	1 1 21	1 71	Spanish North Africa	1 1 71
1 22	French Southern Territories	1 1 22	1 72	Spanish Sahara	1 1 72
1 23	Gabon	1 1 23	1 73	Sudan	1 1 73
1 24	Gambia	1 1 24	1 74	Swaziland	1 1 74
1 25	Ghana	1 1 25	1 75	Tanganyika	1 1 75
1 26	Guinea	1 1 26	1 76	Togo	1 1 76
1 27	Ifni	1 1 27			
1 28	Ivory Coast	1 1 28			
1 29	Kenya	1 1 29	1 79	Tristan da Cunha	1 1 79
			1 80	Tunisia	1 1 80
1 31	Liberia	1 1 31			
1 32	Libya	1 1 32	1 82	Uganda	1 1 82
			1 83	U.A.R. (Egypt)	1 1 83
			1 84	Upper Volta	1 1 84
1 35	Madagascar	1 1 35			
1 36	Mali	1 1 36	1 86	Zanzibar	1 1 86
1 38	Mauritania	1 1 38			
1 39	Mauritius	1 1 39			
1 41	Morocco	1 1 41			
1 42	Mozambique	1 1 42			
1 46	Niger	1 1 46			
1 47	Nigeria	1 1 47			
1 48	Northern Rhodesia	1 1 48			
1 49	Nyasaland	1 1 49			

Continent/country code: 2 AMERICA, NORTH

Fishing area code: 1 2 NORTH AMERICAN INLAND STATISTICAL AREA [1 2]

Country code	Names of countries and of inland sub-areas	Inland sub-area code	Country code	Names of countries and of inland sub-areas	Inland sub-area code
2 02	Antigua	1 2 02	2 52	Netherlands Antilles	1 2 52
2 04	Bahama Islands	1 2 04	2 54	Nicaragua	1 2 54
2 06	Barbados	1 2 06	2 56	Panama	1 2 56
2 08	Bermuda	1 2 08	2 58	Puerto Rico	1 2 58
2 09	British Honduras	1 2 09	2 60	St. Kitts-Nevis-Anguilla	1 2 60
2 10	Canada	1 2 10	2 61	St. Lucia	1 2 61
			2 62	St. Pierre and Miquelon	1 2 62
			2 63	St. Vincent	1 2 63
			2 66	Trinidad and Tobago	1 2 66
			2 68	Turks and Caicos Islands	1 2 68
2 20	Cayman Islands	1 2 20	2 70	United States	1 2 70
2 22	Costa Rica	1 2 22			
2 24	Cuba	1 2 24			
2 26	Dominica	1 2 26			
2 28	Dominican Republic	1 2 28			
2 30	El Salvador	1 2 30			
2 32	Greenland	1 2 32			
2 34	Grenada	1 2 34			
2 36	Guadeloupe	1 2 36			
2 38	Guatemala	1 2 38			
2 40	Haiti	1 2 40			
2 42	Honduras	1 2 42			
2 44	Jamaica	1 2 44			
2 46	Martinique	1 2 46			
2 48	Mexico	1 2 48			
2 50	Montserrat	1 2 50			

Continent/country code: 3 AMERICA, SOUTH

Fishing area code: 1 3 SOUTH AMERICAN INLAND STATISTICAL AREA [1 3]

Country code	Names of countries and of inland sub-areas	Inland sub-area code	Country code	Names of countries and of inland sub-areas	Inland sub-area code
3 04	Argentina	1 3 04	3 52	Uruguay	1 3 52
3 08	Bolivia	1 3 08	3 56	Venezuela	1 3 56
3 12	Brazil	1 3 12			
3 16	British Guiana	1 3 16			
3 20	Chile	1 3 20			
3 24	Colombia	1 3 24			
3 28	Ecuador	1 3 28			
3 32	Falkland Islands	1 3 32			
3 36	French Guiana	1 3 36			
3 40	Paraguay	1 3 40			
3 44	Peru	1 3 44			
3 48	Surinam	1 3 48			

Continent/country code: 4 ASIA

Fishing area code: 1 4 ASIAN INLAND STATISTICAL AREA [I 4]

