GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN

COMMISSION GÉNÉRALE DES PÊCHES POUR LA MÉDITERRANÉE

SCIENTIFIC ADVISORY COMMITTEE (SAC)
Sixteenth session
St Julian's, Malta, 17–20 March 2014
Summary of data collection gaps and needs of GFCM Members (outcomes of 2013 FWP questionnaires)

INTRODUCTION

1.   This document was prepared by the GFCM Secretariat as a follow up of the conclusions and recommendations of the 14th session of the Subcommittee on Statistics and Information (Montenegro, February 2014). Among other issues, the SCSI stressed the need of identifying priority actions related to data collection in the GFCM area of competence aiming at improving data collection systems at regional and national level. In this regard, the document was finalized for consideration of the 16th session of the Scientific Advisory Committee (SAC) and could serve as a basis for further investigation in this field.

2.   This document presents an excerpt from the analysis of the questionnaires as received by the GFCM Secretariat from national focal points (NFP) appointed by national authorities of each GFCM member for the activities related to data collection and management plans in 2013. In the context of the GFCM Framework programme (FWP), the survey was part of a series of coordinated actions to strengthen the GFCM framework for the collection and processing of data on fisheries.

3.   The questionnaires aimed at collecting information on the status of implementation of data collection programmes in the Mediterranean and Back Sea countries and to assess their compatibility with current GFCM data requirements. At a later stage, the information provided could serve as a basis for the development of a future plan of action for specific technical assistance. The inputs were transmitted by NFPs through the use of an online survey released by the GFCM Secretariat. Its structure is reproduced in Appendix A.

4.   The gathered information were presented and discussed during the following three workshops:

- Workshop on fisheries data collection and management plans in the Adriatic Sea, Split (Croatia) from 18 to 19 March 2013[1];

- Subregional meeting on data collection for western, central and eastern Mediterranean, Frascati (Italy) from 25 to 27 March 2013[2];

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[1] GFCM-Report-2013-DataCollectionMgmtPlans-Adriatic.pdf
[2] GFCM-Report-2013-DataCollection-WCE-Med.pdf

- Workshop on fisheries data collection in the Black Sea, Varna (Bulgaria) from 22 to 23 April 2013[3].

5.   The elements emerging from the questionnaires as well as from the discussion during these workshops served as a basis for the development of the GFCM Data Collection Reference Framework (DCRF) for a compatible data collection programme in the GFCM area and its subregions, thus overcoming weaknesses and consolidating the strengths of the current GFCM data collection scheme (the final draft of the DCRF is available as document GFCM:SAC16/2014/3).

6.   This document encompasses the replies received from Members, organized in a comparative way, and with particular focus on the following sections:

- Fishery data collection structure (national institutional framework)

- General fishery information and data collection system
  - o Effort and landing data
  - o Biological data and assessment
  - o Economic and social data

- Fleet monitoring

7.   All the answers transmitted by members within each section have been reorganized by subregion (Western, Central[4], Adriatic[4], Eastern[4] and Black Sea[4]) in order to facilitate the comparison of information among countries pertaining to the same areas (appendix A).

GAPS AND DIFFICULTIES

8.   The main gaps and difficulties arising from the replies of NFP were mainly related to technical, financial and human resources constraints, and in particular they referred to:

- Lack of sufficient dedicated personnel for the collection, aggregation and transmission of data;
- Institutional constrains (e.g. scarce internal coordination among institution for data collection and dissemination);
- Deficiency of qualified personnel;
- Low education level of fishermen;
- Decentralized data fisheries statistical system at national level;
- Lack of adequate control to assess IUU fishing;
- Problem of funding for fishery research programs (amount and timing of erogation);
- Difficulties in collecting socio-economic data on fleet;
- Absence of biological sampling and socio-economic surveys;
- High age of vessels;
- Not enough information for management purpose from fisheries data collection and analysis;
- Problems to deal with different requirements and format coming from different fisheries organizations.

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[3] GFCM-Report-2013-DataCollection-BlackSea.pdf
[4] The information of Italy and Turkey were reported for the countries in their whole and not by the two pertaining subregions, Central and Adriatic, Eastern and Black Sea respectively.

AREAS FOR POTENTIAL ACTIONS

9.   On the basis of the identified gaps, some areas of potential actions were highlighted:

-   Standardization of methodologies, at both national level and sub-regional level, for:
    o   Data collection,
    o   Data processing,
    o   Data analysis.

-   Training in fishery-related topics for fishermen, data collectors and managers on:
    o   Stock assessments data processing;
    o   Logbook;
    o   Socio-economic aspects;
    o   Small scale fishery data collection and management;
    o   Fishing techniques;
    o   Species identification;
    o   Design and management of fisheries databases;
    o   Software for processing fisheries data;
    o   Sampling regime for the collection of fisheries information dedicated to multispecies fisheries;
    o   Compilation and analysis of scientific, commercial and administrative data;
    o   Reading of otholits;
    o   Fisheries statistics.

-   Biological sampling at subregional level;

-   Fisheries survey programmes on:
    o   Small scale fisheries;
    o   Discards data;
    o   Recreational fisheries;
    o   Socio-economic;
    o   Environmental data;
    o   Impact of fishery on marine mammals and sea turtles (by-catch);
    o   Selectivity of fishing gears;
    o   Energy efficiency of fishing vessels;
    o   Trawler (in addition to the already existing in order to cover different season);
    o   Bottom trawler;
    o   Recreational fisheries;
    o   Ichthyoplankton;
    o   Fish processing;
    o   Marketing of fisheries products.

-   Collaboration with non-GFCM members in the field of data collection.

