GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN

COMMISSION GÉNÉRALE DES PÊCHES POUR LA MÉDITERRANÉE

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Report of the FWP workshop on fisheries data collection in the Black Sea

Varna, Bulgaria, 22-23 April 2013

Draft before participants' comments

OPENING AND ARRANGEMENT OF THE MEETING

1. The Workshop on Fisheries data collection in the Black Sea was held in Varna, Bulgaria, on 22 and 23 April 2013. It was attended by 15 participants from five riparian countries of the Black Sea, namely Bulgaria, Romania, Russian Federation, Turkey and Ukraine. A complete list of participants is enclosed in Appendix B. The meeting regretted the absence of Georgia despite the efforts made to ensure its attendance.

2. Ms Pilar Hernández, from the GFCM Secretariat, greeted participants on behalf of the GFCM Executive Secretary and recalled the purpose of the workshop, held within the first phase of the GFCM strategic Framework Programme (FWP) and integrated within a series of activities related to data collection for the Mediterranean and Black Sea, promoting a bottom-up approach to better grasp specificities and issues arising at sub-regional level for the improvement of data collection in the whole area.

3. Mr Violin Raykov was nominated chair of the workshop. The GFCM Secretariat ensured the task of rapporteur. The participants introduced themselves and subsequently the agenda (Appendix A of this report) was adopted.

ADVANCES ON THE GFCM DATA COLLECTION AND SUBMISSION FRAMEWORK

Current status of activities to strengthen the data submission and collection process in the Mediterranean and Black Sea

4. The GFCM Secretariat presented the advances on the FWP since its initial activities in late 2012 and stressed the steps already undertaken by the GFCM to revise its data collection scheme and provide solutions to its members to facilitate the data submission. Each of the main objectives of the workshop was addressed more in-depth, highlighting the need for

precise inputs from the concerned countries to identify gaps and subsequently pinpoint priorities and potential solutions.

Review of the draft GFCM Data Collection Regulation Framework (DCRF)

5. Mrs. Hernández gave an overview of the GFCM Data Collection Reference Framework (DCRF) stressing that it was a living document to be enriched and completed with the inputs received from the members during the three sub-regional workshops in the Adriatic sea, in Western, Central and eastern Mediterranean and the current one in the Black Sea

6. Mr Federico De Rossi, from the GFCM Secretariat, introduced the objectives of the whole action on data collection, i.e.:

- Improve the efficiency of the GFCM data collection framework at sub-regional level, including improving the definition of the fisheries data to be collected by the GFCM and the efficiency of the submission tools
- Harmonize GFCM requirements with national data collection systems

7. He then reported on the process undertaken from January to March 2013, summarized in an internal assessment performed at the Secretariat, on current GFCM requirements in terms of data reporting and the actual contents of the databases and an external assessment of the existing statistics programmes in the member States. He stressed the scarcity of data received and stored in the GFCM databases. The reasons behind this low submission level was to be elucidated during the series of workshops carried out in the Mediterranean and the current one in the Black Sea, and proposals for action to improve this situation were then recalled as the main goals of the current FWP action.

8. In the ensuing discussions, it was underlined that the sustainability of fisheries management in the Black Sea could only be ensured through joint collaboration among all stakeholders in the six riparian countries and through the implementation of regulations. In particular, the crucial need for a common framework for data submission in the area was stressed by several members and – taking into account the many differences between the six riparian countries in this field – the GFCM was regarded as the most suitable umbrella.

9. In light of the above, the need for financial support todedicated sampling programmes was also stressed. The GFCM Secretariat recalled that the FWP could facilitate support to actions needed in this regard in the near future.

CURRENT STATUS OF NATIONAL DATA COLLECTION SYSTEMS IN THE BLACK SEA

Current status of compliance with GFCM requirements and overview of national data in the GFCM databases and Information Systems

10. Mr De Rossi introduced the result of the internal assessment for the three GFCM Members (Bulgaria, Romania, and Turkey). The percentages of coverage of some of the most relevant fields and the chronology of submissions by countries were presented and are summarized in Appendix C.

11. The analysis revealed a good level of compliance with fleet-related data for Bulgaria, whose information was timely submitted, while Romania and Turkey needed to update their information given the fact that the last submission was in 2011 and the fields' coverage was partial. Concerning Task 1, only Bulgaria regularly transmitted the requested data although not for all the sub-tasks, and in particular 1.3 and 1.5 were fully covered. Turkey submitted Task 1 data only once, in 2012, with a good coverage except for 1.4 and the entire 1.5. Romania never transmitted Task 1 data. The level of compliance for other GFCM requirements (VMS, IUU, port state measures) was not satisfactory given the fact that no information had ever been reported by these members.

Summary of information received through the online questionnaire on ongoing national data collection programmes

12. Mrs Pilar Hernández introduced a summary of the analysis carried out based on the information provided prior to the meeting on their ongoing national data collection programmes. The information was collected through an online questionnaire, adopted in a dedicated preparatory meeting for this GFCM FWP activity, and sent to each country National Focal Point, specifically identified and contracted for this GFCM FWP activity.

13. The three GFCM member countries had answered the questionnaire and in general reported that they had data collection programmes currently in force with a great range of biological/economic/effort data gathered with certain regularity. Gaps in the transmission of this information to the GFCM were mainly due to the lack of dedicated personnel in the case of Romania. Turkey clarified that the information submitted through the questionnaire included both Mediterranean and Black sea areas and on this regard, they were called to submit again the questionnaire divided by the two areas.

14. Some participants made remarks about the information presented and provided some clarifications on the referred gaps in their data submission. The complete summary once revised by the participants with the distinction of Black sea and Mediterranean in the case of Turkey is presented in Appendix D.

