Recommendation GFCM/41/2017/6

on the submission of data on fishing activities in the GFCM area of application

The General Fisheries Commission for the Mediterranean (GFCM),

CONSIDERING that rational management for sustainable fisheries is dependent on the scientific utilization of relevant data on fishing fleet capacity, on the fishing activities carried out, on the status of exploited biological resources and on the social and economic situation of fisheries;

RECALLING the subregional approach to fisheries management as enshrined in the Agreement for the establishment of the General Fisheries Commission for the Mediterranean (GFCM Agreement), with a view to better addressing the specificities of the Mediterranean and the Black Sea region;

NOTING the importance of multidisciplinary data and information to monitor and assess fisheries and fisheries resources and to ensure their sustainable exploitation;

RECOGNIZING the need to develop a GFCM database, on the basis of the information received from contracting parties and cooperating non-contracting parties (CPCs) according to a standardized format;

FURTHER RECOGNIZING the Data Collection Reference Framework (DCRF) as an instrument supporting the implementation of the mid-term strategy (2017–2020) towards the sustainability of Mediterranean and Black Sea fisheries (mid-term strategy) through the identification and collection of fisheries-related data necessary to improve the formulatation of sound scientific advice by relevant GFCM subsidiary bodies;

CONSIDERING that a timely submission of complete data and the analysis of the status of fisheries and exploited resources are of paramount importance for the effectiveness and credibility of GFCM management measures;

TAKING INTO ACCOUNT the importance of the classification priority species groups as identified by the Scientific Advisory Committee on Fisheries (SAC), of the use of the GFCM fleet segmentation for the collection of economic and biological data, as well as of the use of standard nominal fishing effort measurement;

NOTING that relevant data on fishing fleets, red coral and common dolphinfish as identified by the SAC in the DCRF are already requested under existing recommendations GFCM/30/2006/2 on the establishment of a closed season for common dolphinfish fisheries using fish aggregating devices, GFCM/33/2009/5 on the establishment of the GFCM regional fleet register, GFCM/33/2009/6 concerning the establishment of a GFCM record of vessels over 15 metres authorized to operate in the GFCM area of application, amending Recommendation GFCM/29/2005/2, and GFCM/36/2012/1 on further measures for the exploitation of red coral in the GFCM area of application;

RECALLING the decision taken by the Commission at its fortieth session to adopt, for a one-year period, Recommendation GFCM/40/2016/2 on the progressive implementation of data submission in line with the GFCM Data Collection Reference Framework, and to reconsider its contents at its forty-first session;

ADOPTS, in conformity with Articles 5 b), 8 b) and 13 of the GFCM Agreement, the following recommendation:

1. CPCs shall submit to the GFCM Secretariat national data on catch, incidental catch of vulnerable species, fishing effort, socio-economic and biological information (as specified in Annex 1) for the first time in 2018, and subsequently each calendar year. Such submission shall be done in accordance with appropriate data submission standards, procedures and protocols to be made available online by the GFCM Secretariat. Data shall be compiled following the

specifications on the GFCM fleet segmentation (Annex 2) and on fishing effort measurement (Annex 3).

2. In addition to the data mentioned above, CPCs shall submit to the GFCM Secretariat for the first time in 2018, and subsequently each calendar year, information needed to assess the status of those stocks considered priority by the Commission. Such submission shall be done using the stock assessment form (SAF) made available online by the GFCM Secretariat and following the data structure specified in Annex 5.

3. CPCs shall submit the data referred to in paragraphs 1 and 2 according to submission specifications (reporting schedule, reference year and frequency) as defined in Annex 4. With a view to ensuring consistency of the time series in the GFCM database, populated with data submitted in line with Recommendation GFCM/33/2009/3 on the implementation of the GFCM Task 1 statistical matrix and repealing Resolution GFCM/31/2007/1 up to the 2015 reference year, the first data submission in 2018 shall also cover the preceding two-year timeframe, i.e. 2016 and 2017.

4. The quality of data submitted pursuant to this recommendation shall be regularly assessed with a view to ensuring the formulation of scientific advice for the Commission.

5. Relevant GFCM subsidiary bodies may draw the attention of the Commission to the possible need for any revision of Annexes 1–5 to this recommendation in order to ensure the effectiveness of data collection and analysis.

6. Recommendation GFCM/33/2009/3 is hereby repealed.

7. All references to the Task 1 statistical matrix and Recommendation GFCM/33/2009/3 found in previous GFCM recommendations and resolutions will be automatically replaced by references to the DCRF upon the entry into force of this recommendation.