EXCERPT FROM THE QUESTIONNAIRES ON NATIONAL DATA COLLECTION AND STATISTICAL SYSTEMS COMPILED BY NATIONAL FOCAL POINTS
(original text as trasmitted to the GFCM Secretariat)

SECTION A - Fishery data collection structure

A1 – National institutional framework

1) *Description of the Institution officially responsible for the overall fishery data collection in your country ("Fishery Data Collection Office")*
…
Does this office collect all data related to fishery?

Adriatic		*Black Sea*		*Central Mediterranean*		*Eastern Mediterranean*		*Western Mediterranean*	
Albania	Partly	**Romania**	Partly	**Libya**	Partly	**Egypt**	Partly	**Algeria**	Partly
Croatia	Partly	**Bulgaria**	Partly	**Malta**	Yes	**Cyprus**	Yes	**France**	Partly
Italy	Partly			**Tunisia**	Partly	**Greece**	Partly	**Morocco**	Partly
Montenegro	Partly	**Turkey**	Partly	**Italy**	Partly	**Israel**	Partly		
Slovenia	No					**Lebanon**	No		
						Turkey	Partly		

2) *Is an appropriate training in fishery-related topics available at national level? (Yes/no/partly)*

Adriatic		*Black Sea*		*Central Mediterranean*		*Eastern Mediterranean*		*Western Mediterranean*	
Albania	Partly	**Bulgaria**	No	**Libya**	Partly	**Egypt**	Yes	**Algeria**	Partly
Croatia	Partly	**Romania**	Partly	**Malta**	No	**Cyprus**	Partly	**France**	Partly
Italy	Yes	**Turkey**	Yes	**Tunisia**	Partly	**Greece**	Partly	**Morocco**	Partly
Montenegro	No			**Italy**	Yes	**Israel**	No	**Spain**	Yes
Slovenia	Partly					**Lebanon**	No		

3) *If no or partly, please specify in which topic your country would need this training.*

Adriatic

Albania	It is necessary to establish the entire structure which start from data collectors to data processing in a way to flow those data to the proper unit in Fishery Directorate for different analyses
Croatia	Economic data; further training on stock assessment
Montenegro	Socio-economic data, Logbook data collection, Small scale fishery data collection and management, Data processing for stock assessment
Slovenia	Freshwater aquaculture, otholits reading, genetics and stomach content analysis, reading acoustic survey outputs

Black Sea

Bulgaria	Methodology for the collection of economic data
Romania	Standardization at regional level and in conformity with the international practice of the methods and tools for sampling, processing, analysing and interpreting the data and information as well as the fish stock assessment

Central Mediterranean

Libya	Establish a network to facilitate data collection - Training the personnel for data collection and analysis - Stock assessment survey
Malta	Determination of biological variables (age, maturity, etc.); Sampling regimes for the collection of fisheries information; Basic and advanced stock assessments
Tunisia	Use of sampling concepts for the collection of fisheries data Creating and managing databases on fisheries

Eastern Mediterranean

Egypt	Fish species scientific classification
Cyprus	Stock assessment (advanced training)
Israel	Fishing gears
Lebanon	Fish identification, fish biology, data collection procedures, stock assessment, statistics

Western Mediterranean

Algeria	Operating software processing fisheries data – Fisheries techniques and technologies - Training on fisheries bio economy
France	Sampling regime for the collection of fisheries information dedicated to multispecies fisheries
Morocco	Compilation & analysis of scientific, commercial and administrative data
Spain	Improvement some tools of assessment methods, reading of otholits of the new species, knowledge of statistics

4) *What should be further investigated?*

Black Sea

Turkey	Some of the fisheries data have been collected and studies have been done by several institutes but they do not produce enough information for management purpose
Romania	In Romania is only one marine research institute, untitled National Institute for Marine Research and Development (NIMRD) "Grigore Antipa" – Constanta. In the last 23 year, NIMRD Constantza doesn't receive from Government subvention for fishery research. All projects in the fishery field have been won by national or international competition. It is necessary that the funding of the fishery research programs must be in due time and with proper amounts; Also is necessary to extend of fisheries data collection Program with at sea surveys to collect eggs, larvae, juveniles and environmental conditions.

Central Mediterranean

Tunisia	Fishing techniques, including selective gear; Determination of the optimal fishing effort by fishery or stocks; Evaluation of certain marketable stocks of non-target species (demersal, echinoderms, etc.)

Eastern Mediterranean

Egypt	There is a appropriate training in fishery-related topics available at national level except the topic of fish species scientific classification
Turkey	Some of the fisheries data have been collected and studies have been done by several institutes but they do not produce enough information for management purpose
Lebanon	Catch assessment, stock assessment, vessel register, socio-economic data, fleet data

Western Mediterranean

Algeria	Establishing a permanent system for collecting biological data
Spain	Still there is not complete and sound scientific information for all the species and/or fisheries, as for the moment the specialists of IEO work with the main species and fisheries (….). Knowledge on some other species or fisheries is lower

SECTION B - Fishery data collection programme

1) *Does your country collect data on fisheries trough a data collection programme?*

Adriatic

Albania	Partly	FAO AdriaMed Project
Croatia	Yes	FAO AdriaMed Project and DCF (Reg CE 199/2008)
Italy	Yes	DCF (Reg CE 199/2008)
Montenegro	Partly	FAO AdriaMed Project
Slovenia	Yes	DCF (Reg CE 199/2008)

Black Sea

Bulgaria	Yes	DCF EU Reg. 199/2008
Romania	Yes	DCF EU Reg. 199/2008
Turkey	Partly	Turkstat Fishery Statistic + FAO Eastmed Project

