



**MedFisis**  
Fishery Statistics and  
Information System in  
the Mediterranean



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## **Working document prepared for the 8<sup>th</sup> session of the GFCM SAC (25-28 October 2005, Tirana – Albania)**

### **Operational Unit Tables**

The Sub Committee on Statistics and Information (SCSI) during its latest meeting, 26 – 30 September 2005, recommended that Member States should be requested by the GFCM to supply data on the fishing fleet and its activities, to enable the identification of all Operational Units in the Mediterranean area. Following this meeting, the MedFisis project has, at the request of the SCSI, developed a framework (including codification) for Operational Unit (OU) identification and data collection, following the outline given during the SCSI meeting, in which 4 tables for OU identification are given.

An Operational Unit has been defined by the GFCM as follows:

*“For the sake of managing fishing effort within a Management Unit, an Operational Unit is the group of fishing vessels practising the same type of fishing operation, targeting the same species or group of species and having a similar economic structure. The grouping of fishing vessels may be subject to change over time and depends on the management objective to be reached”*

This document describes the developed framework related to Operational Units and gives its codifications.

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**- A -**

## Fleet and area variable

ITEMS	DESCRIPTION								
<b>GSA</b>	GFCM Geographical Sub-Area as described in document GFCM:SAC6/2003/3 Conclusions and recommendations of the four sub-committees <sup>1</sup> .								
<b>Country</b>	The name of the country.								
<b>SAC Fleet segment</b>	Fleet segmentation as proposed by the 5 <sup>th</sup> session of the Scientific Advisory Committee (SAC) <sup>2</sup> .								
<b>Vessel Number</b>	Number of fishing vessels belonging to the fleet segment.								
<b>GT</b>	The Gross Tonnage according to the International Convention on Tonnage Measurement of Ships, London, 1969 (in use since 1996) <sup>3</sup> .								
<b>GRT</b>	The Gross Register Tonnage according to the Oslo Convention (1947) (in use until 1995). (GRT represented the total measured cubic content of the permanently enclosed spaces of a vessel, with some allowances or deductions for exempt spaces such as living quarters [1 gross register ton = 100 cubic feet = 2.83 cubic metres]).								
<b>Operational Activity</b>	<p>Open a code for each activity developed around the year. Code composed as follows:</p> <ul style="list-style-type: none"> <li>- First three characters indicate the United Nations country abbreviation</li> <li>- Followed by two-digit number identifying the GSA. This is the GSA code without the first two-digit common to all the Mediterranean Areas ('37').</li> <li>- Followed by the letter of the SAC fleet segment</li> <li>- Last 2-digit number indicates the specific Operational Unit number</li> </ul> <div style="text-align: center; margin-top: 10px;"> <table border="1" style="margin: auto;"> <tr> <td style="text-align: center;">Country</td> <td style="text-align: center;">GSA</td> <td style="text-align: center;">Segment</td> <td style="text-align: center;">Activity Code</td> </tr> <tr> <td style="text-align: center;">     </td> <td style="text-align: center;">   </td> <td style="text-align: center;"> </td> <td style="text-align: center;">   </td> </tr> </table> </div>	Country	GSA	Segment	Activity Code				
Country	GSA	Segment	Activity Code						
<b>Base ports</b>	Port/s of operation of the given Operational Unit.								

<sup>1</sup> <ftp://ftp.fao.org/fi/DOCUMENT/gfcm/sac6/3e.pdf>

<sup>2</sup> [www.faocopemed.org/en/sac/docs.htm#general\\_docs](http://www.faocopemed.org/en/sac/docs.htm#general_docs) (<ftp://ftp.fao.org/docrep/fao/005/y7680b/y7680b00.pdf>)

<sup>3</sup> [www.admiraltylawguide.com/conven/tonnage1969.html](http://www.admiraltylawguide.com/conven/tonnage1969.html)

**- B -**

**Main resource and activity components variables per Operational Unit (OU)**

ITEMS	DESCRIPTION
<b>Operational activity code</b>	As above. For each the following data on the fishing activity practiced around the year must be obtained.
<b>Activity</b>	Days at sea or hours fishing.
<b>Fishing gear</b>	Abbreviated (two or three characters) according to the International Standard Classification of Fishing Gear (ISSCFG) <sup>4</sup> .
<b>Target species (FAO Code)</b>	Scientific name of the bio-economically most important target species (up to a maximum of five species).
<b>FAO species code</b>	The FAO three-letter code based on the English common name as from the International Standard Statistical Classification of Aquatic Animals and Plants (ISSCAAP) <sup>5</sup> .
<b>Main associated exploited resources</b>	The species, species group or assemblage exploited in association with the target species previously indicated.
<b>Fishing period</b>	Self-explanatory (start month – end month, e.g.: from October to February will be 10-02).
<b>Relative Weight</b>	Percentage of total vessels included in the fleet segment that practiced this activity.
<b>Areas where this activity is practiced</b>	Expressed in descriptive way.

