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**GENERAL FISHERIES COMMISSION
FOR THE MEDITERRANEAN**



**COMMISSION GÉNÉRALE DES PÊCHES
POUR LA MÉDITERRANÉE**

GENERAL FISHERIES COMMISSION FOR THE MEDITERRANEAN

SCIENTIFIC ADVISORY COMMITTEE (SAC)

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**REPORT OF THE WORKSHOP ON THE DATA COLLECTION
METHODS APPLIED TO ALL SEGMENTS OF THE FLEET AND
THEIR COHERENCE WITH THE REQUIREMENTS OF
THE GFCM TASK 1**

Rome, Italy 29th September-1st October 2010

OPENING OF THE WORKSHOP

1. The workshop was attended by 35 experts from 16 GFCM contracting parties (Albania, Algeria, Croatia, Egypt, the European Commission, France, Greece, Italy, Lebanon, Libya, Malta, Montenegro, Morocco, Slovenia, Tunisia and Turkey), along with experts from the FAO Fisheries and Aquaculture Department including FAO regional projects, and the GFCM Secretariat.
2. The Coordinator of the Sub-Committee on Statistics and Information (SCSI) and Chairperson of the workshop, Mr Joël Vigneau, opened the meeting and welcomed the participants.
3. The list of participants is given in Appendix A and the Agenda of the meeting in Appendix B.
4. Ms Alicia Mosteiro was elected rapporteur of the meeting.

BACKGROUND AND OBJECTIVES OF THE WORKSHOP

5. The workshop recalled that the GFCM had endorsed, in its 34th session (Athens, April 2010), the proposal made by SAC to organise a workshop on data collection methods

applied to all segments of the fleet, and their coherence with the requirements of the GFCM Task 1. The terms of references for the workshop are as follows:

- a) review the different methods and data collection programmes in place within GFCM Member Countries;
 - b) review the problems arising from the submission of Task 1 data;
 - c) for each of the problems raised in the point above, exchange experiences from other countries in the same field and expertise from the sub-regional projects;
 - d) agree on methods to address the problems raised;
 - e) anticipate problems related to the submission of Task 1.3
6. The objective of the workshop was to review the difficulties encountered by Member Countries when submitting the data on Task 1.1, 1.2 and 1.4 by the end of February 2010 as recommended by GFCM (Recommendation GFCM 33/2009/3), and exchange experiences in search for solutions and codes of good practices.
 7. In this respect, Mr Matthew Camilleri (GFCM Secretariat) provided an overview of the updated data entry / submission software application together with the prototype of the Task 1 regional information system developed by the Secretariat.
 8. He recalled that there are currently 13 different frameworks (<http://151.1.154.86/gfcmwebsite/DataInformationReportingRequirements.html>) under which GFCM Members are requested to provide data and information, which are essential for the Commission to undertake effective monitoring and management of fisheries in the GFCM Area. He added that the Task 1 framework is considered to be vital both for multidisciplinary scientific assessments of fisheries and as an indispensable tool for taking management decisions.
 9. He informed the workshop that, so far, ten countries had submitted data for the reference year 2008 and displayed the information provided through various data processing and reporting features incorporated into the TASK 1 regional information system. Mr Camilleri reminded the participants that it is the Secretariat's intention to place this information system online as soon as possible, for the benefit of various users, in conformity with a data access policy which is yet to be defined by the SCSI and endorsed by the Commission.

REVIEW OF THE METHODS AND DATA COLLECTION PROGRAMMES WITHIN GFCM COUNTRIES

10. Under this agenda item, the Chair invited experts to deliver presentations¹ on the methods and data collection programmes used for delivering Task 1 data to the GFCM secretariat in 2010. A summary of each presentation is given in the following sub-sections.
11. After this agenda item, the MedFisis project had a side-meeting with a group of countries interested in receiving support from the project to upgrade their fleet register and catch assessment systems (applications + methodology) to be able to comply with Task-1 requirements.

¹ Summaries as provided by national experts at the workshop.

12. The countries participating in the side-meeting were Albania, Algeria, Egypt, Lebanon, and Libya. Comments on support requested to the project and assistance that can be delivered follow each country's summary.

Albania

13. The expert of Albania explained that data collection and data submission in Albania was passing a transition phase since new laws in Fisheries and in Aquaculture are preparing and should be ready by the end of the year.
14. Together with the proper provisions regarding data collection and data submission, in the new laws, will be reflected in a new structure in Fishery Administrative Body, building a separate unit of statistical and economic in fisheries and aquaculture which will constitute a progress in this regard.

MedFisis assistance:

15. The Albanian representative expressed the country's interest in receiving support from the project since their Ministry is going through a process of full reorganisation. Only two people make up the staff allocated to fisheries now. There are therefore no funds to launch a survey in the country but the data is available.
16. The group stressed that the priority was to recover the data (rehabilitate the previous census/register) and train at least one person. A big taskforce would be necessary to reorganise the Ministry. The second step would pass through receiving official request from the country to the project through the appropriate channels.