Central Mediterranean

Libya	Partly	Support received from FAO-MedSudMed and Copemed sub-regional projects
Malta	Yes	DCF (Reg CE 199/2008) and support received from FAO-MedSudMed sub-regional project
Tunisia	Partly	
Italy	Yes	DCF (Reg CE 199/2008)

Eastern Mediterranean

Egypt	Yes	Periodical data collection + FAO Eastmed Project
Cyprus	Yes	DCF EU Reg. 199/2008
Greece	No	Data collection programme not running since 2009
Lebanon	No	
Turkey	Partly	Turkstat Fishery Statistic + FAO Eastmed Project

Western Mediterranean

Algeria	Yes	A pilot project for collecting statistical databases on sample surveys (production / effort) under the framework of cooperation between the FAO and Algeria.
France	Yes	DCF (Reg. CE 199/2008)
Morocco	Yes	Catch certification: survey and monitoring of landing catch and effort
Spain	Yes	DCF (Reg. CE 199/2008)

2) Does your data collection programme incorporate the following aspects?

	Adriatic					Black Sea		
	Albania	Croatia	Italy	Montenegro	Slovenia	Bulgaria	Romania	Turkey
Biology	Partly	Yes	Yes	Yes	Yes	Yes	Yes	Partly
Ecology	No	Yes	Partly	Yes	Yes	Partly	Partly	No
Technology	No	Yes	Yes	No	Yes	Partly	Yes	Yes
Environmental science	No	Partly	Yes	Partly	Yes	No	No	No
Economics	Partly	Yes	Partly	Partly	Yes	Yes	Yes	Partly
Social science	No	Partly	Partly	Partly	Yes	Yes	Partly	Partly

Western Mediterranean				Central Mediterranean				Eastern Mediterranean				
Algeria	France	Morocco	Spain	Libya	Malta	Tunisia	Italy	Egypt	Cyprus	Greece	Lebanon	Turkey
No	Yes	Partly	Yes	Partly	Yes	No	Yes	Yes	Yes	Yes	No	Partly
No	Partly		Partly	Partly	Yes	No	Partly	No			No	No
Partly	No	Partly	No	No	Yes	Partly	Yes	Partly		Partly	No	Yes
No	Partly		Partly	Partly	Yes	No	Partly	No	Partly	Partly	No	No
Partly	Yes	Partly	Yes	Partly	Yes	Partly	Yes	Partly	Yes	Partly	No	Partly
Partly	No		Partly	Partly	Yes	No	Partly	Partly			No	Partly

3) Which data are currently collected within your fishery data collection programme (rate value from 0 to 5)?

	Adriatic					Black Sea		
	Albania	Croatia	Montenegro	Slovenia	Italy	Bulgaria	Romania	Turkey
Biological data	1	5	4	5	5	4	4	2
CPUE data	1	5	5	5	5	3	3	4
Discards data	0	3	3	5	3		3	
Economic data fleet	3	4	NA	5	5	5	3	
Economic data landing	3	5	NA	5	5	5	3	
Effort data	1	5	5	5	5	5	3	5
Environmental data	1	3	3	5	3			
Fish processing	2	3	NA	5	3	5	4	4
Fishing gears	3	5	5	5	4	4	4	
Fleet data	4	5	5	5	5	5	4	
Landing data	3	5	5	5	5	5	3	3
Recreational fisheries	NA	5	1	5	3			
Social data	1	4	NA	5	3	4	3	
VMS data	1	5	5	5		4	5	2

Eastern Mediterranean				Central Mediterranean				Western Mediterranean			
Egypt	Cyprus	Turkey	Greece (until 2008)	Libya	Malta	Italy	Tunisia	Algeria	France	Morocco	Spain
3	5	2	5	2	5	5			5	3	5
3	4	4	5	4	5	5	2	2	4	3	
	5		5		2	3			3		3
5	4		3	4	5	5	2		5		5
3	4		3	4	5	5	3	3	4	3	5
	4	5	5	3	5	5	3	3	4	3	3
3	2		2	3	2	3			2		3
2	4	4	5		2	3	2	1	5		5
5	4			3	4	4	2	4	5	3	3
5	5		5	4	5	5	4	4	5	5	5
4	4	3	5	4	5	5	4	4	5		5
3							3	1	3		4
2					5	3		2			4
	5	2	5 (up to now)		5		1		5	4	

4) Are there any fishery surveys programmes currently in place in your country?
[questionnaires (Q), logbook (L), sales notes (SN), sampling programme (SP), census (C), fleet register (F), interview (I), licences (LI), statistical unit (SU), scientific survey (S), pilot study (P), experimental survey (E), etc.]

	Catch data	Landing data	Economic data on landing	Biological data	Fleet composition	Effort data
			Adriatic			
Montenegro	I	L	-	S	LI	L
Croatia	L	L	L, SN	S	L, LI	L
Albania	I, SU	I, SU	I, SU	I, SU	SU	-
Italy	SP	SP	SP	SP, S	C	SP
			Black Sea			
Bulgaria	L	L	Q	SP	F	F, C
Romania	L, Q	L, Q, SN	Q, LI	SP, S	L, Q, LI	L, Q
Turkey	Q	SN, LI, SP	-	SP	-	F, LI
			Central Mediterranean			
Malta	SP	LI, Q		SP	F	LI, Q
Italy	SP	SP	SP	SP, S	C	SP
Tunisia	L, SN	L	L, SN	SP	F	Q
Libya	-	C, SN		-	F	-
			Eastern Mediterranean			
Turkey	Q	SN, LI, SP		SP	-	F, LI
Cyprus	L, SP	L SP	Q, I	S	L	L, SP
Egypt	-	SN, LI, F	Q	SP	F	-
Greece	-	-	-	-	F	*