**- C -**

**Specific catch and effort component variables by Operational Unit**

ITEMS	DESCRIPTION
<b>Operational activity code</b>	As above. For each the next data on the fishing activity practiced around the year
<b>Catch<sup>6</sup></b>	Weight of the landing.
<b>Effort measure</b>	To be discussed.
<b>CPUE<sup>7</sup></b>	Catch divided by effort.

<sup>4</sup> [www.fao.org/figis/servlet/static?dom=ontology&xml=sectionM.xml](http://www.fao.org/figis/servlet/static?dom=ontology&xml=sectionM.xml) (Annex M I)

<sup>5</sup> [www.fao.org/fi/statist/fisoft/asfis/asfis.asp](http://www.fao.org/fi/statist/fisoft/asfis/asfis.asp)

<sup>6-7</sup> To be discussed, usage of catch or landing in these fields.

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**Economic components variables**

<b>ITEMS</b>	<b>DESCRIPTION</b>
<b>Gross Tonnage</b>	Total gross tonnage of fishing vessels belonging to the given Fleet Segment.
<b>Engine Power</b>	Total engine power (kW) of fishing vessels belonging to the given Fleet Segment.
<b>Employment</b>	Total number of people employed on fishing vessels belonging to the given Fleet Segment. The number of crew members can be estimated on a full time equivalent (FTE) basis.
<b>Salary Share %</b>	Percentage of the revenues after discounting commercial costs, daily costs and fuel costs that pertain to the crew. It will be distributed among the crew as salary.
<b>Landing weight</b>	Total landings in weight.
<b>Landing value</b>	The volume of landed fish valued against actual market prices. It equals to quantities landed multiplied by the landing average price.
<b>Vessel value of total Fleet</b>	This is defined as total invested capital – value of hull, engine, gear and equipment. The replacement-value method can be used to estimate this parameter.
<b>Fishing days/year per vessel</b>	Number of fishing days per year.
<b>Fishing hours/day per vessel</b>	Number of fishing hours per day.
<b>Cost of fishing/day per vessel</b>	These include daily expenses incurred in fishing activity, such as fuel, lubricants, etc. They are variable costs that depend on the time spent in fishing.
<b>Yearly Fixed costs per vessel</b>	These comprise costs not directly connected with operational activity, such as non-routine maintenance, vessel insurance, taxes and dues, etc. The fixed costs are all the costs that are inevitable to pay yearly, independently from the time spent to fish.

## Annex 1 – GFCM Geographical Sub-Area

Fishing Area Code	Geographical sub-area		Sub-Basin		Basin	
	Code	Name	Code	Name	Code	Name
37	01	Northern Aliborean Sea	37.1.1	Balearic	37.1	Western
	02	Aliborean Island				
	03	Southern Aliborean Sea				
	04	Algeria				
	05	Balearic Island				
	06	Northern Spain				
	07	Gulf of Lions	37.1.2	Gulf of Lions		
	08	Corsica Island	37.1.3	Sardinia		
	09	Ligurian and North Tirrenian Sea				
	10	South and Central Tirrenian Sea				
	11	Sardinia				
	12	Northern Tunisia				
	13	Gulf of Hammamet	37.2.1	Adriatic	37.2	Central
	14	Gulf of Gabes				
	15	Malta Island	37.2.2	Ionian		
	16	South of Sicily				
	17	Northern Adriatic				
	18	Southern Adriatic Sea				
	19	Western Ionian Sea				
	20	Eastern Ionian Sea				
	21	Libya				
	22	Aegean Sea	37.3.1	Aegean	37.3	Eastern
	23	Crete Island				
	24	South of Turkey	37.3.2	Levant		
	25	Cyprus Island				
	26	Egypt				
	27	Levant				
	28	Marmara Sea	37.4.1	Marmara		
	29	Black Sea	37.4.2	Black Sea		
	30	Azov Sea	37.4.3	Azov Sea		

