Northwest Atlantic



Fisheries Organization

Serial No. N115

NAFO SCS Doc. 80/VI/10

SCIENTIFIC COUNCIL MEETING - JUNE 1980

Notes on International Classifications and Definitions Used in Fishing Gear,
Fishing Effort and Fishermen Statistics1

bу

CWP Secretary FAO, Rome, Italy

NTRODUCTION

- 1. This document represents a compilation of all the available statistical standards and classifications established in recent years for use in statistics on fishing gear, fishing effort, fishermen, etc., by international, regional and national fishery statistical focal points. The material refelects discussions of previous drafts at the 7th, 8th and 9th Sessions of the CWP, at ICES, NAFO (ICNAF) and ICSEAF meetings etc., as well as in meetings organized by EUROSTAT.
- 2. The items of the International Standard Statistical Classification of Fishing Gear (ISSCFG) marked with asterisks are additions proposed by the Secretary of the CWP! Further revisions of this classification have been proposed by Mr. C. Nedelec, Fishery Industry Officer, Fisheries Technology Service, Fisheries Department, FAO, Rome; his suggestions for improvements appear in Appendix B to this document.
- 3. In recent years a great deal of thought has been devoted in various quarters to the refinement and improvement of these classifications. New technical developments with reference to fishing gears will no doubt require statisticians to reconsider these elements. However, it can be considered that we have now reached a milestone in this preparatory work. Before publication it is necessary for the CWP to review these for the last time and make suggestions for lastminute improvements and refinements.
- 4. FAO intends to produce the material in this document together with those in documents CWP 10/18 and CWP-10/40 as a technical paper, which would serve as the basic reference document in these fields.

Prepared for 10th Session of Coordinating Working Party on Atlantic Fishery Statistics, Madrid, Spain, 22-29 July 1980.

INTERNATIONAL STANDARD STATISTICAL CLASSIFICATION OF FISHING GEAR (ISSCFG)

	Standard Abbrevia- tion	ISSCFG Code
SURROUNDING NETS With purse lines - one boat - two boats Without purse lines (lampara)	PS PS1 PS2 LA	01.0.0 01.1.0 01.1.1 01.1.2 01.2.0
SEINE NETS Beach seines Boat or vessel seines - Danish seines - Scottish seines - Pair seines Seine nets, not specified	SB SV SDN SSC SPR * SX	02.0.0 02.1.0 02.2.0 02.2.1 02.2.2 02.2.3 02.2.4
TRAWLS Bottom trawls (general) - beam trawls - otter trawls (side or stern not specified) - otter trawls (side) - Otter trawls (stern) - pair trawls Midwater trawls (general) - otter trawls (side or stern not specified) - otter trawls (side) - otter trawls (stern) - pair trawls Otter trawls (not specified) Pair trawls (not specified) Other trawls - shrimp trawls - nephrops trawls	TB TBB OTB-1 OTB-2 PTB TM OTM-1 OTM-2 PTM OT PT TX * TXS * TXN	03.0.0 03.1.0 03.1.1 03.1.2.1 03.1.2.2 03.1.3 03.2.0 03.2.1 03.2.1.1 03.2.1.2 03.2.2 03.3.0 03.4.0 03.5.1 03.5.2
DREDGES Boat dredges Hand dredges	DRB DRH	04.0.0 04.1.0 04.2.0
LIFT NETS Portable lift nets Boat - installed lift nets Shore - operated stationary lift nets	* LNP * LNB * LNS	05.0.0 05.1.0 05.2.0 05.3.0
FALLING GEAR * Cast nets * Other gears (not specified)	FCN FON	06.0.0 06.1.0 06.2.0
* GILLNETS, TRAMMEL NETS AND ENTANGLING NETS Set gillnets Drift gillnets Encircling drive-in gillnets Fixed gillnets Gillnets (not specified) * Trammel nets * Combined gillnets - trammel nets * Entangling nets (not specified)	GNS GND GNC * GNF * GNX TN GTN EN	07.0.0 07.1.0 07.2.0 07.3.0 07.4.0 07.5.0 07.6.0 07.7.0 07.8.0

		Standard Abbrevia- tion	ISSCFG Code
*	TRAPS Stationary uncovered pound-nets Pots and fyke nets - Pots - Fyke nets Stow-nets Rappiers forces weigs etc.	FPN FPF FPO FYK FSN	08.0.0 08.1.0 08.2.0 08.2.1 08.2.2 08.3.0 08.4.0 08.5.0 08.9.0
	HOOKS AND LINES Hand-lines and pole-lines Hand-lines and pole-lines (mechanized) Set lines (longlines set) Drift lines (longlines drift) Longlines (not specified) Troll lines Mechanical squid jiggers Dory vessel line gears Hand and other lines Hooks and lines (not specified)	LHP LHM LLS LLD LL LTL LMJ LDV * LHO LX	09.0.0 09.1.0 09.2.0 09.3.0 09.4.0 09.5.0 09.6.0 09.7.0 09.8.0 09.9.0
	GRAPPLING AND WOUNDING Harpoons	HAR	10.0.0 10.1.0
	HARVESTING MACHINES Pumps Mechanized dredges Other appliances	HMP HMD HMX	11.0.0 11.1.0 11.2.0 11.3.0
	MISCELLANEOUS GEAR Hand and landing nets Drive-in-nets, n.e.s Gathering by hand with simple hand implements with or without diving equipment Stupefying materials (solid, liquid, gas) and explosives Trained animals Electrophysically induced narcosis	MIS * MHL * MDN * MHI * MSM * MTA * MEN	20.0.0 20.1.0 20.2.0 20.3.0 20.4.0 20.5.0 20.6.0
	RECREATIONAL FISHING GEAR	RG	25.0.0
	GEAR NOT KNOWN OR NOT SPECIFIED	NK	30.0.0