Description of national data collection programmes. Evaluation of strengths and gaps

15. The three National Focal Points of Bulgaria, Romania and Turkey then presented an overview of each national data collection system. Bulgaria and Romania are subject to the EU Data Collection Framework and therefore have in place the necessary collection programmes for most of the data also required by GFCM. Bulgaria does not have major difficulties in submitting the data to GFCM as it is in fact one of the most compliant members.

16. Bulgaria presented its comprehensive data collection programme in compliance with the EU-DCF and GFCM requirements. Logbooks and sales notes, vessel register, licenses as well as questionnaires are utilized regularly. Biological data are collected through surveys by the Institute of Oceanology (IO-BAS), aggregated and provided to National Agency of Fisheries and Aquaculture (NAFA) of the Ministry of Agriculture and Food. Data on the impact of fishing and other anthropogenic activities on the sea bottom and marine environment are also monitored by NAFA. Surveys at sea are done in collaboration with Romania with the vessel Akademik belonging to the IO-BAS. The current legislation for the management of data collection programme and the active and operational VMS system for fishing vessels were underlined as strengths. On the other hand, some problems, such as the 20-year-old fleet and

the lack of cooperation with all the riparian countries preventing to have a full picture of the status of resources in the Black Sea area, were recognized.

17. Romania started its National Data Collection Programme (NDCP) after accessing the EU in 2007 and underlined that, since 2008, the programme complexity had increased with the introduction of new requirements and elements. The National Agency for Fisheries and Aquaculture (NAFA) is designated for the implementation of the National Data Collection Programme in Romania. Fisheries data obtained in framework of NDCP or from different projects are incorporated into a database. Reports and data are transmitted to Romanian NAFA within the National Data Collection Programme. In parallel, the national fisheries report is transmitted annually to the Black Sea Commission. Romania reported that, within the GFCM framework, its activity was very limited also because the data reporting task was not clearly established and addressed to any national institution, but there was a willingness to submit data to the GFCM starting from 2013.

18. The institutions responsible for collecting fisheries data in Turkey are the Turkish Statistical Institute (Turkstat) and the Department of Statistics and Information Systems (DSIS) under the Directorate General of Fisheries and Aquaculture (DGFA).Turkstat collects annually marine fisheries data, including total fisheries production by species, market value, number and types of fishing vessels, employment in fishery and import/export data of fish products. A fisheries information system was established in 2007 with the assistance of the EU. The VMS is present in all marine vessels over 15 m and will be improved and extended to vessels over 12 m. Data collection systems and programmes are conducted to collect fisheries data from the 28 districts to be submitted to the GFCM and to collect inland and aquaculture data, biological data of anchovy, and catch/effort data of vessels over 12 m (with 10% of sampling for small scale fisheries, under 10 m). To monitor anchovy stocks, Turkey has recently started a project named "Stock Assessment of Black Sea Anchovy Using Acoustic Methods and Establishing a Monitoring Model for National Fisheries Data Collection Program".

19. Also, non-GFCM member Ukraine and Russia presented an overview on their data collection systems.

20. In Russia fisheries data are collected by the Russian Federal Research Institute of Fisheries and Oceanography (VNIRO), supported by the National Fisheries Agency. On the basis of scientific research validated by the scientific council of VNIRO and by other scientific institutions, a recommended value for total allowable catch is determined annually. On a biannual basis, trawl and static pound coastal surveys by direct account of mass and quantity per area are carried out. It was underlined that the value of actual production did not always reach the set value for selected species. In Russia, the main problems encountered in the collection of scientific data on the state marine resources are due to a lack of specialized research vessels and also on the assessment of the impact on resources by recreational fisheries. Also, no reliable data on IUU fishing and by-catch exist at present.

21. In Ukraine, fisheries activities data are collected out under the umbrella of the State Agency of Fisheries of Ukraine coordinated by the Minister of Agrarian Policy and Food of Ukraine. YugNIRO is the leading scientific institute nominated to collect data on marine fisheries resources in the Black Sea as well as of open seas that are actually gathered through three different sources: i) Special surveys performed for commercial species in certain periods

of their life cycles; ii) Observations on onshore fishing points (stationary gears) and iii) Reports of scientific observers onboard of fishing operating vessels. Still, supplementary protection bodies are in charge of collecting other types of data, e.g. VMS control is a duty of the State enterprise "Monitoring Remote Centre of Fishing Vessels". Overall, there are about five streams of data and information related to fisheries from different sources which are currently working separately. The urgent need for the establishment of a national statistical data centre in charge of gathering all fishery-related data under the umbrella of YugNIRO was highlighted As an additional problem, the historical data stored by YugNIRO are on paper and their transformation into digital formats would demand man-power and financial effort.

22. Romanian scientists offered assistance in the creation of such information centre based on the experience of Romania to build up the same type of structure.

Sub-regional activities to strengthen national data collection

23. The *ComFish Project – Strengthening the impact of fisheries related research through dissemination, communication and technology transfer* – aims at revealing how to meet challenges in the fisheries sector by stimulating the uptake of scientific knowledge on fisheries related research and by involving different stakeholders groups that play a key role or have close links with the fisheries industry, innovation, EU policies and economics. Five fishing regions – Mediterranean and Atlantic, North Sea, Baltic, and Black Sea were selected to serve as case studies for the project tasks fulfillment in the period 2012-2015.

24. *Application of genetic-biochemical methods for investigation on biodiversity and protection of fish population in* the Black Sea. This project aimed at identifying species with the use of genetical markers in the absence of correspondence between morphological and genetical features (e.g. genus *Alosa*). The results of the project were particularly useful in light of restoration and conservation measures of various vulnerable species and also for sustainable fisheries. The results revealed that in the Black Sea there were two different species of turbot, and two subspecies of anchovy.

25. The importance of this type of research was highlighted by many participants as its findings are important not only for the stock identification and management but also for restocking purposes.