## Annex 2 – Provisional List of the GFCM Countries

Short name English	UNDP* code	ISO3**
Albania	ALB	ALB
Algeria	ALG	DZA
Bulgaria	BUL	BGR
Croatia	CRO	HRV
Cyprus	CYP	CYP
Egypt	EGY	EGY
France	FRA	FRA
Greece	GRE	GRC
Israel	ISR	ISR
Italy	ITA	ITA
Japan	JPN	JPN
Lebanon	LEB	LBN
Libyan Arab Jamahiriya	LIB	LBY
Malta	MAT	MLT
Monaco	MNC	MCO
Morocco	MOR	MAR
Romania	ROM	ROM
Serbia and Montenegro	YUG	SCG
Slovenia	SVN	SVN
Spain	SPA	ESP
Syrian Arab Republic	SYR	SYR
Tunisia	TUN	TUN
Turkey	TUR	TUR

\* United Nations Developed Programme ([www.undp.org](http://www.undp.org))

\*\* ISO 3166-1 alpha-3 (International Organization for Standardization - [www.iso.org](http://www.iso.org))

## Annex 3 – Fleet Segmentation

*proposed by the 5th session of the Scientific Advisory Committee (SAC)*

Groups	< 6 metres	6-12 metres	12-24 metres	More than 24 metres
1. Minor Gear without engine	A	←		
2. Minor Gear with engine	B	C		
3. Trawl	⇒	D	E	F
4. Purse Seine		G	H	←
5. Long line			I	
6. Pelagic Trawl		⇒	J	←
7. Tuna Seine			K	←
8. Dredge		⇒	L	
9. Polyvalent			M	

A - **Minor Gear without engine**. All vessels less than 6 metres in length without an engine (wind or oar propulsion). Exceptionally, vessels without engine longer than 6 metres can be included.

B - **Minor Gear with engine less than 6 m. length**. All vessels under 6 metres length with engine, excluding trawl vessels.

C - **Minor Gear with engine between 6 to 12 metres**. All vessels between 6 to 12 metres length with engine, excluded specific gears as demersal trawl, purse seine, pelagic trawl and dredge.

D - **Trawlers less than 12 m. length**. All demersal trawlers less than 12 metres. Exceptionally, trawl vessels under 6 metres can be included.

E - **Trawlers between 12 to 24 m.** Demersal trawl between 12 to 24 metres.

F - **Trawlers of more than 24 m.** Demersal trawl with length of more than 24 metres

G - **Purse Seines between 6 to 12 m.**

H - **Purse Seines between 12 to 24 m.** Excluded Tuna Seine. Exceptionally, Purse Seines vessels of more than 24 metres, can be included

I - **Long line of more than 12 m.** Long line as exclusive gear more than 12 m. Exceptionally, vessels more than 24 metres, can be included.

J - **Pelagic Trawlers.** All Pelagic Trawl vessels, but normally this group is between 12 to 24 metres.

K - **Tuna Seine.** ll Tuna Seine vessels.

L - **Dredge.** All Dredge vessels. Normally this group is between 12 to 24 metres, but exceptionally dredges under 12 metres can be included.

M - **Polyvalent (and Other) longer than 12 m.** All vessels longer than 12 metres, that use different gears along the year or use a gear not already listed in this classification.

## Annex 4 – Base Ports (GFCM countries)

Examples of the codification provided by MedFisis in cooperation with the countries concerned:

### Algeria

Port ID	Port Code	Port Name
203	DZAALG	Alger
213	DZABOS	Bous Ismail
219	DZACHR	Cherchell
251	DZATIP	Tipaza

### Lebanon

Port ID	Port Code	Port Name
10005	LBN005	Ain el Mraisseh
10006	LBN006	Manarah
10013	LBN013	Dalieh
10014	LBN014	Dbaiye

### Tunisia

Port ID	Port Code	Port Name
222003	TUN003	La Goulette
222058	TUN058	La Marsa
222059	TUN059	Sidi Bou Said
222060	TUN060	Salambo

### Serbia and Montenegro

Port ID	Port Code	Port Name
01	SCG001	Bar
06	SCG006	Ulcinj
04	SCG004	Kotor
03	SCG003	Herceg Novi

## Annex 5 – International Standard Classification of Fishing Gear (ISSCFG)

The “International Standard Statistical Classification of Fishing Gear” (ISSCFG<sup>7</sup>) adopted during the 10th Session of the Coordinating Working Party on Fishery Statistics (CWP) (Madrid, 22-29 July 1980).