	Catch data	*Landing data*	*Economic data on landing*	*Biological data*	*Fleet composition*	*Effort data*
			Western Mediterranean			
Algeria	C	C	C, I	-	F	C
France	L, SP, SN	L, SP, SN	SP, SN	S, SP	C	L, SP, SN
Spain	-	SN	SN	SP	F	SN
Morocco	-	-	C, LI, SN	P, E, SP, Q	-	LI, F

* Greece: Fishing effort estimates for trawlers & purse seines using VMS data

5) Do you believe that all the data collected through the current surveys serve the national needs properly? (yes/no/partly)

Adriatic		*Black Sea*		*Central Mediterranean*		*Eastern Mediterranean*		*Western Mediterranean*	
Montenegro	Partly	**Bulgaria**	Yes	**Malta**	Partly	**Turkey**	Partly	**Algeria**	Partly
Croatia	Partly	**Romania**	Yes	**Italy**	Yes	**Cyprus**	No	**France**	Partly
Albania	No	**Turkey**	Partly	**Tunisia**	Partly	**Egypt**	Yes	**Spain**	Yes
Italy	Yes			**Libya**	Partly	**Greece**	Yes*	**Morocco**	Partly
Slovenia	Partly					**Lebanon**	Yes		

* Greece: for the importance of collected data

6) Do you think that other surveys would need to be better identified?

Adriatic

Albania	Small Scale Fisheries, Discards data, Recreational fisheries, Social data, reliable data
Croatia	1.economic data; 2.Environmental data - higher coverage; 3.fish processing data
Montenegro	Small scale fishery survey; Survey on the impact of fishery on marine mammals and sea turtles (by-catch); Socio-economic survey of the fishery sector; Survey on the impact of trawl fishery on benthic biocenosis (Posidonia, coral riffs)
Slovenia	Selectivity of fishing gears; Energy efficiency of fishing vessels
Italy	A second demersal survey to better identified the changes in the seasonality composition of the demersal assemblages (i.e. demographic structure; biodiversity)

Black Sea

Bulgaria	-
Romania	Extension of fisheries data collection Program with at sea surveys to collect eggs, larvae and juveniles; Surveys at sea in May, June/July and August/September for eggs; Surveys at sea in May and September for juveniles; The fisheries research must be completed with the monitoring of the environmental conditions. Correlate the surveys at sea with monitoring of environment conditions.
Turkey	Biological; Discard: Effort

Central Mediterranean

Libya	Bottom trawl; CPUE
Malta	While the data collected is enough it needs to be extended to other fisheries/stock
Tunisia	1) Catch / effort for small scale / inshore fisheries (generalizations from sampling procedures all along the coast) 2) Fleet (characteristics and economic data) 3) Recreational fishing
Italy	A second demersal survey to better identified the changes in the seasonality composition of the demersal assemblages (i.e. demographic structure; biodiversity)

Eastern Mediterranean

Egypt	Data collection of CPUE; bycatch; socioeconomic
Cyprus	-
Israel	-
Lebanon	Catch assessment; stock assessment; socio-economic; environmental data; fleet data; vessel register; CPUE; biological data; by catch data; rec. fishery; scientific surveys; fish processing
Turkey	Biological; Discard: Effort

Western Mediterranean

Algeria	Survey on the costs of vessel exploitation; Survey on the marketing of fisheries products; Survey on fishing gear; Survey of macroeconomic data
France	No
Morocco	Identification of some species
Spain	No

B1 – Effort and landing data

7) ***Does your country routinely collect effort data?***

Adriatic		*Black Sea*		*Central Med*		*Eastern Med*		*Western Med*	
Montenegro	Partly	**Bulgaria**	Yes	**Malta**	Partly	**Turkey**	Partly	**Algeria**	Yes
Croatia	Yes	**Romania**	Yes	**Italy**	Yes	**Cyprus**	Yes	**France**	Yes
Albania	Partly	**Turkey**	Partly	**Tunisia**	Partly	**Egypt**	Yes	**Spain**	Yes
Italy	Yes			**Libya**	Partly	**Greece**	No since 2009	**Morocco**	Yes
Slovenia	Yes					**Lebanon**	No		

8) ***If yes or partly, please provide the list of effort variables collected:***

Gear	*Variable*	*Adriatic*	*Black Sea*	*Central Med*	*Eastern Med*	*Western Med*
Dredge (for molluscs)	*Dredged bottom surface*	Croatia				Morocco
Trawl (including dredges for flatfishes)	*GT*days*	Albania; Croatia; Montenegro; Slovenia; Italy		Italy; Malta; Tunisia	Cyprus; Egypt; Turkey	France; Morocco; Spain
Trawl (including dredges for flatfishes)	*GT*hours*	Montenegro; Slovenia; Italy	Bulgaria; Romania; Turkey	Italy; Malta	Cyprus; Turkey	Spain
Trawl (including dredges for flatfishes)	*KW*days*	Montenegro; Slovenia; Italy	Bulgaria; Romania; Turkey	Italy; Malta	Cyprus; Turkey	Spain
Nets	*Net length * days*		Bulgaria; Romania; Turkey	Malta	Cyprus; Turkey	France; Morocco
Nets	*Surface*days*		Bulgaria	Malta		