GENERAL DISCUSSION

26. In the ensuing discussion, the main problems faced and possible solutions raised were tackled and are summarized below:

- Difficulties in collecting socio-economic data on fleets. In Bulgaria, the age of most vessels (about 20 years) and the low education level of fishermen was mentioned as possible causes.
- Aggregation level of some variables of Task 1, in particular in Task 1.4 could be simplified.
- Task 1 could be separated in different modules to be submitted in different phases.
- Need for increasing collaboration with non-GFCM members whose contribution to international scientific *fora* (technical meetings of EU-STECF and of GFCM) currently remains under the initiative of individual researchers.

- Need for standardization of methodologies and format of data collected by all the six countries since data are not always compatible nor comparable.
- Improvement of communications between the countries and the Secretariat by ending reminders and reports of received information after each submission.

CONCLUSIONS AND RECOMMENDATIONS

27. All conclusions and recommendations issued in the two previous sub-regional workshops were endorsed by the Workshop on Black Sea and are summarized in Appendix E.

28. In Addition, two specific problems faced in this area were identified: the extension and lack of knowledge on IUU activities and the lack of cooperation on data-sharing among all riparian countries. The workshop made the following recommendations on these subjects:

- **To fight IUU fishing:** The group recommended to encourage the establishment/reinforcement of national MCS measures to detect IUU activities and submit the list of vessels to GFCM, designate ports for inspections of foreign vessels, and communicate these ports to GFCM;
- **To improve cooperation on data sharing:** All riparian countries are currently submitting national fisheries reports to the Black Sea Commission (BSC) on an annual basis and in a standardized way. Taking advantage of this ongoing activity and within the framework of the current Memorandum of Understanding between GFCM and the BSC, the workshop recommended that the current template of BSC National Reports be revised in collaboration with the SAC to create a new form that non-GFCM members could fill and submit to both organizations on a voluntary basis, in order to ensure that a minimum of information is provided and have a most complete picture of fisheries in the whole Black Sea area. It was also stressed that unification of systems was not feasible, but that some kind of harmonization was necessary.

Appendix A

Agenda

1. **Opening and arrangement of the meeting**
   - Adoption of the agenda
   - Introduction of participants
   - Introduction of workshop objectives

2. **Advances on the GFCM data collection and submission framework**

   2.1. **Current status of activities to strengthen the data submission and collection process in the Mediterranean and Black Sea**

   2.2. **Review of the draft GFCM Data Collection Regulation Framework (DCRF)**

3. **Current status of national data collection systems in the Black Sea:**

   3.1. **Current status of compliance with GFCM requirements and overview of national data in the GFCM databases and Information Systems**

   3.2. **Summary of information received through the online questionnaire on on-going national data collection programmes**

   3.3. **Description of national data collection programmes. Evaluation of strengths and gaps**

   3.4. **Sub-regional activities to strengthen national data collection**

4. **Discussion:**
   - Identification of gaps, definition of potential actions
   - Priorities and emerging issues at sub-regional level

5. **Wrap up of conclusions and recommendations of the workshop**

6. **Adoption of draft report and closure of the meeting**

Appendix B

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Appendix C

NATIONAL COMPLIANCE STATUS
BASED ON THE DATA TRANSMITTED TO THE GFCM SECRETARIAT

[As at 19th April 2013]

Table 1 - Data submission by theme (all GFCM members)

THEME	SUBMISSION YEAR								
	2013	2012	2011	2010	2009	2008	2007	2006	TOT
Vessel Records	3	4							7
Fleet Register	2	1	10						13
AVL	3	5	14	5	2	22	9	17	77
FRA			1	1					2
MMS				2	1				3
Task 1	9	10	7	8	2	7			43
Fishing Capacity			*7*						*7*
Dolphin Fish		1	2	1	3	1	1		9
Registered Ports		1				2			3
TOTAL	17	22	41	17	8	32	10	17	164

The figure in each cell of the table is the cumulative number of submissions received by the Secretariat (therefore members double counting can occur)

Table 2

Data transmission protocols made available by the Secretariat*

THEME	Excel	CSV	XML
Vessel Records	x	x	x
Fleet Register	x	x	x
AVL	x	x	x
FRA	x	x	x
MMS	x	x	x
Task1		x	x
Dolphin Fish	x		

Table 3

Data submission by transmission protocol

TRANSMISSION PROTOCOLS	
CSV	10
Email	2
Excel	64
Excel-GFCM	52
PDF	13
Word	1
XML	21

**specifications on codifications and structures for the above-mentioned formats are made available on the GFCM website*

Table 4 - Total number of data submission by theme and country

COUNTRY	Task 1	Vessel Records	*Fleet Register*	*AVL*	*FRA*	*MMS*	Dolphin Fish	IUU	Port state measures	Fishing Capacity
Bulgaria	**2**	**2**	*2*	*6*	-	-	-	-	-	1
Romania	-	-	*1*	-	-	-	-	-	-	-
Turkey	**1**	-	*1*	*3*	-	*1*	-	-	-	-

Table 5 - Last year of data submission by theme and country

COUNTRY	Task 1	Vessel Records	*Fleet Register*	*AVL*	*FRA*	*MMS*	Dolphin Fish	IUU	Port state measures	Fishing Capacity
Bulgaria	**2011**	**2013**	*2013*	*2011*	-	-	-	-	-	2011
Romania	-	-	*2011*	-	-	-	-	-	-	-
Turkey	**2012**	-	*2011*	*2009*	-	*2009*	-	-	-	-

Table 6 - Last fleet data submission

LAST INFORMATION	Bulgaria	Romania	Turkey
Submitted dataset(s)	VRs	RFR	RFR-MMS
Last submission	2013	2011	2011
Vessel number	**2,351**	**476**	**17,399**

VRs (Vessel Records), RFR (Regional Fleet Register), AVL (Authorized Vessel List), FRA (Fisheries Restricted Area), MMS (Minimum Mesh Size)