ISSCFG	Fishing gear	Standard abbreviation
0110	With purse lines (purse seines)	PS
0111	One boat operated purse seines	PS1
0112	Two boats operated purse seines	PS2
0120	Without purse lines (lampara)	LA
0210	Beach seines	SB
0220	Boat or vessel seines	SV
0221	Danish seines	SDN
0222	Scottish seines	SSC
0223	Pair seines	SPR
0290	Seine nets (not specified)	SX
0310	Bottom trawls	TB
0311	Bottom beam trawls	TBB
0312	Bottom otter trawls	OTB
0313	Bottom pair trawls	PTB
0314	Bottom nephrops trawls	TBN
0315	Bottom shrimp trawls	TBS
0319	Bottom trawls (not specified)	TB
0320	Midwater trawls	TM
0321	Midwater otter trawls	OTM
0322	Midwater pair trawls	PTM
0323	Midwater shrimp trawls	TMS
0329	Midwater trawls (not specified)	TM
0330	Otter twin trawls	OTT
0349	Otter trawls (not specified)	OT
0359	Pair trawls (not specified)	PT
0390	Other trawls (not specified)	TX
0410	Boat dredges	DRB
0420	Hand dredges	DRH
0510	Portable lift nets	LNP
0520	Boat-operated lift nets	LNB

<sup>7</sup> [www.fao.org/figis/servlet/static?dom=ontology&xml=sectionM.xml](http://www.fao.org/figis/servlet/static?dom=ontology&xml=sectionM.xml)

0530	Shore-operated stationary lift nets	LNS
0590	Lift nets (not specified)	LN
0610	Cast nets	FCN
0690	Falling gear (not specified)	FG
0710	Set gillnets (anchored)	GNS
0720	Driftnets	GND
0730	Encircling gillnets	GNC
0740	Fixed gillnets (on stakes)	GNF
0750	Trammel nets	GTR
0760	Combined gillnets-trammel nets	GTN
0790	Gillnets and entangling nets (not specified)	GEN
0791	Gillnets (not specified)	GN
0810	Stationary uncovered pound nets	FPN
0820	Pots	FPO
0830	Fyke nets	FYK
0840	Stow nets	FSN
0850	Barrier, fences, weirs, etc	FWR
0860	Aerial traps	FAR
0890	Traps (not specified)	FIX
0910	Handlines and pole-lines (hand operated)	LHP
0920	Handlines and pole-lines (mechanised)	LHM
0930	Set longlines	LLS
0940	Drifting longlines	LLD
0950	Longlines (not specified)	LL
0960	Trolling lines	LTL
0990	Hooks and lines (not specified)	LX
1010	Harpoons	HAR
1110	Pumps	HMP
1120	Mechanised dredges	HMD
1190	Harvesting machines (not specified)	HMX
2000	Miscellaneous gear	MIS
2500	Recreational fishing gear	RG
9900	Gear not known or not specified	NK

## Annex 6 – Aquatic Sciences and Fisheries Information System (ASFIS)

The FAO Fishery Information, Data and Statistics Unit (FIDI) collates world capture and aquaculture production statistics at either the species, genus, family or higher taxonomic levels in 1,572 statistical categories (2003 data) referred to as species items.

Three types of codes are assigned to each species item: 1) **ISSCAAP** code; 2) **taxonomic** code; and 3) **3-alpha code**. The ISSCAAP code is assigned according to the FAO 'International Standard Statistical Classification for Aquatic Animals and Plants' (ISSCAAP) which divides commercial species into 50 groups on the basis of their taxonomic, ecological and economic characteristics. The taxonomic code is used by FAO for a more detailed classification of the species items and for sorting them out within each ISSCAAP group. The 3-alpha identifier is a unique code made of three letters that is widely used for the exchange of data with national correspondents and among fishery agencies.

The list is a part of the Aquatic Sciences and Fisheries Information System (ASFIS) which includes among others also the Aquatic Sciences and Fisheries Abstracts (ASFA<sup>8</sup>).

Presently, the ASFIS list of species includes 10,511 species items. Each species item stored in a record has an ISSCAAP code, a taxonomic code, a 3-alpha code, a scientific name, taxonomic classification at family and at a higher taxonomic level.

The 10,511 species items were selected according to their interest or relation to fisheries and aquaculture.

ASFIS Version: February 2005.

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<sup>8</sup> It is an International Cooperative Information System which comprises an abstracting and indexing service covering the world's literature on the science, technology, management, and conservation of marine, brackish water, and freshwater resources and environments, including their socio-economic and legal aspects.