Country code	Names of countries and of inland sub-areas	Inland sub-area code	Country code	Names of countries and of inland sub-areas	Inland sub-area code
4 02	Aden	1 4 02	4 51	Kuwait	1 4 51
			4 52	Laos	1 4 52
			4 53	Lebanon	1 4 53
			4 54	Macau	1 4 54
4 05	Afghanistan	1 4 05	4 55	Malaysia	1 4 55
4 07	Bahrain	1 4 07	4 57	Maldives Islands	1 4 57
4 08	Bhutan	1 4 08	4 58	Mongolian People's Republic	1 4 58
4 10	Bonin Islands	1 4 10	4 59	Muscat and Oman	1 4 59
4 11	Brunei	1 4 11	4 60	Nepal	1 4 60
4 13	Burma	1 4 13	4 62	Pakistan	1 4 62
4 14	Cambodia	1 4 14	4 64	Philippines	1 4 64
4 16	Ceylon	1 4 16	4 65	Portuguese Timor	1 4 65
			4 66	Qatar	1 4 66
			4 67	Ryukyu Islands	1 4 67
4 20	China (mainland)	1 4 20	4 69	Saudi Arabia	1 4 69
			4 71	Sikkim	1 4 71
			4 73	Syria	1 4 73
			4 74	Thailand	1 4 74
			4 77	Trucial Oman	1 4 77
4 29	China (Taiwan)	1 4 29	4 78	Turkey	1 4 78
4 30	Cyprus	1 4 30	4 81	Viet-Nam, North	1 4 81
4 31	Hong Kong	1 4 31	4 83	Viet-Nam, South	1 4 83
4 32	India	1 4 32	4 84	West New Guinea	1 4 84
4 39	Indonesia	1 4 39	4 87	Yemen	1 4 87
4 41	Iran	1 4 41			
4 42	Iraq	1 4 42			
4 43	Israel	1 4 43			
4 45	Japan	1 4 45			
4 47	Jordan	1 4 47			
4 48	Korea, North	1 4 48			
4 50	Korea, South	1 4 50			

Continent/country code: 5 EUROPE
 Fishing area code: 1 5 EUROPEAN INLAND STATISTICAL AREA [I 5]

Country code	Names of countries and of inland sub-areas	Inland sub-area code	Country code	Names of countries and of inland sub-areas	Inland sub-area code
5 02	Albania	1 5 02	5 52	Netherlands	1 5 52
5 04	Andorra	1 5 04	5 54	Norway	1 5 54
5 06	Austria	1 5 06	5 56	Poland	1 5 56
5 08	Belgium	1 5 08	5 58	Portugal	1 5 58
5 10	Bulgaria	1 5 10	5 60	Romania	1 5 60
5 12	Channel Islands	1 5 12	5 62	San Marino	1 5 62
5 14	Czechoslovakia	1 5 14	5 64	Spain	1 5 64
5 16	Denmark	1 5 16	5 66	Sweden	1 5 66
5 18	Faeroe Islands	1 5 18	5 68	Switzerland	1 5 68
5 20	Finland	1 5 20	5 70	United Kingdom	1 5 70
5 22	France	1 5 22			
5 24	Germany, Eastern	1 5 24			
5 26	Germany, Fed. Rep.	1 5 26			
5 28	Gibraltar	1 5 28			
5 30	Greece	1 5 30			
5 32	Holy See	1 5 32			
5 34	Hungary	1 5 34	5 84	Yugoslavia	1 5 84
5 36	Iceland	1 5 36			
5 38	Ireland	1 5 38			
5 40	Isle of Man	1 5 40			
5 42	Italy	1 5 42			
5 44	Liechtenstein	1 5 44			
5 46	Luxembourg	1 5 46			
5 48	Malta and Gozo	1 5 48			
5 50	Monaco	1 5 50			

Continent/country code: 6 OCEANIA
 Fishing area code: 1 6 OCEANIAN INLAND STATISTICAL AREA [I 6]