Table 7 - Fleet data submission (compulsory fields coverage)

FIELDS	Bulgaria	Romania	Turkey
Vessel Name	100.0%	100.0%	100.0%
Vessel Registration Number	100.0%	100.0%	100.0%
GFCM Registration Number	100.0%	100.0%	100.0%
Vessel Type	100.0%		
Operational Status	100.0%		100.0%
Port Registration	100.0%		100.0%
Year Entry Activity	100.0%		
License indicator (yes)	45.1%		100.0%
Fishing Period info (>15m)	100.0%	100.0%	100.0%
Authorized Fishing Period (>15m)	1.8%		
Fishing Gear 1	100.0%	100.0%	91.1%
LOA	100.0%	100.0%	100.0%
GRT			95.3%
GT	100.0%	100.0%	79.9%
Construction Year	100.0%	100.0%	47.2%
Hull Material	100.0%	4.6%	99.9%
Powered (yes)	92.6%		
Engine Power Main	92.6%	50.4%	99.8%
Owner Name	100.0%	8.6%	100.0%
Owner Address	100.0%	8.6%	100.0%
Operator Name	100.0%	100.0%	
Operator Address	100.0%	100.0%	
VMS indicator (>15m)	88.2%	57.1%	
Minimum Mesh size			7.9%
Fishery Restricted Area			

Table 8 - Task 1 data submission status

Reference YEAR	Bulgaria	Romania	Turkey
2007	**-**	**-**	**-**
2008	**x**	**-**	**-**
2009	**x**	**-**	**-**
2010	**x**	**-**	**x**
2011*	**-**	**-**	**-**

** Submission deadline: May 2013*

Table 9 - Task 1 data fields coverage

TASK	FIELDS	Bulgaria	Romania	Turkey
		2010	**-**	**2010**
SEGMENT	**Year-Country-Segment**	**7**	**-**	**11**
1.1	FSE-vessel_no	100%	-	100%
1.1	FSE-id_Capacity_Measure	100%	-	100%
1.1	FSE-Capacity_Value	100%	-	100%
1.3	FSE-Engine_Power	86%	-	100%
1.3	FSE-Employment	0%	-	100%
1.3	FSE-SalaryShare	0%	-	100%
1.3	FSE-LandingWeight	100%	-	0%
1.3	FSE-LandingValue	100%	-	0%
1.3	FSE-VesselValueTotalFleet	0%	-	100%
1.3	FSE-WorkingDaysPerYear	0%	-	100%
1.3	FSE-WorkingHoursPerDay	0%	-	100%
1.3	FSE-VariableCostsOfFisshingPerDay	0%	-	100%
1.3	FSE-PercOfVCFromFuelCosts	0%	-	100%
1.3	FSE-YearlyFixedCosts	0%	-	0%
GSA-SEGMENT	**Year-Country-GSA-Segment**	**7**	**-**	**35**
1.1	FS-vessel_no	100%	-	100%
1.1	FS-Capacity_Value	100%	-	100%
OPERATIONAL UNIT	**Year-Country-GSA-Segment-GearClass-SpeciesGroup**	**53**	**-**	**35**
1.2	OU-id_Gear_Class	100%	-	100%
1.2	OU-id_group_target_species	100%	-	100%
1.2	OU-VesselNo	100%	-	100%
FISHING PERIOD - GEAR	**Year-Country-GSA-Segment-GearClass-SpeciesGroup-Period-Gear**	**73**	**-**	**35**
1.2	FP-month_start	100%	-	100%
1.2	FP-month_end	100%	-	100%
1.2	FP-id_gear	100%	-	100%
1.2	FP-vessel_number	100%	-	100%

TASK	FIELDS	Bulgaria	Romania	Turkey
		2010	-	2010
1.4	FP-Effort_TimeValue	100%	-	100%
1.1	FP-CapacityValue	99%	-	100%
1.4	FP-ActivityValue	0%	-	0%
1.4	FP-id_GearUnitsType	1%	-	0%
1.4	FP-OtherGearUnits	0%	-	0%
1.4	FP-GearUnitsValue	0%	-	0%
1.4	FP-TotalEffort	100%	-	100%
1.4	FP-id_CLPrecisionLevel	97%	-	0%
1.4	FP-TotalEffortUnits	100%	-	100%
1.4	FP-id_CLValueType	97%	-	0%
1.4	FP-CatchOrLandingValue	100%	-	0%
1.4	FP-id_CPUE_LPUE_PrecisionLevel	0%	-	0%
1.4	FP-id_CPUE_LPUEValueType	0%	-	0%
1.4	FP-CPUEOrLPUEValue	100%	-	0%
1.4	FP-id_DiscardPrecisionLevel	0%	-	0%
1.4	FP-DiscardValue	0%	-	0%
1.4	FP-id_ByCatchPrecisionLevel	0%	-	0%
1.4	FP-ByCatchValue	0%	-	0%
SPECIES	**Year-Country-GSA-Segment-GearClass-SpeciesGroup-Period-Gear-Species**	**237**	**-**	**88**
1.2	SP-id_species	100%	-	100%
1.4	SP-CatchOrLandingValue	100%	-	0%
1.4	SP-CPUEOrLPUEValue	57%	-	0%
1.5	SP-MinLengthForCatch	0%	-	0%
1.5	SP-MaxLengthForCatch	0%	-	0%
1.5	SP-AverageLength	0%	-	0%
1.5	SP-Sex	0%	-	0%
1.5	SP-MaturityScale	0%	-	0%
1.5	SP-AdditionalInfo	0%	-	0%

Percentage refer to the national dataset currently stored in the GFCM Task 1 Regional Information System

Appendix D

EXTRACT FROM THE ANALYSIS OF THE QUESTIONNAIRES ON NATIONAL DATA COLLECTION AND STATISTICAL SYSTEMS
(BY P. CARPENTIERI GFCM SECRETARIAT)

BLACK SEA

Bulgaria
Romania
Turkey

Questionnaire Feedback received

Bulgaria	Yes	All sections complete
Romania	Yes	All sections complete
Turkey	Yes	All sections complete

SECTION A
Fishery data collection structure

A1 – National institutional framework

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?