Algeria

MedFisis assistance:

17. The Algerian representative noted that Algeria has developed its own software. The data is collected in separate schemes; one for the "chalutiers" and "sardiniers" through a questionnaire filled up by field recorders; and another for the artisanal fisheries, by sampling 10% of the active artisanal fisheries in the villayas, estimating the number of active vessels per trimester. The artisanal fisheries production is 8% of the total, but its value is much higher. From here emanates the need for an adequate sampling system.
18. Algeria indicates that a file with some characteristics of artisanal vessels already exists, and could be used as a starting point. This is necessary to estimate the catches; however, the estimation differs according to the ports.
19. The group suggested developing first a sampling frame and at a later stage a pilot survey in the field (maybe through CopeMed II).
20. The group was also informed that Algeria is launching the "Observatoire Socio-economique" through CopeMed II.

Croatia

21. The expert of Croatia certified that Croatian Fishing Fleet Register, logbook and landing declaration were in line with the EU requirements. Croatia is preparing the Data Collection Programme in line with EU DCF, and is in process of identification of the

Metier. The expert of Croatia expressed that due to format for data entry differences with GFCM Task 1, a lot of time is needed to fill out the requested information. Most Data for Task 1.1, Task 1.2 and Task 1.4 are available, but it takes time to enter all data in GFCM Task1 DB Application (Croatian database may not at this time easily export data).

22. Issues and concerns:

- Fleet segmentation per effort – data available, new routines need to be programmed for automatic GFCM Task 1 segmentation.
- Task 1 database needs to be filled manually – time consuming.
- Human capacity and financial constrains – funds available for data collection and available number of employees as compared to the requirements
- Task 1.3 and 1.5 are expected to be delayed – issues with communication with fishermen, issues of available resources, issues of confidentiality (data per vessel) and problems of aggregation as per required outputs (time consuming – programmers need time to programme coordination routines for automatic export of data available into GFCM Task 1 database.
- Timely submission of data – due to aforementioned constraints some delays have occurred and are expected in the future (submission pending manual entry).
- Official statistics and fisheries data – requirements for minimum data required do not match since official statistics (Bureau of Statistics) collects data on the level of enterprise and DCR/Task 1 requires at the level of vessel; additional constrains (finances, employees).

Egypt

MedFisis assistance:

23. A census/fleet register exists in Egypt in excel format which was checked for reliability and found to be 99% reliable data. However, there is need for the new MedFisis software in order to be able to produce the Task 1.1 and 1.2 outputs. Currently, Egypt has the information in paper copies that need to be inserted into excel.
24. The group suggested taking action following a detailed roadmap:
- 1st provide Egyptian representatives with the Questionnaire for the Census (in English) and Data Field Descriptions both to be translated into Arabic by the Egyptian focal point.
 - 2nd review the questionnaire fields and data field descriptions by the national focal point. MedFisis will, in due time, customise the application to host the modifications introduced by the Egyptian focal point.
 - 3rd provide the Egyptian representatives with the data codification system (reference tables) to be translated into Arabic by the national focal point and adjusted, together with the MedFisis team, to the national specificities (populate certain tables with national-specific data fields).
 - 4th Transfer/enter some test data to MedFisis Fleet Register and certify the software.
 - 5th Installation, customization and training on Fleet Register software. The software will be in English, while the reference tables, questionnaires and data field descriptions will be translated into Arabic by the Focal Point and introduced in the application.

25. The Egyptian representatives immediately started working with the MedFisis team (during the stay in Rome for the WS). They were provided with an XML file of the reference tables, and given the task to begin translating it. A visual representation of the tables (pdf) was also provided as an aid to the translation. The census questionnaire and the data field descriptions were also facilitated to the representatives for their translation.
26. The best way to move forward was discussed with the project team. Ideally, Egyptian representatives would travel to Rome with the support from EastMed or MedFisis. This option is considered to maximise efforts, costs and effectiveness, since the full MedFisis team will be available and therefore the result can be certified by the team.
27. It was agreed that, once the translating and reviewing tasks are complete, hopefully around mid-October (20th - 22nd), the Egyptian representatives would travel to Rome with a test or sample data to finalise the software, to be trained on its use and be given the full package together with the set-up.