Country code	Names of countries and of inland sub-areas	Inland sub-area code	Country code	Names of countries and of inland sub-areas	Inland sub-area code
6 03	American Samoa	1 6 03	6 53	New Caledonia	1 6 53
			6 56	New Guinea (Aust. Adm.)	1 6 56
6 10	Australia	1 6 10	6 59	New Hebrides	1 6 59
			6 62	New Zealand	1 6 62
			6 65	Niue	1 6 65
			6 68	Norfolk Island	1 6 68
6 20	British Solomon Islands	1 6 20	6 71	Pacific Islands (U.S. Adm.)	1 6 71
6 23	Canton and Enderbury Islands	1 6 23	6 74	Papua	1 6 74
6 26	Christmas Islands	1 6 26	6 77	Pitcairn	1 6 77
6 29	Cocos Islands	1 6 29	6 80	Tokelau Islands	1 6 80
6 32	Cook Islands	1 6 32	6 83	Tonga	1 6 83
6 35	Fiji Islands	1 6 35	6 86	Wake Island	1 6 86
6 38	French Polynesia	1 6 38	6 89	Western Samoa	1 6 89
6 41	Gilbert and Ellice Islands	1 6 41			
6 44	Guam	1 6 44			
6 47	Midway Islands	1 6 47			
6 50	Nauru	1 6 50			

Continent/country code: 7 U.S.S.R.

Fishing area code: 1 7 RUSSIAN INLAND STATISTICAL AREA [I 7]

Country code	Names of countries and of inland sub-areas	Inland sub-area code	Country code	Names of countries and of inland sub-areas	Inland sub-area code
7 05	Armenian S.S.R.	1 7 05			
7 10	Azerbaidzhan S.S.R.	1 7 10	7 60	Russian S.F.S.R.	1 7 60
7 15	Belorussian S.S.R.	1 7 15			
7 20	Estonian S.S.R.	1 7 20	7 70	Tadjik S.S.R.	1 7 70
7 25	Gruzin S.S.R.	1 7 25	7 75	Turkmen S.S.R.	1 7 75
7 30	Kazakh S.S.R.	1 7 30	7 80	Ukranian S.S.R.	1 7 80
7 35	Kirgiz S.S.R.	1 7 35	7 85	Usbek S.S.R.	1 7 85
7 40	Latvian S.S.R.	1 7 40			
7 45	Lithuanian S.S.R.	1 7 45			
7 50	Moldavian S.S.R.	1 7 50			

Appendix B

MARINE STATISTICAL AREAS

Of the nineteen Marine Statistical Areas the boundaries of seventeen are subject to further reviews to be based on comments received on this paper. In this provisional version the proposed boundaries for these seventeen areas are also shown on the attached world map.

Descriptions of the boundaries and of the seas enclosed in each Statistical Area are possible for the two Statistical Areas which are already settled by international agreement:

Statistical Area B (32): Northwest Atlantic Statistical Area;

Statistical Area C (33): Northeast Atlantic Statistical Area.

The descriptions of these two North Atlantic Statistical Areas are given in this Appendix as examples of the way in which similar descriptions for the other Marine Statistical Areas could be presented as soon as their boundaries have been finally established.

STATISTICAL AREA B (32)

NORTHWEST ATLANTIC STATISTICAL AREA

1. TITLE, OTHER

(a) ICNAF Statistical Area

2. DESCRIPTION

2.1 Definition of boundaries

The waters of the Northwest Atlantic bounded by a line beginning at a point on the coast of Rhode Island in 71°40' west longitude; thence due south to 39°00' north latitude; thence due east to 42°00' west longitude; thence due north to 59°00' north latitude; thence due west to 44°00' west longitude; thence due north to the coast of Greenland; thence along the west coast of Greenland to 78°10' north latitude; thence southward to a point at 75°00' north latitude and 73°30' west longitude; thence along a rhumb line to a point at 69°00' north latitude and 59°00' west longitude; thence due south to 61°00' north latitude; thence due west to 64°30' west longitude; thence due south to the coast of Labrador; thence in a southerly direction along the coast of Labrador to the southern terminus of its boundary with Quebec; thence in a westerly direction along the coast of Quebec, and in an easterly and southerly direction along the coasts of New Brunswick, Nova Scotia, and Cape Breton Island to Cabot Strait; thence along the coasts of Cape Breton Island, Nova Scotia, New Brunswick, Maine, New Hampshire, Massachusetts, and Rhode Island to the point of beginning.