Romania	Partly
Bulgaria	Partly
Turkey	Partly

Do other institutions collect fishery data?

Bulgaria	**Partly**	**Biological, Economic data**
Romania	**Partly**	**Fleet, Landing, Biological, Discards, Fish Processing, Effort, Surveys, Aquaculture**
Turkey	**Yes**	**Landing**

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

Bulgaria	Romania	Turkey
No	**Partly**	**Yes**

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

BUL: methodology for the collection of economic data
ROM: 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

What should be further investigated?

ROM: 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.

TUR: 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.

SECTION B
Fishery data collection programme

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

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

Does your data collection programme incorporate the following aspects?

	Bulgaria	**Romania**	**Turkey**
Biology	Yes	Yes	Partly
Ecology	Partly	Partly	No
Technology	Partly	Yes	Yes
Environmental	No	No	No
Economics	Yes	Yes	Partly
Social science	Yes	Partly	Partly

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

	Bulgaria	Romania	Turkey
Biological data	4	4	2
CPUE data	3	3	4
Discards data		3	
Economic data fleet	5	3	
Economic data landing	5	3	
Effort data	5	3	5
Environmental data			
Fish processing	5	4	4
Fishing gears	4	4	
Fleet data	5	4	
Landing data	5	3	3
Recreational fisheries			
Social data	4	3	
VMS data	4	5	2

Are there any fishery surveys programmes currently in place in your country?

Catch data

BUL: Logbook
ROM: Logbook, Questionnaires
TUR: Questionnaires

Landing data

BUL: Logbook
ROM: Logbook, Questionnaires, Sale notes
TUR: Sales notes, Licenses, SP.,

Economic data on fleet

BUL: Questionnaires
ROM: Questionnaires, Licenses

Biological data

BUL: Sampling programme
ROM: Sampling programme, Scientific survey
TUR: Sampling programme

Fleet composition

BUL: Fleet register
ROM: Logbook, Questionnaires, Licenses

Effort data

BUL: Fleet register, Census
ROM: Logbook, Questionnaires
TUR: Fleet register, Licenses,

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

Bulgaria	Romania	Turkey
Yes	**Yes**	**Partly**

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

ROM: 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;

TUR: Biological; Discard: Effort

B1 – Effort and landing data

Does your country routinely collect effort data?

Bulgaria Yes
Romania Yes
Turkey Partly

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

Gear	Variable	Country
Trawl (including dredges for flatfishes)	GT*days	BULGARIA; ROMANIA TURKEY
Trawl (including dredges for flatfishes)	KW*days	BULGARIA; ROMANIA TURKEY
Trawl (including dredges for flatfishes)	GT*hours	BULGARIA; ROMANIA TURKEY
Nets	Net length * days	BULGARIA; ROMANIA TURKEY
Nets	Surface*days	BULGARIA
Long lines	Number of hooks * days	BULGARIA; ROMANIA
Long lines	Number of hooks * hours	BULGARIA; ROMANIA
Long lines	Number of longline units * days/hours	
Traps	Number of traps * days	BULGARIA; ROMANIA
Purse seiners	GT*fishing sets	BULGARIA
Purse seiners	Length of the net * Fishing sets	BULGARIA
Purse seine/FAD	Number of FADs * Number of trips	

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

Bulgaria Yes
Romania Yes
Turkey Partly

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

Country		Frequency	Disaggregation	Data source
BULGARIA	Volume of landings per species	Annually	By gear	L
	Prices per species	Annually	By fleet segment	S
ROMANIA	Volume of landings per species	Monthly	By fleet segment	SN
	Prices per species	Annually	By fleet segment	SN
TURKEY	Volume of landings per species	M	BY FLEET SEGMENT	Q
	Prices per species	M	BY FLEET SEGMENT	Q

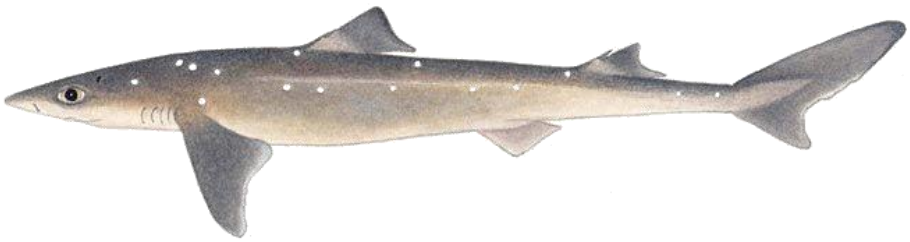
B2 – Biological data and assessment

Main commercial species per countries (tot landing)

Bulgaria

Sprattus sprattus

Trachurus mediterraneus



Squalus acanthias

Psetta maxima

Engraulis encrasicolus

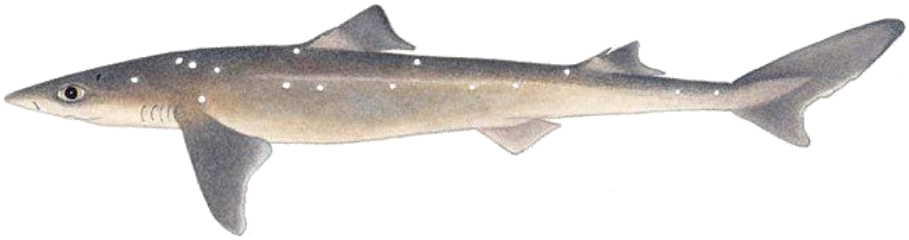
Main commercial species per countries (tot value)