France

28. The expert of France detailed the new approach in data collection methods undertaken by France for estimating catches and effort for the small-scale vessels, by sampling fishing trips on-site. The originality of the approach lies in the use, during the sampling protocol elaboration, of a preliminary exhaustive collection of annual activity calendar. The sampling allocation is optimised, by covering at best, the variability of the catches between métiers, fishing areas and seasonality.
29. In terms of methodology, the population sampled is the total number of harbours * days of activity, and the spatial stratification aggregates homogeneous harbours in terms of métiers and fleets. The observation unit is a set of harbours an observer may sample during one day. A random selection of sampling units is drawn for each set of homogeneous harbours and time strata.
30. For raising purpose, knowledge of the total number of fishing trips at the population level is required; otherwise this information may be estimated. During the first analysis, post-stratification has been used, after having found more similarities in fishing activity practised than in the harbour location. Finally, the bootstrap method has been used to derive the estimates and their variances. More details on the methodology may be found in Demaneche et al (2008)².
31. The preliminary results of the survey showed reliable estimates, especially for the important métiers, and some difficulties (high uncertainty) for minor métiers, i.e. less represented in the samples. For improving the latter, there is the solution of increasing the sampling rate, with a direct consequence on the cost, or develop alternative methodologies, to enrich the information already collected, such as telephone surveys.
32. For submission of Task 1 data, it is the exhaustive fishing activity calendar which has been used. Further works and refinement will be done to use the catch assessment survey for submitting the remaining data of task 1.4, and forthcoming submission requirements.

² Demaneche, S., C. Merrien, J. Vigneau, O. Guyader, P. Berthou, P. Lespagnol, E. Leblond, F. Daures. 2008. A new approach to estimate catches and fishing effort of small scale fisheries by sampling fishing trips on-site. ICES CM 2008/K:14, 12 p.

Greece

33. The expert of Greece explained that the scope of the Greek National Fisheries Data Collection Program (NFDCP) was to collect primary biological, technical, environmental and socioeconomic data in a national level, in order to be integrated into the Community DCF, meet the requirements of GFCM Data Collection Task 1 and fulfill the demands of ICCAT; also to support the idea of an integrated and precautionary approach to protect, conserve and manage fisheries stock and finally to meet the provisions of the Common Fisheries Policy (CFP).
34. Many obstacles evoking great difficulties in the implementation of the NFDCP have been observed. These obstacles are related mainly to the distinctive features of the Greek Marine Fisheries and also to administrative and economical issues. In particular, the extensive coast line generates great spatio-temporal variation and scattering of the fishing activity. Due to the fact that Greece has more than 1500 islands, there is great variation in the types of fishing gears used and the fishing practices followed. More than 90 % of the national fleet comprises of small vessels. These vessels implement coastal, multi-gear, multi-species fishery in many different fishing grounds during the year. The fact that fishery has a multi-gear character it makes difficult for these vessels to be classified in categories according to their main gear, since usually the main gear based on their fishing license is not necessarily the one mostly used. The multi-species character also makes it difficult for the target species to be defined. Due to the vast number of fishing vessels, too much information and big workload of data are available. But unfortunately there is little manpower to deal with and also little means to analyze them. According to the National law, fishing licenses are valid for the whole national territory waters. Thus it is a common practise for fishing vessels to load their catches in ports different from their base or authorised ports. In fisheries sector many administrative and economical obstacles are present. Usually the administrative system is complex and unwieldy; co-responsibilities are frequently shared between different administrative services, while more often than not there is lack of means in terms of both money and manpower.
35. At February 2010 Greece submitted incomplete report for Task 1 (Task 1.1 and part of Task 1.3 were included) at the GFCM Secretariat. In the forthcoming period Greece intends to improve its conformity status by applying a set of measures. The GDF will be soon transferred to the emergent Ministry of Maritime Affairs, Insular Policy & Fisheries. This act will ensure the close cooperation and collaboration with the Fisheries Control Coast Guard services and moreover will improve the Fisheries Control System. Electronic Recording and Reporting System will be soon installed. The 2010 NFDCP will be partly implemented and fisheries data will be available. Greece through its delegates will participate and attend Meetings, Workshops and Conferences concerning Data Collection and in general Fisheries Management issues both in Community and Organizations level. The GDF will cooperate and interact with the Sub-Regional FAO project EASTMED in order to improve scientific and technical knowledge for undertaking the fundamental elements of fisheries management.

Italy

36. The expert of Italy outlined that Italian fishery statistics are produced through a sample survey. This approach has been adopted several years ago in order to gather timely, complete and reliable statistical data on catch and fishing effort that are crucial to

evaluate the current state of the fishery resources and to allow sound conservation and management decisions.