2.2 Additional descriptive remarks

- (a) It covers the Northwest Atlantic and includes, inter alia, the banks of Newfoundland, the Gulf of St. Lawrence, the Bay of Fundy, Cape Cod Bay, Nantucket Sound, the Labrador Sea and the eastern waters of the Baffin Bay and of the Davis Strait.
- (b) It includes the waters around the islands of Newfoundland, Anticosti, Prince Edward, Cape Breton, St. Pierre and Miquelon, etc.

3. COUNTRIES FISHING

Canada (Maritimes and Quebec)	Germany, Fed. Rep.
Canada (Newfoundland)	Iceland
Greenland (Denmark)	Italy
St. Pierre and Miquelon (France)	Norway
United States (New England State)	Poland
	Portugal
Japan	Spain
	United Kingdom
Faeroe Islands (Denmark)	
France	U.S.S.R.
Germany, Eastern	

4. BREAKDOWN OF THE "ICNAF STATISTICAL AREA" BY SUB-AREAS, DIVISIONS AND SUB-DIVISIONS

4.0 General

Paragraph 3 of Article I of the International Convention for the Northwest Atlantic Fisheries concluded in February 1949 reads:

"The Convention area shall be divided into five sub-areas, the boundaries of which shall be those defined in the Annex to this Convention, subject to alterations as may be made in accordance with the provisions of paragraph 2 of Article VI".

4.1 Sub-area 1

4.1.1 Definition: That portion of the Convention area which lies to the north and east of a rhumb line from a point in 75°00' north latitude and 73°30' west longitude to a point in 69°00' north latitude and 59°00' west longitude; east of 59°00' west longitude; and to the north and east of a rhumb line from a point in 61°00' north latitude and 59°00' west longitude to a point in 52°15' north latitude and 42°00' west longitude.

4.1.2 Breakdown: Sub-area 1 is further broken down into six Divisions: 1A, 1B, 1C, 1D, 1E and 1F.

4.2 Sub-area 2

4.2.1 Definition: That portion of the Convention area lying to the south and west of sub-area 1 defined above and to the north of the parallel of 52°15' north latitude.

4.2.2 Breakdown: Sub-area 2 is further broken down into three Divisions: 2G, 2H and 2J.

4.3 Sub-area 3

4.3.1 Definition: That portion of the Convention area lying south of the parallel of 52°15' north latitude; and to the east of a line extending due north from Cape Bauld on the north coast of Newfoundland to 52°15' north latitude; to the north of the parallel of 39°00' north latitude; and to the east and north of a rhumb line extending in a northwesterly direction which passes through a point in 43°30' north latitude, 55°00' west longitude, in the direction of a point in 47°50' north latitude, 60°00' west longitude, until it intersects a straight line connecting Cape Ray, on the coast of Newfoundland, with Cape North on Cape Breton Island; thence in a northeasterly direction along said line to Cape Ray.

4.3.2 Breakdown: Sub-area 3 is further broken down into six Divisions: 3K, 3L, 3M, 3N, 3O and 3P (with Sub-divisions 3Pn and 3Ps).

4.4 Sub-area 4

4.4.1 Definition: That portion of the Convention area lying to the west of sub-area 3 defined above, and to the east of a line described as follows: beginning at the terminus of the international boundary between the United States of America and Canada in Grand Manan Channel, at a point in 44°46'35.34" north latitude, 66°54'11.23" west longitude; thence due south to the parallel of 43°50' north latitude; thence due west to the meridian of 67°40' west longitude; thence due south to the parallel of 42°20' north latitude; thence due east to a point in 66°00' west longitude; thence along a rhumb line in a southeasterly direction to a point in 42°00' north latitude, 65°40' west longitude; thence due south to the parallel of 39°00' north latitude.

4.4.2 Breakdown: Sub-area 4 is further broken down into six Divisions: 4R, 4S, 4T, 4V (with Sub-divisions 4Vn and 4Vs), 4W and 4X.