Gear	Variable	Adriatic	Black Sea	Central Med	Eastern Med	Western Med
Long lines	Number of hooks * days	Italy	Bulgaria; Romania	Italy; Malta	Cyprus	France;
Long lines	Number of hooks * hours	Italy	Bulgaria; Romania	Italy; Malta	Cyprus	Morocco
Long lines	Number of longline units * days/hours			Italy; Malta	Cyprus; Egypt	Spain
Traps	Number of traps * days		Bulgaria; Romania	Italy; Malta		France; Morocco; Spain
Purse seiners	GT*Fishing sets/GT*days[1]	Albania; Montenegro; Slovenia; Croatia[1]	Bulgaria	Libya; Malta; Tunisia	Egypt; Turkey	Morocco
Purse seiners	Length of the net*Fishing sets	Albania; Slovenia; Italy	Bulgaria	Libya; Malta	Turkey	
Purse seine/FAD	Number of FADs * Number of trips			Malta	Cyprus; Egypt	Morocco; Spain

9) Does your country collect landing data for all the commercial species? (yes/no/partly)

Adriatic

Albania	Yes	The system of data collecting is applicable only for landings and for few species. In near future will be applicative a new system
Croatia	Yes	New programme calculates the main species as per métier
Italy	Yes	
Montenegro	Yes	System will be fully operated in 2014
Slovenia	Yes	

Black Sea

Bulgaria	Yes	
Romania	Yes	
Turkey	Partly	

Central Mediterranean

Libya	Partly	Thresholds are identified according to the technical regulation of the fishing law (14/89) Fishing Law No. 14/89 and his executive and technical regulations needs to be update. No commitment to use the logbook and no commitment to fill existing technical regulation forms.
Malta	Yes	
Tunisia	Yes	
Italy	Yes	

Eastern Mediterranean

Egypt	Yes	
Cyprus	Yes	
Greece	No since 2009	
Lebanon	No	
Turkey	Partly	

Western Mediterranean

Algeria	Yes	Landings by species carried out as per métier (trawler, sardine and small business).
France	Yes	Data processed from logbooks, sales notes and fishing notes. Sample surveys for vessels under 12m.
Morocco	Yes	
Spain	Yes	Data concerning landing and effort is actively compiled. It must be highlighted that it is compiled according to strict EU standards. FAO and EU standards, formats, and type of data should be aligned.

10) Information on landing data [Frequency: M (monthly); Q (quarterly); A (annually) Data source: questionnaires, logbook, sales notes, etc.]:

Adriatic		Frequency	Disaggregation	Data source
Albania	Volume of landings per species	M	By gear	Q, L
	Prices per species	M	By gear	L
Croatia	Volume of landings per species	A	By gear	L
	Prices per species	M	By gear	SN
Italy	Volume of landings per species	M	By fleet segment and gear	Q
	Prices per species	M	By fleet segment and gear	Q
Montenegro	Volume of landings per species			
	Prices per species			
Slovenia	Volume of landings per species	M	By fleet segment and gear	L
	Prices per species	A	By fleet segment and gear	SN

Black Sea		Frequency	Disaggregation	Data source
Bulgaria	Volume of landings per species	A	By gear	L
	Prices per species	A	By fleet segment	S
Romania	Volume of landings per species	M	By fleet segment	SN
	Prices per species	A	By fleet segment	SN
Turkey	Volume of landings per species	M	By fleet segment	Q
	Prices per species	M	By fleet segment	Q

Central Med		Frequency	Disaggregation	Data source
Italy	Volume of landings per species	M	By fleet segment and by gear	Q
	Prices per species	M	By fleet segment and by gear	Q

Central Med		Frequency	Disaggregation	Data source
Libya	Volume of landings per species	Q	By fleet segment	C
	Prices per species	M	By fleet segment	SN
Malta	Volume of landings per species	M	By fleet segment and by gear	L, Q
	Prices per species	M	By fleet segment and by gear	Direct sales, Market sales
Tunisia	Volume of landings per species	M	By fishery, by port and by species	L, Findings of landings, Coupons for transportation of fishery products
	Prices per species	M	By fishery, by port and by group of species	Auction (billing)

Eastern Med		Frequency	Disaggregation	Data source
Cyprus	Volume of landings per species	M	By fleet segment	L
	Prices per species	M	By fleet segment	SN
Egypt	Volume of landings per species	M	By fleet segment	L
	Prices per species	M		O
Greece	Volume of landings per species	Q	By fleet segment	SP
	Prices per species	A	By fleet segment	SP
Turkey	Volume of landings per species	M	By fleet segment	Q
	Prices per species	M	By fleet segment	Q

Western Med		Frequency	Disaggregation	Data source
Algeria	Volume of landings per species	M	By fleet segment	C
	Prices per species	M	By fleet segment	C
France	Volume of landings per species	M	By fleet segment	L
Morocco	Volume of landings per species	M	By fleet segment	SN
	Prices per species	M	By fleet segment	SN
Spain	Volume of landings per species	M	By fleet segment	L
	Prices per species			

11) Please specify the number of fisheries stock assessments carried out in your country over the last 3 years:

	Adriatic				Black Sea		Central Med			Eastern Med			Western Med			
	Italy	Slovenia	Croatia	Montenegro	Bulgaria	Romania	Italy	Malta	Tunisia	Egypt	Cyprus	Greece	Algeria	France	Morocco	Spain
Total number of stocks for which an assessment has been carried out	37	3	8	6	2	4	37	9	23	8	4	14	2	5	2	22
Potential number of stocks in your country	87		15	15	6	10	87		>30	>50		15			5	41
Percentage of stocks covered by each assessment	42%		50%	50%	33%	>50%	42%			15	6			>50	>50	32
How many assessments have been presented to GFCM?	25	3	4	4	1	2	25	16	3	2	10			3	2	41
How many assessments have been validated?	25	3	4	2	7	2	25	16	2	2	6			3	2	
How many assessments have been presented to other organizations/meetings?	22	3	4		7	4	22	7	23		2	10		5	2	37

12) Does your country routinely carry out scientific/experimental surveys at sea to collect biological and environmental information?