Bulgaria

Sprattus sprattus

Psetta maxima

Squalus acanthias



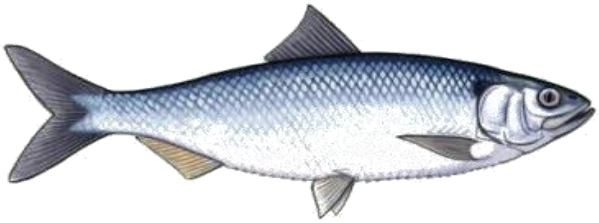
Trachurus mediterraneus

Engraulis encrasicolus

Main commercial species per countries (tot landing)

Romania

Sprattus sprattus



Alosa pontica

Psetta maxima

Engraulis encrasicolus

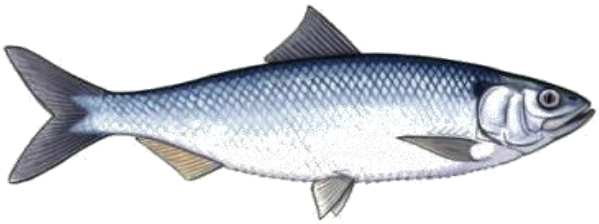
Trachurus mediterraneus

Merlangius merlangus

Main commercial species per countries (tot value)

Romania

Psetta maxima



Alosa pontica

Sprattus sprattus

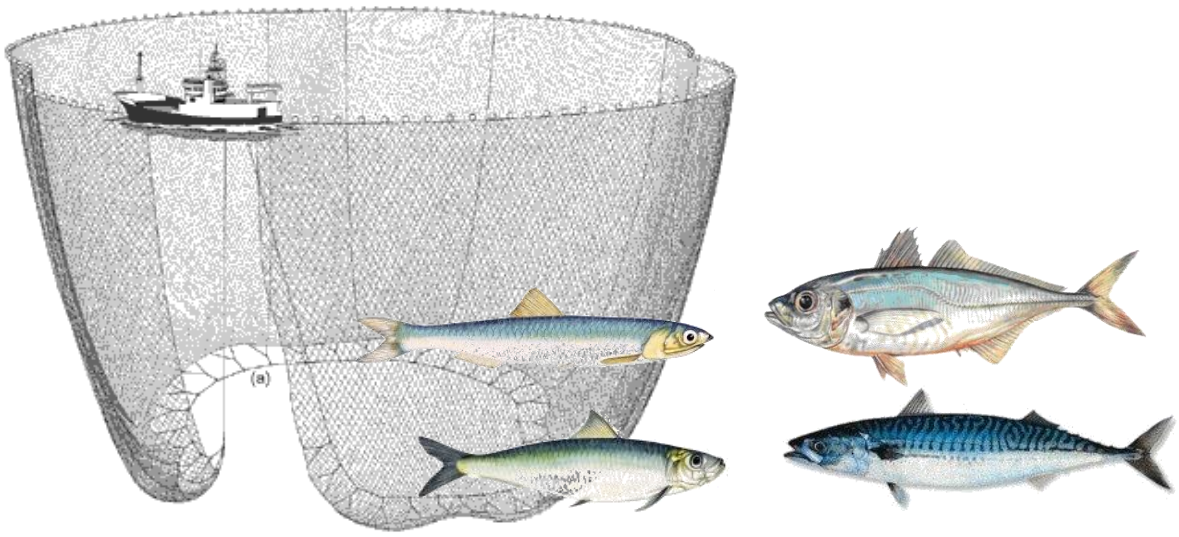
Engraulis encrasicolus

Trachurus mediterraneus

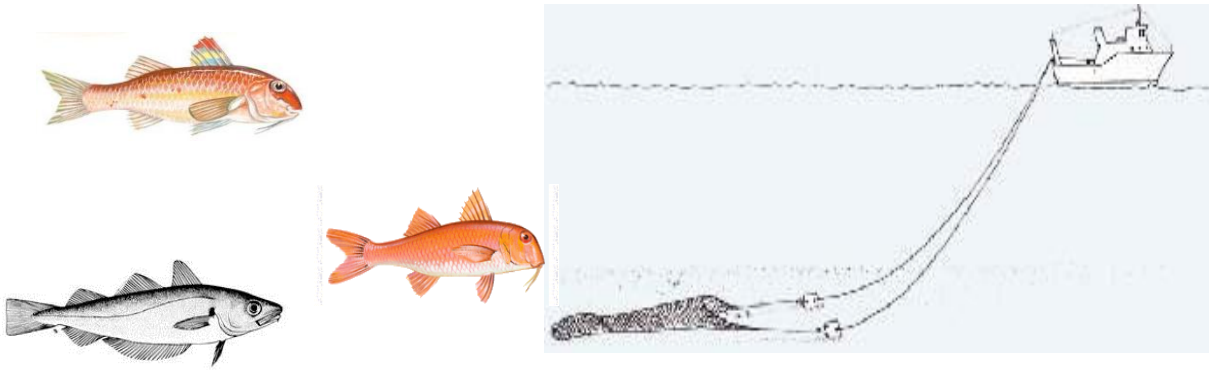
Merlangius merlangus

Some important commercial species with relative gears

Turkey



Engraulis encrasicolus; Sardina pilchardus; Trachurus mediterraneus; Scomber japonicus



Mullus barbatus, Mullus surmuletus, Merlangius merlangus

Please list the species for which biological information/variables (length, age, weight, sex and maturity) are collected:

Sprattus sprattus	Bulgaria	Romania	Turkey
Length	Yes	Yes	Yes
Age	Yes	Yes	Yes
Weight	Yes	Yes	Yes
Sex	Yes	Yes	Yes
Maturity	Yes	Yes	Yes

Squalus acanthias	Bulgaria	Romania	Turkey
Length		Yes	
Age			
Weight		Yes	
Sex		Yes	
Maturity		Yes	