4.5 Sub-area 5

4.5.1 Definition: That portion of the Convention area lying west of the western boundary of sub-area 4 defined above.

4.5.2 Breakdown: Sub-area 5 is further broken down into two Divisions: 5Y and 5Z.

STATISTICAL AREA C (33)

NORTHEAST ATLANTIC STATISTICAL AREA

1. TITLE, OTHER

- (a) ICES Statistical Area (North)

2. DESCRIPTION

2.1 Definition of boundaries

The ICES Statistical Area (North) covers the waters of the Northeast Atlantic lying between the east coast of Greenland and the Atlantic and Baltic coastlines of the European continent and adjacent islands and includes all such waters lying:

- (i) north and east of a line drawn from a point at 5°36' west longitude and 36°00' north latitude on the punta Marroqui isthmus due west to 42°00' west longitude, thence due north to 59°00' north latitude, thence due west to 44°00' west longitude, thence due north to the Greenland coast near Cape Farewell,
- (ii) west of a line drawn across the western entry of the Strait of Yugorskiy Shar; thence along the west coast of the island of Vaygach; thence across the western entry to the Strait of the Karskiye Vorota; thence along the west coast of the south island of Nova Zemlya; thence across the westerly entry to the Strait of Matochkin Shar; thence along the west coast of the north island of Nova Zemlya to its most northerly point and thence due north.

2.2 Additional descriptive remarks

- (a) It covers the Northeast Atlantic and includes, inter alia, the Bay of Biscay, the Baltic Sea, the Gulfs of Bothnia, Finland and Riga, the North Sea, the English Channel, the Norwegian Sea, Greenland Sea and Basin, Barents Sea, White Sea.
- (b) It includes the waters around the Azores, the British Isles, the Faeroe Islands, Iceland, Jan Mayen Island, the Lofoten Islands, Bear Island, Spitzbergen, Franz Josef Land and off the west coasts of Nova Zemlya and of the island of Vaygach, etc.

3. COUNTRIES FISHING

Greenland	Ireland
Israel	Italy
Japan	Netherlands
	Norway
Belgium	Poland
Denmark	Portugal
Faeroe Islands	Spain
Finland	Sweden
France	U.K. (England and Wales)
Germany, Eastern	U.K. (Scotland)
Germany, Fed. Rep.	U.K. (Northern Ireland)
Iceland	U.S.S.R.

4. BREAKDOWN OF THE "ICES STATISTICAL AREA (NORTH)" BY SUB-AREAS, DIVISIONS AND SUB-DIVISIONS

Type of fishing area	Numbering of fishing areas	Name of fishing area
Division	IIId	Baltic Sea
Divisions	IIIf+c	The Sound and Belt Sea
Division	IIIf	Kattegat and Skagerak
Division	IVc	Southern North Sea
Division	IVb	Middle North Sea
Sub-division	IVa ₁	Northwestern North Sea
Sub-division	IVa ₂	Northeastern North Sea
Division	VIa	Northwest coast of Scotland and North Ireland
Division	VIb	Rockall
Division	VIIa	Irish Sea
Divisions	VIIb+c	West coast of Ireland and Porcupine Bank
Divisions	VIIg,h,j,k	South coast of Ireland
Divisions	VIIId+e	English Channel, east and west
Division	VIIIf	Bristol Channel
Sub-area	I	Barents Sea
Division	IIb	Spitzbergen and Bear Island
Division	IIa	Norwegian Sea
Division	Vb	Faeroese grounds
Division	Va	Iceland grounds, southern and northern
Sub-area	XIV	East Greenland
Sub-area	VIII	Gulf of Biscay
Division	IXa	Coast of Portugal
Division	IX b	West of Portuguese coast
Fishing areas, not yet designated		All other North Atlantic waters forming part of the ICES Statistical Area (North) but not already covered by any of the ICES Sub-areas, Divisions and Sub-divisions listed above.

ICES STATISTICAL AREA (North)
 ZONE STATISTIQUE DU CIEM (Nord)
 ZONA ESTADISTICA DEL CIEM (Norte)