37. The sampling approach is also coherent with the specificity of the fishery under monitoring (very high number of landing sites, large artisanal fleet, multi gears activities, numerous commercial species).
38. The sample survey is part of the Italian Statistical Programme (PSN) within the SISTAN, the official statistical Italian system and it is based on a sample of around 1500 vessels, that is about 12% of the total fleet. The sample is stratified according to fishing segments and geographical areas. Elementary data are collected through questionnaires filled by data collectors, which are about 60 and are scattered along the Italian coast. Survey takes place every week on a continuous basis. Data on landings (weight and prices) and fishing area are recorded by gear and species. Raising of total values from the sample to the whole fleet is computed according to statistical procedures that allow the calculation of sampling errors.
39. Interviewers have a direct access to real data and are trained in order to identify the species and report them correctly. In fact, a very common situation, also on bigger vessels, is to sell the production into boxes of mixed fishes that usually have also a very high value. Starting from the information given by the data collectors, it is possible to distinguish the production by single specie. The identification of species is a very sensitive problem that requires trained people and careful registration of quantities and prices. European Commission and GFCM require the landings for individual species that is essential for biological assessment. This precise information cannot in any way be derived by logbook, unless applying very roughly estimates.
40. The methodology, which has been drawn together with the Italian Statistical Institute (ISTAT), is described in several documents (for a complete and accurate description see the Italian National Program 2011-2013, under Council Regulation (EC) N° 93/2010).
41. The transmission of data under task 1 has been only partially achieved because of some conceptual and technical problems. Task 1 requires to organize data in one unique spreadsheet where capacity indicators are required per fleet segment and then disaggregated on the basis of the gears used, the fishing period and the species caught. Present Italian statistical data are organized in databases made by a big number of linked tables. This difference implies to devote resources in organizing the data on the basis of the required task 1 format. In order to facilitate the transmission of data to GFCM task 1, Italy would appreciate if the GFCM secretariat could provide a package of XML schemas, that is one XML schema for each sub-task (1.1, 1.3, 1.2, 1.4 and 1.5) and also provide a full list of definitions used in the data entry application.

Lebanon

42. The expert of Lebanon noted that the only data available was from the 2004/2005 census of fishing vessels that was done in collaboration with MedFisis. He explained that Lebanon was not ready or familiar with Task 1 requirements, and that Lebanon required capacity building and political commitment.

MedFisis assistance:

43. Lebanon has data for 2004/05 collected through a good census exercise, however there would be need for a new census survey to be carried out since one port was destroyed by tragic events in 2006 and the fleet was partially relocated. As a matter of fact, the present register does not reflect any longer the real situation. There are at present no operational funds for fisheries in Lebanon. Since a census is a costly exercise and there are no funds available, it is suggested to transfer the old database into a customised system. The existing system is fully compliant with task 1.1 and 1.2.
44. The MedFisis project suggests the following working plan:
 - 1st phase (immediately): There are two possibilities to transfer the old database. The first one consists on one or two Lebanese staff would come to Rome with the data (officially) where it will be transferred into the new system (and certified by the team) and the terminology reviewed together with the team. The second option would be that 1-2 MedFisis staff go to Lebanon in order to carry out the migration. The first option is the more convenient one so that all MedFisis team is available to solve eventual problems.
 - 2nd phase: Field surveys could be carried out (quality check surveys, etc) to update the database. This process could take up to one year due to operational modus.
 - 3rd phase: Eventually a new census survey could be launched when funds would be available.
45. Using the licensing system as a means to update the census was considered as a possible solution. Once completed the migration, this option, together with other possible means, will be explored to enable the census to complete its revision.
46. It was agreed that a document in Arabic to update the licenses was necessary and the Lebanese representative raised the need for PCs at their regional offices, since licences are treated manually (on paper) for now. It was recalled that EastMed made some PCs available for the Headquarters but the regional offices PCs are still lacking.
47. Regarding the CAS survey in Lebanon, it is an ArtFish-based system that has been monitored by a private University from North Lebanon for the last 5 years. A revision of the CAS system would be foreseen for beginning 2011 if funds were available; however, for now, it is suggested to keep the current system in place..

Libya

48. The Libyan delegate would like to briefly elucidate the exact problems and constraints which are currently faced in the collection and transmission of Task 1 required data:
 - Local fisheries laws and regulations specify certain Formats for data collection which are quite different from the Matrix of GFCM Task 1 requirements, for example, the classification of fleet segmentation and the nomenclature of fleet segments.To cohere with Task 1 requirements, the Fisheries Authority – which relatively recently established – has taken a positive steps towards reviewing and amending its current fisheries regulations and by-laws. A technical committee within the Fisheries Authority is engaged in the said revision and comparing the articles of such laws with The Code of Conduct for Responsible Fisheries, especially the articles related to Aquaculture. The committee has to present its work as a proposal of amendments to the Fisheries Authority who will revise it and then forward the final version of the proposal to The

General People's Committee for Agriculture (The Ministry) for approval, and to issue a ministerial Decree of enforcement. Such procedure – I may expect – will take some months to be materialized and eventually applied.