Region	Country				Environmental data
Adriatic	**Albania**	MEDITS	Acoustic + Ichthyoplanktonic-survey		NA
	Croatia	MEDITS	MEDIAS	SOLEMON	Yes
	Italy	MEDITS	MEDIAS	SOLEMON	Yes
	Montenegro	MEDITS	MEDIAS		Partly
	Slovenia	MEDITS	MEDIAS		No
Black Sea	**Bulgaria**	SBTS	ABTS	AHATS	No
	Romania	PTS	DTS		No
	Turkey	Anchovy	ErDEM		Yes
Central Med	**Libya**	No			NA
	Malta	MEDITS	MEDIAS		Partly
	Tunisia	Yes			Yes
	Italy	MEDITS	MEDIAS	Solemon	Yes
Eastern Med	**Cyprus**	MEDITS	Monitoring Programme under the Water Frame Directive (200/60/EC)		Yes

	Turkey	Anchovy	ErDEM		Yes
	Egypt	No	Scientific surveys by Res. Dept. of GAFRD		
	Greece	No	sampling programme (no data since 2009)		
	Lebanon	No			
Western Med	**Algeria**	ALPAL	ALDEM	No	Yes
	France	MEDITS	PELGAS (MEDIAS)		Partly
	Morocco		Survey of shells		Yes
	Spain	MEDITS	MEDIAS		Partly

B3 - Economic and social data

13) Does your country routinely collect economic and social data? (yes/no/partly)

Adriatic		*Black Sea*		*Central Med*		*Eastern Med*		*Western Med*	
Montenegro	Partly	**Bulgaria**	Yes	**Malta**	Yes	**Turkey**	Yes	**Algeria**	Partly
Croatia	Partly	**Romania**	Yes	**Italy**	Yes	**Cyprus**	Yes	**France**	Yes
Albania	Partly	**Turkey**	Yes	**Tunisia**	Partly	**Egypt**	No	**Spain**	Partly
Italy	Yes			**Libya**	Partly	**Greece**	No since 2009	**Morocco**	Yes
Slovenia	Yes					**Lebanon**	No		

14) If yes or partly, please list them:

	Adriatic	*Black Sea*	*Central Med*	*Eastern Med*	*Western Med*
Days at sea	Croatia, Slovenia, Montenegro, Italy, Albania		Italy, Libya, Malta, Tunisia	Cyprus, Greece*, Turkey	Algeria, France, Morocco
Fishing hours	Slovenia, Montenegro, Italy		Italy, Libya, Malta	Cyprus, Turkey	France, Morocco
Main gear used	Croatia, Slovenia, Montenegro, Italy, Albania		Italy, Libya, Malta	Cyprus	Algeria, France, Morocco
Engaged crew, total number	Croatia, Slovenia, Italy		Italy, Libya, Malta, Tunisia	Cyprus, Greece, Turkey	Algeria, France, Morocco, Spain
Engaged crew, Part time	Croatia, Slovenia, Italy		Italy, Libya, Malta	Cyprus, Turkey	Algeria, France, Morocco, Spain
Engaged crew, Full time	Slovenia, Italy		Italy, Libya, Malta, Tunisia	Cyprus, Turkey	Algeria, France, Morocco, Spain
Age of the crew				Turkey	Algeria, Morocco

	Adriatic	*Black Sea*	*Central Med*	*Eastern Med*	*Western Med*
Education level of the crew			Libya	Turkey	Algeria, Morocco
Household members engaged in fishing					Morocco
Wages and salaries of crew	Slovenia, Italy	Bulgaria, Romania, Turkey	Italy, Libya, Malta	Cyprus, Greece, Turkey	France, Morocco, Spain
Gross value of landing	Croatia, Slovenia, Italy, Albania		Italy, Malta, Tunisia	Cyprus, Greece, Turkey	Algeria,France, Morocco, Spain
Energy cost (fuel and oil)	Slovenia, Italy, Albania	Bulgaria, Romania, Turkey	Italy, Libya, Malta, Tunisia (fuel)	Cyprus, Greece, Turkey	France, Morocco, Spain
Repair and maintenance costs	Slovenia, Italy	Bulgaria, Romania, Turkey	Italy, Libya, Malta	Cyprus, Greece, Turkey	France,Morocco, Spain
Commercial costs	Slovenia, Italy	Bulgaria, Romania, Turkey	Italy, Libya, Malta	Cyprus, Turkey	France,Morocco, Spain
Other operational costs	Slovenia, Italy	Bulgaria	Italy, Malta	Cyprus	France, Spain
Fixed costs	Slovenia, Italy	Bulgaria, Romania	Italy, Libya, Malta	Cyprus, Greece	France,Morocco, Spain
Investments in physical capital	Slovenia, Italy	Bulgaria, Romania	Italy, Malta	Cyprus	France,Morocco, Spain
Depreciation costs	Slovenia, Italy	Bulgaria	Italy, Libya, Malta	Cyprus	Morocco, Spain
Volume of landings per species	Croatia, Slovenia, Italy, Albania	Bulgaria, Romania, Turkey	Italy, Malta, Tunisia	Cyprus, Greece, Turkey	Algeria,France, Morocco
Value of landings per species	Croatia, Slovenia, Italy, Albania	Bulgaria, Romania, Turkey	Italy, Malta	Cyprus, Greece, Turkey	Algeria,France, Morocco
Average price per species	Croatia, Slovenia, Italy		Italy, Libya, Malta, Tunisia	Cyprus, Turkey	Algeria,France, Morocco

* Greece: data collected in DCR framework only

15) *Type of surveys carried out [Temporal disaggregation: M (month); Q (quarter); Y (year); Type of data collection: census, sample survey; Data source: questionnaires (Q), logbook (L), sales notes (SN), etc.; Fleet segment coverage: all segments, main segments, few segments]*