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GFCM DATA FIELDS (DCRF TASKS)

The data variables listed below are those that should be submitted to the GFCM Secretariat following the guidance provided by the relevant GFCM subsidiary bodies through the DCRF manual, including field definitions, list of species (groups 1, 2 and 3 by GFCM subregion), fishing gear, vulnerable species, shared stocks. In line with the GFCM data confidentiality policy and procedures, the "data confidentiality status" identifies the access-level criteria for the sake of data dissemination: Public (P), Semi-private (S), Private (R).

DATA FIELDS (DCRF tasks and subtasks)			MANDATORY (X)	DATA CONFIDENTIALITY STATUS
Global figures of national fisheries		Number of vessels	X	P
		Total landings	X	P
		Total capacity (GT)	X	P
		Total engine power (kW)	X	P
Catch	**Total landing** *(by GSA and fleet segment)*	Number of vessels	X	P
		Total landings	X	P
	Catch per species *(by GSA and fleet segment)*	Species	X	P
		Total landings per species	X	P
		Total discards per species (if any)	X	S
		Total catch per species	X	P
Incidental catch of vulnerable species (by GSA and fleet segment)[1]		Date	X	P
		Source of data	X	S
		Fishing gear (if available)	X	P
		Group of vulnerable species[1]	X	P
		Family (if available)	X	P
		Species (if available)	X	P
		Total number of individuals caught	X	P
		Total weight of individuals caught (if available)	X	P
		Number of individuals released alive (if available)	X	S
		Number of dead individuals (if available)	X	S
		Number of individuals released in unknown status (if available)	X	S
Effort	**Fleet segment** *(by GSA and fleet segment)*	Fishing days	X	S
		Capacity	X	P
		Activity	X	S
		Nominal effort	X	S
		Number of vessels	X	P
	Fishing gear *(by GSA)*	Fishing gear	X	S
		Fishing days (by fishing gear)	X	S
	CPUE *(by GSA)[2]*	Fishing gear	X	P
		Species[2]	X	P
		Nominal effort	X	S
		CPUE	X	S

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[1] Mandatory for the GFCM vulnerable species

[2] Mandatory for the species of group 1 and group 2

DATA FIELDS (DCRF tasks and subtasks)			MANDATORY (X)	DATA CONFIDENTIALITY STATUS
Socio-economics	**Economic and social data** *(by GSA and fleet segment)*	Capacity (gross tonnage)	X	P
		Capacity (engine power)	X	P
		Number of vessels	X	P
		Total landing value	X	S
		Total days at sea	X	S
	Operating costs *(by GSA and fleet segment)*	Number of vessels	X	P
		Personnel costs	X	R
		Fuel consumption (if available)	X	R
		Fuel price (if available)	X	R
		Total fuel cost (if available)	X	R
		Repair and maintenance costs	X	R
		Commercial costs	X	R
		Other variable costs	X	R
		Capital costs	X	R
		Value of physical capital	X	R
		Fixed costs	X	R
		Employment	X	R
		Currency	X	S
	Species value *(by GSA and fleet segment)*[3]	Number of vessels	X	P
		Species[3]	X	P
		Total landing volume	X	P
		Total landing value	X	S
		Prices by commercial species	X	S
		Currency	X	S
	Other economic aspects *(by GSA and fleet segment)*	Operating subsidies		R
		Investments in physical capital		R
		Other income		R
		Full-time equivalent (FTE)		S
		Number of persons in the crew < 25 years-old		S
		Number of persons in the crew 25-40 years-old		S
		Number of persons in the crew > 40 years-old		S
		Currency		S
Biological information	**Length data** *(by GSA)*[4]	Source of data	X	S
		Name of the scientific survey (if any)	X	S
		Fleet segment (only if from fishery-dependent data)	X	S
		Species[4]	X	S
		Length	X	S
		Number of individuals sampled (per length classes)	X	S
		Weight of individuals sampled (per length classes)	X	S
		Number of individuals expanded (per length classes)	X	S

[3] Mandatory for the species of group 1 and 2

[4] Mandatory for the species of group 1, 2 and 3

DATA FIELDS (DCRF tasks and subtasks)			MANDATORY (X)	DATA CONFIDENTIALITY STATUS
Biological information	**Size at first maturity** *(by GSA)[5]*	Species[5]	X	P
		Sex	X	S
		L_{50}	X	S
		Reference (if any)	X	S
	Maturity data *(by GSA)[5]*	Source of data	X	S
		Name of the scientific survey (if any)	X	P
		Fleet segment (only if from fishery-dependent data)	X	P
		Species[5]	X	P
		Length	X	S
		Sex	X	S
		Maturity[6]	X	S
		Number of individuals sampled (per length class, sex and maturity stage)	X	S
		Weight of individuals sampled (per length class, sex and maturity stage)	X	S
		Number of individuals expanded (per length class, sex and maturity stage)	X	S
	European eel	Habitat	X	P
		Site	X	P
		Gear type	X	P
		Mesh size		S
		Number of fishermen	X	S
		Fishing days	X	S
		Average number of "gear units" per day per fisherman	X	S
		Total catch of silver eel	X	P
		Total catch of yellow eel	X	P
		Total catch of silver and yellow eel	X	P
		Total catch of glass eel	X	P
		Stocking lifestage	X	P
		Stocking (kg/year)	X	P