DESCRIPTORS AND DEFINITIONS OF FISHING EFFORT MEASURES BY GEAR CATEGORIES

Level of priority	Fishing gear d	Effort measure escriptors	Definitions
A. FIRST	Surrounding nets (purse seines)	No. of sets	Number of times the gear has been set or shot, whether or not a catch was made. This measure is appropriate when school size and packing density is related to stock abundance or sets are made in a random manner:
		or	
		Searching time	This represents time on the grounds less time spent shooting net and retrieving the catch as well as time hove to. This measure is complicated by the use of aircraft spotting as
			well as by the dissemination of information from vessel to vessel. The measure is appropriate when school size and packing density is unrelated to stock abundance and a set is only made when a school has been located.
	Beach seines	No. of sets	Number of times the gear has been set or shot, whether or not a catch was made.
	Boat seines (Danish seine, etc.)	No. of hours fished	Number of hours during which the seine was on the bottom and fishing.
	Trawls	No. of hours fished	Number of hours during which the trawl was in the water (midwater trawl), or on the bottom (bottom trawl), and fishing.
	Boat dredges	No. of hours fished	Number of hours during which the dredge was on the bottom and fishing.
A. FIRST (continued)	Gillnets (set or drift)	No. of effort units	Length of nets expressed in 100-metre units multiplied by the number of sets made (= accumulated total length in metres of nets used in a given time period divided by 100).
	Gillnets (fixed)	No. of effort units	Length of net expressed in 100-metre units multiplied by the number of times the net was cleared.
	Traps (un- covered pound nets)	No. of effort units	Number of days fished times the number of units hauled.
	Covered pots and fyke nets	No. of effort units	Number of lifts times the number of units (= total number of units fished in a given time period).
Ŧ	Longlines (set or drift)	Thousand of hooks	Number of hooks fished in a given time period divided by 1000.

Effort Level of Fishing Definitions measure priority gear descriptors Handlines No. of Total number of lines used in the (pole, troll, line-days given time period. jig, etc.) Harpoons (Report effort levels B and C only) B. SECOND All gears No. of The number of days (24-hour periods, reckoned from midnight to midnight) days on which any fishing took place. fished For those fisheries in which searching is a substantial part of the fishing operation, days in which searching but no fishing took place should be included in "days fished" data. C. THIRD All gears The number of days (24-hour periods, No. of reckoned from midnight to midnight) days on in which the vessel was on the fishing grounds ground, and includes in addition to the days fishing and searching also all the other days while the vessel was on the ground. The number of days absent from port D. FOURTH All gears No. of on any one trip should include the day days the fishing craft sailed but not the absent day of landing. Where it is known from that fishing took place on each day of the trip the number of "days absent port from port" should include not only the day of departure but also the day of arrival back in port. Where on any trip a fishing craft visits more than one "fishing area" (as defined for statistical purposes) and appropriate fraction of the total number of days absent from port should be allocated to each "fishing area" in proportion to the number of days spent in each, so that the total number of days absent on the trip will be the sum of the number of days allocated to all of the different "fishing areas" visited. Any voyage during which fishing took place in only on "fishing area" is E. FIFTH All gears No. of trips When in to be counted as one trip. made a single trip a craft visits more than one "fishing area" an appropriate fraction of the trip should be apportioned to each "fishing area" in proportion to the number of days spent fishing in each, so that the total number of trips for the Major Fishing Area as a whole will be the same as the sum of trips to each

"fishing area".

FISHING GEAR SIZE AND CHARACTERISTICS

Gear type specified separately, in accordance with international classification.