- The present old and traditional National Fisheries Statistical System has to be renewed and modernized in order to serve well the countries fishing sector as well as GFCM Task 1 requirements.
- In this regard, there is an URGENT need to introduce and/ or adopt – possibly through a FAO regional project – an intensive training course/programme in Fisheries Statistical System in Libya. Although the Fisheries Authority has at its head quarters some expertise in Information Technology (IT), such experienced staff are lacking at most coastal harbors and landing sites

MedFisis assistance:

49. It was pointed out that staff assigned to fisheries tasks in Libya is not very abundant but is well trained. A very good census exercise was carried out in 2005, and the Catch and Effort Assessment Survey (CAS) had to be post-poned awaiting cooperation from CopeMed II.
50. MedFisis team advised to review the system as it was planned before (maybe through CopeMed II). An assessment of the first census should be carried out by MedFisis together with providing training and the new software among other things. Then, as a second step, field work could be undertaken through a possible technical assistance from CopeMed. It was agreed with the Libyan representative that should this support not be available from CopeMed, MedFisis would explore other options.

Malta

51. The presentation made by the expert of Malta pointed out that Malta was collecting fisheries data in accordance with the EU Data Collection Framework (EC 93/2010) and such data included biological, transversal and economic fisheries data. Biological data is collected through scientific surveys (e.g. MEDITS, MEDIAS) and from surveys on the commercial fleet (on-board observations/market sampling). Transversal data consists of capacity, landings and effort data. Capacity data is obtained from the fleet register and a census is carried out and updated annually. Landings and effort data are obtained from logbooks and sales voucher notes for the vessels > 10 metres LOA (census) whereas a multivariate sampling survey is employed for the vessels < 10 metres LOA. Economic data is collected through surveys on the evaluation of the fishing survey (sampling survey), and on the aquaculture and processing industry (census).
52. Malta also has the obligation to compile and send data (Task 1 Operational Unit Matrix) to the General Fisheries Commission for the Mediterranean. For the compilation of the Task 1, Malta highlighted the following constraints:
 - Reporting of catches by GSA;
 - Identification of the target species;
 - Difficulty to determine the group of target species for certain species (e.g. *Merluccius merluccius*);
 - The issue of reporting data for particular fisheries that extend from one year to the next;
 - Clarifications on the Effort table in Annex 2 of Resolution *GFCM/31/2007/3*;

- Difficulty in the calculation of effort for fleet segments targeting more than one group of target species during the same fishing operation/trip;
 - Clarifications on definitions for the calculation of economic parameters;
 - Submission of economic data of year n-1 by May of year n;
53. Malta believes that by May 2011, if these clarifications are addressed, Malta should be able to fulfil its obligations towards Recommendation GFCM33/2009/3 and submit its data related to GFCM Tasks 1.1, 1.2, 1.3, 1.4 and 1.5 on an annual basis.

Montenegro

54. The expert of Montenegro expressed that the Ministry of Agriculture, Forestry and Water Management (MoAFWM), by the end of 2009, adopted the new Law on Marine Fisheries and Mariculture, which gives possibilities to establish control under marine fisheries on principles of EU. This law will follow a huge number of secondary legislative, which will in totally regulate fishing fleet, logbooks, landing declarations, mariculture, technical characteristics of nets, etc.
55. The fishery unit, working under MoAFWM, started working on the secondary legislative from January 2010 until now. The regulation in final phase are:
- Rulebook on technical characteristics of nets and other gears;
 - Rulebook on license;
 - Rulebook on fleet register;
 - Rulebook on small scale fishing;
 - Rulebook on sports and recreational fishing;
 - Rulebook on logbook and landing declaration;
 - Rulebook on mesh size;
56. The development of the Fishery Information System has also suffered a lack of financial resources following the recent global financial crisis. More recently in Montenegro started the realisation of IPA 2009 Project which will support the MoAFWM to further develop the fisheries sector, including secondary legislation, reconstruct and equip Institute of marine biology, modernize and equip offices of fish inspectors, develop software requirements for VMS, etc.
57. Montenegro's plans are to start filling data to the Fishery Information System, under the new legislative frame during 2011, and undertake, in the near future, automatic Task 1 report. It is important to mention also, that forthcoming negotiations with EU will crystallize all activities in Marine Fisheries.

Morocco

58. L'expert du Maroc a présenté le système national de collecte de données. L'INRH accorde un intérêt important à la mise en place d'un Système d'Information Halieutique (SIH) qui a comme
- objectifs :
 - l'intégration des données des différentes sources d'information dans une base de données centrale afin d'assurer leur sauvegarde, leur intégrité et pérennité, leur contrôle qualité, leur valorisation et diffusion;
 - la mise en place d'un référentiel commun aux différentes sources d'information;
 - la rationalisation de l'exploitation des données;