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[5] Mandatory for the species of group 1.

[6] Following the scale of maturity stages (DCRF manual).

GFCM fleet segmentation
(Combination of vessel groups and length classes)

VESSEL GROUPS			LENGTH CLASSES (LOA)			
			< 6 m	6 - 12 m	12-24 m	> 24 m
Polyvalent	P	Small-scale vessels without engine using passive gear	P-01	P-02	P-03	P-04
			P-13			
		Small-scale vessels with engine using passive gear	P-05	P-06	P-07	P-08
		Polyvalent vessels	P-09	P-10	P-11	P-12
					P-14	
Seiners	S	Purse seiners	S-01	S-02	S-03	S-04
					S-09	
		Tuna seiners	S-05	S-06	S-07	S-08
					S-10	
Dredgers	D	Dredgers	D-01	D-02	D-03	D-04
				D-05		
Trawlers	T	Beam trawlers	T-01	T-02	T-03	T-04
		Pelagic trawlers	T-05	T-06	T-07	T-08
				T-13		
		Trawlers	T-09	T-10	T-11	T-12
Longliners	L	Longliners	L-01	L-02	L-03	L-04
				L-05		

Note

- A vessel is assigned to a group on the basis of the dominant gear used in terms of percentage of time: more than 50 percent of the time at sea using the same fishing gear during the year.

- "Polyvalent vessels" are defined as all the vessels using more than one gear, with a combination of passive and active gear, none of which exceeding more than 50 percent of the time at sea during the year.

- A vessel is considered "active" when it executes at least one fishing operation during the reference year in the GFCM area of application.

- The yellow cells contain the codes of reported fleet segments which should be included in the GFCM data submission. If necessary, fleet segments as identified in the orange cells can be used: P-13 (P-01 + P-02), P-14 (P-11 + P-12), S-09 (S-03 + S-04), S-10 (S-07 + S-08), D-05 (D-02 + D-03), T-13 (T-06 + T-07 + T-08) and L-05 (L-02 + L-03 + L-04). Any proposal for a different aggregation of fleet segments should be brought to the attention of the relevant GFCM subsidiary bodies, mentionning the rationale and corresponding references (e.g. existing scientific studies), which in turn should confirm the similarity/homogeneity of the combined cells.

Table on fishing effort measurement

Effort measurement by fleet segment

FLEET SEGMENTS			EFFORT MEASUREMENTS		
	Vessel groups	Length classes (LOA)	Unit of capacity	Unit of activity	Nominal effort
P	Small-scale vessels without engine using passive gear Small-scale vessels with engine using passive gear Polyvalent vessels	All	Net length[1]	Fishing days	Net length x Fishing days
			Number of traps/pots[1]	Fishing days	Number of traps/pots x Fishing days
			Number of lines[1]	Fishing days	Number of lines x Fishing days
S	Purse seiners Tuna seiners	All	GT	Number of fishing sets[2]	GT x Number of fishing sets
D	Dredgers	All	GT	Fishing days	GT x Fishing days
T	Beam trawlers Pelagic trawlers Trawlers	All	GT	Fishing days	GT x Fishing days
L	Longliners	All	Number of hooks[1]	Fishing days	Number of hooks x Fishing days

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[1] Should this information not be available, "GT" may be used as capacity unit upon approval by relevant GFCM subsidiary bodies on a case by case basis.

[2] Should this information not be available, "fishing days" may be used as activity unit upon approval by relevant GFCM subsidiary bodies on a case by case basis.