Psetta maxima	Bulgaria	Romania	Turkey
Length	Yes		Yes
Age	Yes		Yes
Weight	Yes		Yes
Sex	Yes		Yes
Maturity	Yes		Yes

Trachurus mediterraneus	Bulgaria	Romania	Turkey
Length		Yes	Yes
Age		Yes	Yes
Weight		Yes	Yes
Sex		Yes	Yes
Maturity		Yes	Yes

Engraulis encrasicolus	Bulgaria	Romania	Turkey
Length		Yes	Yes
Age		Yes	Yes
Weight		Yes	Yes
Sex		Yes	Yes
Maturity		Yes	Yes

Pagellus erythrinus	Bulgaria	Romania	Turkey
Length			Yes
Age			
Weight			Yes
Sex			Yes
Maturity			Yes

Merlangius merlangus	Bulgaria	Romania	Turkey
Length		Yes	
Age			
Weight		Yes	
Sex		Yes	
Maturity		Yes	

List the species for which assessment has been carried out over the last 3 years:

Engraulis encrasicolus		TUR	ROM
Psetta maxima	BUL	TUR	ROM
Sprattus sprattus	BUL		ROM
Trachurus mediterraneus			ROM
Squalus acanthias			ROM
Merlangius merlangus			ROM
Engraulis encrasicolus		TUR	ROM
Psetta maxima	BUL	TUR	ROM
Sprattus sprattus	BUL		ROM
Trachurus mediterraneus			ROM

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

	Bulgaria	Romania	Turkey
Total number of stocks for which an assessment has been carried out	**2**	**4**	
Potential number of stocks in your country	6	**10**	
Percentage of stocks covered by each assessment	**33%**	>50%	
How many assessments have been presented to GFCM?	**1**	2	
How many assessments have been validated?	**7**	2	
How many assessments have been presented to other organizations/meetings?	**7**	**4**	

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

				Environmental data
Bulgaria	**SBTS**	**ABTS**	**AHATS**	No
Romania	**PTS**	**DTS**		No
Turkey	**Anchovy**	**ErDEM**		Yes

SBTS; ABTS; DTS; ErDem : demersal surveys
AHATS; Anchovy: acoustic surveys

B3 - Economic and social data

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

Bulgaria	Yes
Romania	Yes
Turkey	Yes

If yes or partly, please list them:

Energy cost (fuel and oil)	Bulgaria	Romania	Turkey
Wages and salaries of crew	Bulgaria	Romania	Turkey
Repair and maintenance costs	Bulgaria	Romania	Turkey
Commercial costs	Bulgaria	Romania	Turkey
Other operational costs	Bulgaria		
Fixed costs	Bulgaria	Romania	
Investments in physical capital	Bulgaria	Romania	
Depreciation costs	Bulgaria		
Volume of landings per species	Bulgaria	Romania	Turkey
Value of landings per species	Bulgaria	Romania	Turkey
Average price per species	Bulgaria	Romania	Turkey
Energy cost (fuel and oil)	Bulgaria	Romania	Turkey
Wages and salaries of crew	Bulgaria	Romania	Turkey
Repair and maintenance costs	Bulgaria	Romania	Turkey
Commercial costs	Bulgaria	Romania	Turkey
Other operational costs	Bulgaria		
Fixed costs	Bulgaria	Romania	
Investments in physical capital	Bulgaria	Romania	
Depreciation costs	Bulgaria		
Volume of landings per species	Bulgaria	Romania	Turkey
Value of landings per species	Bulgaria	Romania	Turkey

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]*

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

SECTION C
Fleet monitoring

Is the logbook the primary source for the following information?

	Bulgaria	Romania	Turkey
Fishing gear type	Yes	Partly	Partly
Time of fishing	Yes	Partly	Partly
Fishing area	Yes	Partly	Partly
Number of fishing operations	Yes	Partly	Partly
Effort	Yes	Partly	Partly
Landing by species	Yes	Partly	Partly
Total landing	Yes	Partly	Partly

Countries integrate the information coming from the logbook with:

ROM: questionnaires, census, sales notes
TUR: questionnaires

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

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

ROM: fishermen sometimes incorrectly report some data and to omit reporting of data
TUR: misreporting; incomplete

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

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

BUL: vessels > 12 meters
ROM: fishing fleet with LOA > 24 meters
TUR: all ICCAT vessels and vessels over 15 meters

SECTION D
National data collection programmes and GFCM requirements

Does your current data collection programme provide data complying with the GFCM requirements for data and information (e.g. Vessel records, Task 1, etc..)? (yes/no/partly)

Bulgaria	Romania	Turkey
Yes	Yes	Partly

TUR: Lack of Biological, Discard, By-catch; Catch by Fishing Gear due to multigears vessels.

At present, which of the following data/information have been reported by your country to fulfil the GFCM requirements?

Data	BUL	ROM	TUR
Dolphin fish			
IUU			
Port State Measures	2012		
Task 1	2012		
Task 1.1 (Fleet and area)	2012		2012
Task 1.2 (Main resources and activity variables)	2012		2012
Task 1.3 (Economic variables)	2012		2012
Task 1.4 (Effort variables)	2012		2012
Task 1.5 (Provisional biological parameters)	2012		
Vessel record	2012		2012
VMS	2012		

Please indicate if your national codification is compliant or not (yes/no/partly) with the GFCM codification.

	BUL	ROM	TUR
Fleet segmentation	No	Partly*	Partly
Geographical sub-areas	Yes	Yes	Yes
Statistical grid	Yes	Yes	Partly
Fishing gear	Yes	Yes	Yes
Fishing gear class	Yes	Yes	Yes
Species	Yes	Yes	Yes
Group of species	No	Yes	Yes

ROM: fleet segmentation is in conformity with EU Dec 93/2010

How should your country improve its level of compliance?