- l'intégration transversale des données du SIH avec des données complémentaires d'autres systèmes : internes (base de données océanographiques, qualité et salubrité du milieu) ou externes (données DPMA, données ONP, etc.).
 - Intérêt:
 - Mise à disposition de l'intégralité de données aux équipes de l'Institut.
 - Soutien aux programmes de recherche halieutiques et aux missions d'avis et d'expertise halieutiques.
 - Elaboration d'indicateurs intégrés sur les pêcheries et de synthèses à destination de la recherche, des pêcheurs, des gestionnaires et du grand public.
59. L'INRH a procédé, depuis l'année 2008 et avec l'appui de l'IRD, à la mise en place d'une base de méta-données sous le logiciel open source 'GeoNetwork'. L'intérêt de ce travail c'est qu'il a permis de faire un inventaire des différentes données disponibles en donnant le détail sur :
- La série chronologique ;
 - la zone géographique de collecte de la donnée ;
 - les paramètres collectés ;
 - le logiciel de stockage ;
 - le service chargé de la collecte et du stockage de l'information.
60. Tout ce travail servira de base pour la conception de la base de données centrale.
61. During the workshop, Morocco requested technical assistance for automatic exporting of Task 1 data from the national database to the Task 1 application. See paragraph 96 for the responsive action.

Slovenia

62. The expert of Slovenia detailed how data on fisheries sector under the European Data Collection Framework is collected and stated that the country was completely in line with DCF demands and legislation. All Slovenian data collection activities are described in National programs for data collection, confirmed and adopted by European Commission.
63. Collected data is stored in centralized database called InfoRib that is based on ORACLE platform. InfoRib is composed by different modules in witch primary data is stored except in the Reporting module where also aggregated data is stored for reporting obligations. Biological data for fisheries is still separated from InfoRib. It is stored in biological database in the Fisheries Research Institute of Slovenia (FRIS). In the near future we are going to join biological database to Inforib.
64. In 2010 Slovenia reported for the first time GFCM Task 1 report. The data has been entered manually using the GFCM Task 1 Application. When preparing the report Slovenia encountered some problems mainly because the DCF and GFCM segmentation were not the same and because there were also differences between metier and operational units (see section 4.4).
65. Slovenia has reported the data for Tasks 1.1, 1.2, 1.4 and some data for Task 1.3. Data source for completing the Task 1.1 was the Fleet vessel register. It includes all fishing vessels and it is updated regularly. For the Task 1.2 and 1.4 the data sources were

logbooks that every single fishing vessel, also vessels under 12 meters has to fulfil and to report to the Ministry of the Agriculture Forestry and Food (MAFF). To guarantee the quality of the data the data on logbooks are examined by the experts and crosschecked before the adoption into the database. The main sources for Task 1.3 are social-economic questionnaires that are sent to all fishermen, interviews with selected fishermen and data from Agency of the Republic of Slovenia for Public Legal Records and Related Services. The source for Task 1.5 that will be reported in the future is going to be biological database from FIRS.

66. For the future Slovenia are not expecting many difficulties because all data required for completing GFCM Task 1 is regularly collected. Slovenia is planning to establish cooperation with the MedFisis. With their help and support Slovenia could establish the automatic generation of the GFCM Task 1 report and implementing GFCM Task 1 XML schema into the national database.

MedFisis assistance:

67. The Slovenian representative indicated that Slovenia has a centralised ORACLE database (InfoRib) where all data regarding fisheries sector in Slovenia are stored except the biological data that are stored in a biological database. In the future the biological database will also be joined to InfoRib.
68. Slovenia requested assistance to MedFisis to examine their database and to help them to enable the automatisisation of the GFCM Task 1 report in XML format from their centralised fisheries database - InfoRib.
69. Slovenia is willing to set up a date for MedFisis to visit Slovenia to attend this request.

Tunisia

70. L'expert de Tunisie a présenté le système national de collecte de données. Le système de collecte des données statistiques de la Pêche en Tunisie englobe toutes les activités de pêche (maritime, continentale -eau douce) et d'aquacultures (en eau de mer ou en eau douce) quel que soit le moyen d'exploitation (par bateau ou à pied).
71. Ce système conçu et mis en place depuis les années soixante dix est basé sur le dénombrement complet, du fait de l'existence d'une chaîne portuaire développée (en moyenne 1 port tous les 30 Km de côte), de la connaissance du nombre de bateaux de pêche actifs par port et des moyens humains affectés à chaque port pour assister aux opérations de débarquement et enregistrer les informations y afférentes, ainsi qu'une assise juridique organisant l'exercice de la pêche et imposant des journaux de pêche « mensuels » pour certaines catégories de bateaux de pêche.
72. Cette longue tradition dans la collecte des données statistiques de base (zone de pêche, port de débarquement, mode de pêche, espèces débarquées en quantités et en valeurs, bateaux de pêche « actifs » et « non actifs », mains d'ouvre, etc) ne doit pas cacher les défaillances enregistrées surtout au niveau de la qualité de l'information et des moyens de communication et de traitement de cette information, eu regard au manque de personnels qualifiés et en nombre suffisant pour couvrir les principaux ports et sites de débarquement, d'une part, et le besoin de développer un système informatisé pour les statistiques de pêche en Tunisie, devenu, de nos jours, une nécessité absolue afin de

répondre aux multiples exigences nationales, régionales (CGPM, ICCAT, etc) et internationales (FAO, etc) en la matière.