Effort measurement by fishing gear

Fishing gear		Gear code	Unit of capacity	Unit of activity	Nominal effort
Surrounding nets	With purse lines (purse seines)	PS	GT	Number of fishing sets[1]	GT x Number of fishing sets
	One boat operated purse seines	PS1			
	Two boats operated purse seines	PS2			
	Without purse lines (lampara)	LA			
Seine nets	Beach seines	SB	Net length[2]	Fishing days	Net length x Fishing days
	Boat or vessel seines	SV			
	Danish seines	SDN			
	Scottish seines	SSC			
	Pair seines	SPR			
	Seine nets (not specified)	SX			
Trawls	Bottom trawls	TB	GT	Fishing days	GT x Fishing days
	Bottom beam trawls	TBB			
	Bottom otter trawls	OTB			
	Bottom pair trawls	PTB			
	Bottom nephrops trawls	TBN			
	Bottom shrimp trawls	TBS			
	Midwater trawls	TM			
	Midwater otter trawls	OTM			
	Midwater pair trawls	PTM			
	Midwater shrimp trawls	TMS			
	Otter twin trawls	OTT			
	Otter trawls (not specified)	OT			
	Pair trawls (not specified)	PT			
	Other trawls (not specified)	TX			
Dredges	Boat dredges	DRB	GT	Fishing days	GT x Fishing days
	Mechanised dredges	HMD			
	Hand dredges	DRH			
Gillnets and entangling nets	Set gillnets (anchored)	GNS	Net length[2]	Fishing days	Net length x Fishing days
	Driftnets	GND			
	Encircling gillnets	GNC			
	Fixed gillnets (on stakes)	GNF			
	Trammel nets	GTR			
	Combined gillnets-trammel nets	GTN			
	Gillnets and entantling nets (not specified)	GEN			
	Gillnets (not specified)	GN			
Traps	Stationary uncovered pound nets	FPN	Number of traps/pots[2]	Fishing days	Number of traps/pots x Fishing days
	Pots	FPO			
	Fyke nets	FYK			
	Stow nets	FSN			
	Barrier, fences, weirs, etc	FWR			
	Aerial traps	FAR			
	Traps (not specified)	FIX			

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[1] Should this information not be available, "fishing days" may be used as activity unit upon approval by relevant GFCM subsidiary bodies on a case by case basis.

[2] Should this information not be available, "GT" may be used as capacity unit upon approval by relevant GFCM subsidiary bodies on a case by case basis.

Fishing gear		Gear code	Unit of capacity	Unit of activity	Nominal effort
Hooks and lines	Handlines and pole-lines (hand operated)	LHP	Number of lines[2]	Fishing days	Number of lines x Fishing days
	Handlines and pole-lines (mechanised)	LHM			
	Trolling lines	LTL			
	Set longlines	LLS	Number of hooks[2]	Fishing days	Number of hooks x Fishing days
	Drifting longlines	LLD			
	Longlines (not specified)	LL			
	Hooks and lines (not specified)	LX			

Data submission calendar

Each calendar year (n), the requested data, as specified in Annex 2 and pertaining to the year before submission (n-1), shall be submitted to the GFCM Secretariat on the basis of the following schedule:

- May
    - Global figures of national fisheries
    - Socio-economics – Species value[11]
    - Socio-economics – Other economic aspects[1]
    - Socio-economics – Operating costs[1]
- June
    - Catch – Landing data
    - Catch – Catch data per species
    - Effort – Fleet segment
    - Effort – Fishing gear
    - Effort – CPUE
- July
    - Incidental catch of vulnerable species
    - Biological information – Length data
    - Biological information – Size at first maturity
    - Biological information – Maturity data
- September
    - Biological information – Stock assessment form[12]
    - Biological information – European eel
- November
    - Socio-economics – Economic and social data

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[11] Data should refer to the reference year n-2 and their submission should take place on a biennial basis only for those countries that do not have annual economic surveys in place. Countries collecting these data on a yearly basis are requested to submit them annually (keeping reference year n-2).

[12] The date of data submission is linked to the scheduling of the GFCM stock assessment working groups and therefore may differ from one year to another.

Stock assessment forms

The stock assessment forms (SAFs) to be used to submit the information required to assess the status of those stocks considered as priority stocks by the Commission shall be provided by relevant GFCM subsidiary bodies according to the following structure:

- basic identification data;

- stock identification and biological information (stock unit, growth and maturity);

- fisheries information (description of the fleet, historical trends, management measures, reference points);

- fisheries independent information (name, brief description of the chosen method and assumptions used, spatial distribution of the resources, historical trends);

- ecological information (protected species potentially affected by the fisheries, environmental indexes);

- stock assessment (name of the model, model assumptions, scripts, input data and parameters, tuning data, results, robustness analysis, retrospective analysis, comparison between model runs, sensitivity analysis, assessment quality);

- stock predictions (short, medium, and long term); and

- draft scientific advice.

SAFs shall be revised by relevant GFCM subsidiary bodies on a regular basis and their most updated version will be disseminated online by the GFCM Secretariat.