Adriatic

Country	*Variable*	*Temporal*	*Type of data collection*	*Source*	*Fleet coverage*
Italy	Effort	M	Sample survey	Q	all segments
	Social data	Y	Sample survey	Q	all segments
	Income	Y	Sample survey	Q	all segments
	Costs	Y	Sample survey	Q	all segments
	Production per species	M	Sample survey	Q	Main segments

Country	Variable	Temporal	Type of data collection	Source	Fleet coverage
Montenegro	Effort	M	Census	L	all segments
Slovenia	Effort	Y	Census	L	all segments
	Social data	Y	Census	Q	all segments
	Income	Y	Census	Q	all segments
	Costs	Y	Census	Q	all segments
	Production per species	Y	Census	Q	main segments

Black Sea

Country	Variable	Temporal	Type of data collection	Source	Fleet coverage
Bulgaria	Effort	Y	Census	L	All segments
	Social data	Y	Census	Q	All segments
	Income	Y	Census	Q	All segments
	Costs	Y	Census	Q	All segments
	Production per species	Y	Census	L	All segments
Romania	Effort	M	Census	L	All segments
	Social data	M	Census	Q	All segments
	Income	M	Census	SN	All segments
	Costs	M	Census	Q	All segments
	Production per species	M	Census	Q	All segments
Turkey	Effort	M	Sample Survey	Q	All segments
	Social data	Y	Sample Survey		All segments
	Income	Y	Sample Survey	Q	All segments
	Costs	Y	Sample Survey	Q	All segments
	Production per species	M	Sample Survey	Q	All segments

Central Mediterranean

Country	Variable	Temporal	Type of data collection	Source	Fleet coverage
Italy	Effort	M	Sample Survey	Q	All segments
	Income	Y	Sample Survey	Q	All segments
	Costs	Y	Sample Survey	Q	All segments
	Production per species	M	Sample Survey	Q	Main segments
Libya	Effort	Q	Census	F	All segments
	Social data	Q	Sample Survey	SP	Few segments
	Income	Q	Sample Survey	SP	Few segments
	Costs	Q	Sample Survey	SP	Few segments
	Production per species	Q	Census	C	All segments
Malta	Effort				
	Social data	Y	Sample Survey	Q	Main segments
	Income				
	Costs				

Country	Variable	Temporal	Type of data collection	Source	Fleet coverage
	Production per species				
Tunisia	Effort	M	Sample Survey	L, SN	Main segments
	Social data				
	Income				
	Costs				
	Production per species	M	Sample Survey	L, SN	Main segments

Eastern Mediterranean

Country	Variable	Temporal	Type of data collection	Source	Fleet coverage
Cyprus	Effort	M	Sample Survey	L	All segments
	Social data	Y	Sample Survey	Q	All segments
	Income	Y	Sample Survey	Q	All segments
	Costs	Y	Sample Survey	Q	All segments
	Production per species	M	Sample Survey	SP	All segments
Greece (DCR only)	Effort	M	Sample Survey	SP	All segments
	Social data	Y	Sample Survey	SP	All segments
	Income	Y	Sample Survey	SP	All segments
	Costs	Y	Sample Survey	SP	All segments
	Production per species	M	Sample Survey	SP	All segments
Lebanon	Effort				
	Social data	Y	Sample Survey		
	Income	Y	Sample Survey	Q	
	Costs	Y	Sample Survey	Q	
	Production per species				
Turkey	Effort	M	Sample Survey	Q	All segments
	Social data	Y	Sample Survey		All segments
	Income	Y	Sample Survey	Q	All segments
	Costs	Y	Sample Survey	Q	All segments
	Production per species	M	Sample Survey	Q	All segments

Western Mediterranean

Country	Variable	Temporal	Type of data collection	Source	Fleet coverage
Algeria	Effort	M	Census	C	Main segments
	Social data	M	Census	F	all segments
	Production per species	M	Census	C	all segments
France	Effort	M	Census	L	All segments
	Income	Y	Sample Survey	SP	All segments
	Costs	Y	Sample Survey	SP	All segments
	Production per species	M	Census	L	Main segments

Morocco	Effort	M	Census	LI	All segments
	Social data	M	Census	C	Main segments
	Income	M	Sample Survey	SN	Main segments
	Costs	M	Sample Survey	Q	Main segments
	Production per species	M	Census	SN	Main segments
Spain	Social data	Y	Sample survey	Q	
	Income	Y	Sample survey	Q	
	Costs	Y	Sample survey	Q	

General information

SPAIN: Economic data of the Mediterranean request (Task 1) does not conform to the stratifications of community "data Collection" regulations: Regulation (EC) Nº 1543/2000; Regulation (EC) No. 199/2008 in the following aspects:

1) Stratification of the fleet which is ordered in the GFCM, regarding gear, size, length and areas GSA, is more disaggregated than collecting in the EU regulations, mentioned above. This would imply a new survey design of marine fisheries, made in Spain, and in many segments it would be necessary an exhaustive study of all elements of the population research, which is excessively fractionated.
(2) The survey costs would increase, without being guaranteed the quality of the survey. It would be very likely an increase in the lack of response of the reporting units.