73. Ainsi, plusieurs démarches ont été prises ces dernières années en vue d'améliorer le système national de collecte des données sur la pêche. Nous citons en particulier les différentes assistances techniques avec des programmes régionaux comme CopeMed, et bailleurs de fonds (Banque Mondiale) pour soutenir et mener des actions touchant les statistiques de pêche artisanale, le suivi des campagnes de pêche et la réalisation d'un recensement général de la pêche.
74. Pour pérenniser ces acquis et honorer nos différents engagements, une requête d'appui à l'amélioration du Système de Suivi de la Pêche Artisanale en Tunisie (SSPAT) a été formulée et envoyée ces derniers mois à la FAO-Tunis pour la prendre en charge les frais de mission et d'expertise d'un expert international en statistiques des pêches pour faire l'audit et l'évaluation du système existant en vue de préparer les termes de références d'un Projet de Coopération Technique (PCT) pour la conception, le développement et la mise en place du SSPAT basé sur le système d'échantillonnage. Les démarches de concrétisation de cette requête sont bien avancées (Accord de principe de Copemed II pour le financement de cette phase préparatoire du «SSPAT» et demande officielle de la Tunisie à ce sujet.

Turkey

75. The expert of Turkey explained that the State Statistic Organization was responsible to collect process and publish the official fisheries data. The organization employs census, sampling and other methods of statistics. However with in the EU accession work the Ministry of Agriculture and Rural Affairs has developed and set up electronic "Fisheries Information System" covering fleet registry, log book, sales notes and VMS. Fleet registry has been completed in accordance with EU requirements. VMS has been installed on blue fin tuna seines. Logbook implementation is summarized below. In near future the system will be official fisheries data collection system of Turkey.
76. Turkish Logbook System: Fishing vessels over 12 meters in length are under legal obligation to keep logbook (EU Standards) and complete a landing declaration (totally: 1900 vessels). Since the end of 2008, the logbook data has been recorded in FIS. There are also about 900 fishing vessel between 10 and 12meter. Logbook is prepared in 3 copies (0/1/2). Each book comprises a set of 75 copies.
- Copy "0" is collected at the landing sites, provincial or distinct directorates.
 - Copy "1" is accompanied by the harvest.
 - Copy "2" is kept in the logbook.
77. Fishermen are required to keep the logbook of their operations for a period of 2 years. Accumulated logbook data are recorded under the FIS. The system is only accessible by authorized persons who can enter the computer-assisted data collection system through internet access.
78. Problems: Collection of and recording of logbook data is burdensome. It requires considerable labour and organization. Currently, logbook is obligatory for the vessels over 12 meters. This means collection and recording of 250 000 logbook per year. If

logbook obligation is extended to vessels of 10 meters, there would be a need to record about 400 000 logbooks/year.

79. Future plans: In order to make the logbook data collection and recording less burdensome, it is planned to shift to electronic logbook system. Works on development of a specific device to function as an integrated system comprising VMS and AIS is underway. At the end of the set of presentations, a review of all difficulties encountered allowed to classify the items to clarify and discuss as follows :
- Clarification on the GFCM protocol for data submissions
 - Data collection methods for all types of vessels
 - Data collection methods specific to large vessels
 - Data collection methods specific to small scale vessels
 - Differences between the EU obligations and Task 1
 - Clarification on some technical issues
 - Clarification on the GFCM Task 1 application software
 - Quality issues

ASSISTANCE OPPORTUNITIES (SUB-REGIONAL AND REGIONAL PROJECTS) AVAILABLE FOR MEDITERRANEAN AND BLACK SEA COUNTRIES AND PROCEDURES FOR REQUESTING SUPPORT

80. After the countries presentations which focused on the current status of their national systems for data collection and the problems encountered to comply with the Task 1.1, 1.2 and 1.4 data submissions, the Workshop discussed the possible solutions to the problems based on other countries' experiences as well as on the sub-regional and regional projects' expertise.
81. Several countries highlighted the important support which could be delivered by the MedFisis regional project on statistics and data collection methods and tools. In this regard, the chairman invited Mr Salvatore Coppola (MedFisis Senior Advisor) to give an overview of the outcome of the side-meeting held between the countries requesting support and to expand on the assistance opportunities available in the area and the procedure to be followed when requesting support.

Medfisis fao regional project

82. The main objectives of MedFisis are to complete and consolidate applications for data collection and statistical analysis, providing detailed support through packages comprising:
- Assessment and design guidelines
 - Documentation
 - Software
 - Training material
 - Pilot studies
83. The four packages are namely the Fleet Register, CAS logbook, CAS sampling and enhancement tools.