- 1. Trawls and Danish/Scottish seines
 - 1.1 Headline length (m)
 - 1.2 Net circumference at the opening, stretched (m)
 - 1.3 Mesh opening of codend $\frac{1}{2}$ (mm)
 - 1.4 Otter board type (for otter trawls)
- 2. Dredges
 - 2.1 Beam width (m)
 - 2.2 Mesh opening (mm)
- 3. Purse seines and other seines (excluding Danish/Scottish)
 - 3.1 Floatline length (m)
 - 3.2 Net depth, stretched (m)
 - 3.3 Mesh size stretched $\frac{2}{}$ of body and/or bunt (mm)
- 4. Gillnets and other entangling nets
 - 4.1 Total length of floatline (m)
 - 4.2 Net depth, stretched (m)
 - 4.3 Mesh size, stretched (mm)
 - 4.4 Bottom set or drifting (specify)
- 5. Trap nets (including pound/fyke nets)
 - 5.1 Number of catching chambers for one trap net
 - 5.2 Length of leader or wings (m)
 - 5.3 Mesh size stretched of chambers (mm)
- 6. Pots
 - 6.1 Number of entrances for one pot
 - 6.2 Mesh opening (mm)
 - 6.3 Total number of pots used during fishing operation
- 7. Longlines
 - 7.1 Total length of main line used during fishing operation (m)
 - 7.2 Total number of hooks used during fishing operation
 - 7.3 Bottom set or drifting (specify)
- 8. Others (specify)
- I/ In accordance with ISO definition. Dimension generally used in fishing regulations for towed nets.
- 2/ Length of mesh, fully stretched, in accordance with ISO definition

AMENDMENTS TO THE ISSCFG

proposed by Mr. C. Nédélec, FAO Fishery Industries Officer
(Gear and Fishing Technology)

Gear Categories	Standard Abbrevia- tion	ISSCFG Code
SURROUNDING NETS With purse lines (purse seines) - one boat operated purse seines - two boat operated purse seines Without purse lines (lampara)	PS PS1 PS2 LA	01.0.0 01.1.0 01.1.1 01.1.2 01.2.0
SEINE NETS Beach seines Boat or vessel seines - Danish seines - Scottish seines - Pair seines Seine nets, not specified	SB SV SDN SSC SPR * SX	02.0.0 02.1.0 02.2.0 02.2.1 02.2.2 02.2.3 02.2.4
TRAWLS Bottom trawls (general) - beam trawls - otter trawls (side or stern not specified) - otter trawls (side) - otter trawls (stern) - pair trawls Midwater trawls (general) - otter trawls (side or stern not specified) - otter trawls (side) - otter trawls (stern) - pair trawls Otter trawls (not specified) Pair trawls (not specified) Other trawls - shrimp trawls - nephrops trawls	TB TBB OTB OTB-1 OTB-2 PTP TM OTM-1 OTM-2 PTM OTM-2 PTM OT PT TX * TXS * TXN	03.0.0 03.1.0 03.1.1 03.1.2.1 03.1.2.2 03.1.3 03.2.0 03.2.1 03.2.1.1 03.2.1.2 03.3.0 03.4.0 03.5.0 03.5.1 03.5.2
DREDGES Boat dredges Hand dredges	DRB DRH	04.0.0 04.1.0 04.2.0
LIFT NETS Portable lift nets Boat operated lift nets Shore operated stationary lift nets	* LNP * LNB * LNS	05.0.0 05.1.0 05.2.0 05.3.0
FALLING GEAR Cast nets Other gears (not specified)	FCN FON	06.0.0 06.1.0 06.2.0
GILLNETS, TRAMMEL NETS AND ENTANGLING NETS Bottom set gillnets Drifting gillnets (driftnets) Encircling gillnets Fixed gillnets (e.g. on stakes) Gillnets (not specified) Trammel nets Combined gillnets - trammel nets Entangling nets (not specified)	GNS GND GNC * GNF * GNX TN GTN EN	07.0.0 07.1.0 07.2.0 07.3.0 07.4.0 07.5.0 07.6.0 07.7.0

Gear Categories	Standard Abbrevia- tion	ISSCFG Code
TRAPS Stationary uncovered pound-nets Pots and fyke nets * Pots * Fyke nets Stow-nets Barriers, fences, weirs, etc. Aerial traps Traps (not specified)	FPN FPF FPO FYK FSN FWR FAR FIX	08.0.0 08.1.0 08.2.0 08.2.1 08.2.2 08.3.0 08.4.0 08.5.0 08.9.0
HOOKS AND LINES Hand-lines and pole-lines (hand operated) Hand-lines and pole-lines (mechanized) Bottom set longlines Drifting longlines Longlines (not specified) Trolling lines Jigging lines Hand operated Mechanized Dory operated line gears Hand and other lines Hooks and lines (not specified)	LHP LHM LLS LLD LL LTL LJ LJH LJM LDV LHO LX	09.0.0 09.1.0 09.2.0 09.3.0 09.4.0 09.5.0 09.6.0 09.7.0 09.7.1 09.7.2 09.8.0 09.9.0 09.9.9
GRAPPLING AND WOUNDING Harpoons	HAR	10.0.0 10.1.0
HARVESTING MACHINES Pumps Mechanized dredges Other appliances	HMP HMD HMX	11.0.0 11.1.0 11.2.0 11.3.0
MISCELLANEOUS GEAR Hand and landing nets Drive-in-nets Gathering by hand with simple hand implements with or without diving equipment	MIS * MHL * MDN * MHI	20.0.0 20.1.0 20.2.0 20.3.0
Poisons and explosives Trained animals Electrical fishing	* MPE * MTA * MEF	20.4.0 20.5.0 20.6.0
RECREATIONAL FISHING GEAR	RG	25.0.0
GEAR NOT KNOWN OR NOT SPECIFIED	NK	30.0.0