SECTION C - Fleet monitoring

1) Is the logbook the primary source for the following information?[yes (Y), partly (P), no (N)]

	Adriatic					Black Sea			Central Med				Eastern Med					Western Med			
	Albania	Croatia	Italy	Montenegro	Slovenia	Bulgaria	Romania	Turkey	Italy	Libya	Malta	Tunisia	Egypt	Cyprus	Greece	Lebanon	Turkey	Algeria	France	Morocco	Spain
Fishing gear type	Y	Y	P	Y	Y	Y	P	P	P	N	P	P	Y	P	N	N	P	N	P	P	P
Time of fishing	Y	Y	Y	Y	Y	Y	P	P	Y	N	P	P	P	P	N	N	P	N	P	P	N
Fishing area	Y	Y	Y	Y	Y	Y	P	P	Y	N	P	P	P	P	N	N	P	N	P	P	P
Number of fishing operations	Y	Y	P	Y	Y	Y	P	P	P	N	P	N	N	P	N	N	P	N	P	Y	Y
Effort	Y	Y	P	Y	Y	Y	P	P	P	N	P	P	N	P	N	N	P	N	P	P	P
Landing by species	Y	Y	P	Y	Y	Y	P	P	P	N	P	P	Y	P	N	N	P	N	P	P	P
Total landing	Y	Y	P	Y	Y	Y	P	P	P	N	Y	P	Y	P	N	N	P	N	P	P	P

2) *Countries integrate the information coming from the logbook with:*
[questionnaires (Q), sales notes (SN), sampling programme (SP), census (C), fleet register (F), interview (I), licences (LI), statistical unit (SU), scientific survey (S), pilot study (P), experimental survey (E), etc.]

Black Sea	
Romania	Q, C, SN
Turkey	Q

Central Mediterranean	
Malta	Q
Italy	SP, F, LI
Libya	SP, C

Eastern Mediterranean	
Turkey	Q
Cyprus	SP
Egypt	Q
Greece	SP
Lebanon	C

Western Mediterranean	
Algeria	C
France	S, SP
Spain	F, VMS, SN
Morocco	LI, SN, F, S

3) *The fishery data collected through the logbook can be considered as:*

Adriatic

	Albania	**Croatia**	**Italy**	**Montenegro**	**Slovenia**
Reliable	Partly	Partly	Partly	Partly	Yes
Complete	Partly	Partly	Partly	Partly	Yes
Relevant	Partly	Yes	Partly	Partly	Yes

Montenegro: lack of fishery inspection control, and lack of Rulebooks.
Croatia: errors in entry or validation.
Italy: information not sufficient to perform statistical analysis on fisheries.

Black Sea

	Bulgaria	**Romania**	**Turkey**
Reliable	Yes	Partly	Partly
Complete	Yes	Partly	Partly
Relevant	Yes	Yes	Yes

Romania: fishermen sometimes incorrectly report some data and to omit reporting of data.
Turkey: misreporting; incomplete.

Central Mediterranean

	Italy	**Libya**	**Malta**	**Tunisia**
Reliable	Partly	No	Yes	Partly
Complete	Partly	No	Partly	Partly
Relevant	Partly	No	Yes	Yes

Italy: information not sufficient to perform statistical analysis on fisheries.
Libya: there is no logbook.
Malta: no reference to the target species. Does not provide enough space to report discards by species.

Eastern Mediterranean

	Egypt	**Cyprus**	**Lebanon**	**Turkey**
Reliable	Partly	Partly	Partly	Partly
Complete	No	Partly	Partly	Partly
Relevant	Partly	Yes	Partly	Yes

Egypt: there is no periodically data about effort; there is no data about navigation road and locations.
Cyprus: some mistakes are reported.
Turkey: misreporting; incomplete.

Western Mediterranean

	France	**Morocco**	**Spain**
Reliable	Yes	Partly	Yes
Complete	Partly	Yes	Yes
Relevant	Yes	Partly	Yes

Algeria: The logbook is not used.
France: Under-coverage of vessel under 12m.
Morocco: Catch declarations are estimated; problem of identification of some species.

> 4) *Indicate if a vessel monitoring system (VMS) has already been implemented in your country for:*

Adriatic

	Albania	**Croatia**	**Italy**	**Montenegro**	**Slovenia**
The entire fishing fleet	No	No		No	
Part of the fishing fleet (specify)	Yes	Yes	Yes	Yes	Yes
None of the fishing fleet	Partly				

Montenegro: > 10 m LoA
Albania: > 12 m length
Slovenia: All vessels > 15 m LOA and some vessels using trawls. Until the end of the year all vessels using trawls will be equipped with VMS.
Croatia: All vessels > 15 m covered by VMS (plan to cover all vessel sizes)
Italy: > 12 m length

Black Sea

	Bulgaria	**Romania**	**Turkey**
The entire fishing fleet			
Part of the fishing fleet	Yes	Yes	Yes
None of the fishing fleet			

Bulgaria: vessels > 12 meters
Romania: fishing fleet with LOA > 12 meters
Turkey: all ICCAT vessels and vessels over 15 meters

Central Mediterranean

	Italy	Libya	Malta	Tunisia
The entire fishing fleet				
Part of the fishing fleet (specify)	Yes	Yes	Yes	Yes
None of the fishing fleet				

Italy: more than 12 m length
Libya: only for ICCAT vessel
Malta: more than 12 m length

Eastern Mediterranean

	Egypt	Cyprus	Greece	Lebanon	Turkey
The entire fishing fleet					
Part of the fishing fleet	Yes	Yes	Yes		Yes
None of the fishing fleet				Yes	

Egypt: only two vessels used in tuna fisheries
Cyprus: vessels > 12 meters
Turkey: all ICCAT vessels and vessels over 15 meters

Western Mediterranean

	Algeria	France	Morocco	Spain
The entire fishing fleet	No			
Part of the fishing fleet		Yes	Yes	Yes
None of the fishing fleet				

Algeria: plan to implement it in the near future
France: vessel more than 15 m length
Spain: for all vessels over 12 m length