BUL: By continuing to development of statistical information system
ROM: As a EU Members States, in the frame of DCF, Romania and Bulgaria from Black Sea area must respect the tasks established annually by RCM Med&BS; PG Med&BS; Liaison meetings (LM) and STECF EWGs.
TUR: The Department of Statistics and Information Systems under Directorate General of Fisheries and Aquaculture was recently established. National data collection systems and VMS have been developing continually.

How should GFCM facilitate the improvement of your country's level of compliance?

BUL: By guidelines and training

ROM: The same data are reported in too many places in different formats and too many times (BSC, GFCM, DCF/EC). GFCM, DG MARE/DCF and BSC must have only one database on the GFCM server in a format established in common by the experts from Mediterranean and Black Sea area. The situation will be the same with that for North European Countries which will have a common database on ICES platform.

TUR: With the projects carried out by GFCM

List any problem encountered by your country in compiling and/or submitting the requested data/information to GFCM:

	BULGARIA
Dolphin fish	NA
IUU	No problems
Port State Measures	No problems
Task 1	No problems
Task 1.1	No problems
Task 1.2	No problems
Task 1.3	No problems
Task 1.4	No problems
Task 1.5	No problems
Vessel records	No problems
VMS	No problems

	ROMANIA
Dolphin fish	data reporting task was not established clearly to an institution
IUU	data reporting task was not established clearly to an institution
Port State Measures	data reporting task was not established clearly to an institution
Task 1	
Task 1.1	data reporting task was not established clearly to an institution
Task 1.2	data reporting task was not established clearly to an institution
Task 1.3	data reporting task was not established clearly to an institution
Task 1.4	data reporting task was not established clearly to an institution
Task 1.5	data reporting task was not established clearly to an institution
Vessel records	data reporting task was not established clearly to an institution
VMS	data reporting task was not established clearly to an institution

Appendix E

IDENTIFIED GAPS AND PROPOSED ACTIONS FOR IMPROVEMENT OF THE FISHERIES DATA COLLECTION IN THE MEDITERRANEAN AND BLACK SEA

VESSEL RECORDS

Gaps/Difficulties	Most of countries don't submit these data.
Comments	Data are available in most of the countries but they are not submitted to the GFCM. The number of the requested variables should be reduced.
Recommendations	Data must be submitted. If no changes occur, members should submit the list once a year.

TASK 1

Gaps/Difficulties	Most of countries submit these data only partially and some have never submit them.
Comments	Not all the variables are clearly defined. The aggregation level is too detailed. Lack of dedicated staff at national level. The tool to submit Task 1 data is not user friendly.
Recommendations	Improve the definition of variables. Revise the aggregation level. Harmonize these data requirements with other data collection frameworks at regional level. Identify a minimum set of mandatory information/variables. Separate the different subtasks in modules that could be submitted in a staggered way. Tasks 1.1, 1.2, 1.4 and 1.5 could be submitted by June of year n+1. Task 1.3 (socio-economic data) could be submitted by the end of the year n+1

Comments from GFCM Secretariat: *"There are countries in which biological / economic / effort data are available through the collection programme currently in place, however the requested information is not provided to the GFCM Task 1"*

TASK 1.1

Gaps/Difficulties	It is mostly filled, no real problem.
Comments	The time lag is too long, it should be reduced to n-1 although it was also said that some countries cannot have these data before Novemeber of the second year.

TASK 1.2

Gaps/Difficulties It is mostly filled, however there are some problems in the compilation due to the too detailed aggregation level.

Recommendation Reduce the aggregation level for some variables.

TASK 1.3

Gaps/Difficulties Socio-eco variables, as requested till now, are not collected in some countries.
Problem of data availability for all requested fields.

Comments Description/meaning of some variables is not clear.
In general, this task should be simplified.

Recommendations Economic variables should be better defined in an *ad hoc* glossary.
The number of variables should be reduced to a minimum agreed upon.

TASK 1.4

Gaps/Difficulties Data not fully available for all requested fields.

Comments Description/meaning of some variables is not clear.
This task should be simplified.

Recommendations The requested variables should be revised and modified.
The number of variables should be reduced.
The aggregation level for some variables should be reduced.

TASK 1.5

Gaps/Difficulties This information is not submitted.

Comments The present requirements are not useful for assessment purposes.
The purpose of task 1.5 should be revised.

Recommendations If agreed that these data should be used for assessment then:

- Time lag in the submission of the data should be minimized.
- Different categories of priority species with different data rquirements should be established (i.e.:species to be regularly assessed, species for which a rough monitoring is needed)

and then specifications of data needed for each category and time frame should be further decided.
If its decided that data for stock assessment is submitted only through Stock Assessment Forms instead, task 1.5 may no longer be useful within the framework of Task 1.

IUU

Gaps/Difficulties	Data are not submitted**.**
Comments	Some countries do not consider it relevant in their area whilst others (Black Sea and Eastern countries) think that GFCM should take more active role on this issue.
Recommendations	Even if low or negligible, information should be reported. Continue with the initiated activities to fight IUU in the region by GFCM.

PORTS STATE MEASURES

Gaps/Difficulties	Information is not submitted.
Comments	Some countries don't have registered ports for inspections, in other cases, the information to be sent was not clear.
Recommendations	When available it should be reported. The Secretariat should facilitate the understanding of the information requested.

VMS

Gaps/Difficulties	Information is not submitted
Comments	VMS have already been implemented in most countries and information is available but it is not submitted to the GFCM. The Secretariat clarified that the data required are very simple, just the name of the Monitoring Center and the status of implementation of VMS in each country
Recommendations	Information should be reported

DOLPHIN FISH

Gaps/Difficulties	Information is submitted
Comments:	Some details in the current submission forms could be improved.
Recommendation	Review the effort definition (number of FAD and number of vessel).
Current time frame	May (reference year n-1)
Revised time frame	When an extension of the season is granted the deadline should be revised.