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84. Amongst other things, this system also constitutes the basis for Task 1: the Fleet Register provides static data such as capacity, fleet segment, operational units, and others; whereas the CAS applications provide dynamic data about landings, effort, species and much more.
85. The latest revision of the Fleet Register application is complete. The new system has been designed around the new requirements of the GFCM and EC, making it compatible with all data submission procedures and also including a reviewed and improved version of the reference system. Therefore, the current version is regionally-based and consolidates all the data requirements of FAO, GFCM and EC. It may then be customised for the particular needs of a country by enabling/disabling components, such as disabling the EC component for non-member countries. The software, however, is still compatible with previous versions and the data transfer from these systems may be facilitated by MedFisis.
86. As well as improved reference files, the system also has improved functionality. Most importantly to GFCM's Task 1 are:
- Automatic calculation of the Fleet Segment through the number of engines, length overall and gear type
 - Automatic identification of the operational units according to fleet segment, gear class, target group of species and GSA.
 - Automatic generation of data submission files for GFCM, one of which is Task 1.
87. This is done by a set of matching tables which have been set up, and are also used to validate the data. Other validation methods include: consistency checks for missing data and data formats; range checks for numerical data; and quality checks on LOA-GT-Power according to correlation coefficients (originally calculated on the regional registry, but customisable according to the national fleet).
88. The Fleet Register allows for automatic outputs both for national use, as well as international. On a national level, there are a number of vessel reports and statistical reports. It is also possible to export all or selected characteristics of the fleet, for either the entire fleet or queried vessels, either in Excel or XML format, in codified or readable format. To serve international requirements, the FAO FishStat FF-1 and FF-2 are generated automatically, as well as the EU snapshot in CSV format. A number of GFCM exports in XML format are also made available at the click of a button for:
- Fleet Register and Fleet Register updates
 - Authorised Vessel List
 - Task-1, particularly Task 1.1 and most of Task 1.2
89. MedFisis has also prepared the documentation which goes hand-in-hand with the Fleet Register. The main document 'Design and Implementation of National Fishing Vessels Census' addresses national and international experts, providing the support for launching a statistical survey. It also offers guidance on carrying out assessment surveys, quality check surveys, and more. Other documents included in the package include the Statistical Recorders' Book, with the questionnaire and data elements for the census; manuals for field recorders, supervisors and the national focal points; and technical documentation and a user guide for the software. Complementary training material will also be supplied. This documentation is currently being edited and will then be available on MedFisis' new website, which will soon be online.

90. The project will now be focusing on the new version of the CAS applications, to enable data submission for the rest of Task 1.2 and Task 1.4. The documentation for the CAS is also being reviewed to complete the package. MedFisis is also looking forward to assisting the countries by providing immediate support and incorporating the feedback obtained from this workshop in the project follow-up.

Opportunities

91. It was recalled that, originally, FAO sub-regional projects (CopeMed, AdriaMed and MedSudMed) included in their mandate, the delivery of support in statistical issues through the implementation of specific actions. At a later stage, in order to increase the synergy among the projects in the area, the MedFisis Project was established to provide specific support on fisheries statistics issues that were part of the other FAO sub-regional projects. However, a lack of support was detected in the eastern area and was initially covered by a Technical Cooperation Project – TCP/INT/2904 – “Enabling participation in the fishery statistics and information system in the Mediterranean”.
92. Following an unexpected time gap in the implementation of the MedFisis project after the completion of its second year, it was re-launched for a third year to enhance and support the data collection procedures and statistics in the area mainly through its upgraded fleet register and catch and effort packages (software applications and documentation). In this new phase, the project has accumulated further expertise but does not have the necessary resources for implementation in the field. This resource issue could be partly achievable through cooperation among sub-regional projects.

Procedure

93. The procedure followed by different Mediterranean countries to request support from the regional projects varies according to the countries, with some countries having to use their diplomatic channels or submit the request to FAO through the national competent authority. In this respect, participants agreed that it is advisable to supplement any official request with direct correspondence with the sub-regional and regional projects’ coordinators in order to ensure an efficient follow up.

Catch and Effort Assessment Surveys (CAS)

94. The immediate need for technical support and follow up by MedFisis was underlined, both for upgrading existing systems and the establishment of new ones. Any new CAS survey would need to run for at least one year before being in a position to produce complete and reliable data.
95. In this regard, MedFisis project will adopt the following code of practice:
- Training is to be delivered in countries only if immediately followed up by a Pilot Survey and/or implementation.
 - CAS exercise implies a serious long-term **commitment** from the country in order to be able to maintain the system running for years. The CAS is not an *ad hoc* survey and thus it is absolutely necessary to count on a strong national structure, based on availability of staff, PCs, recorders, premises, etc. Field recorders are essential to the system. If this structure cannot be assured, it is proposed that other

existing surveys (such as market approach or other) are used and be adjusted accordingly.

96. The MedFisis Project considers the following essential steps (in the order as listed below) when implementing a CAS survey:
 - Complete the Census and have the Fleet Register fully functioning.
 - Adjust the sampling scheme (design, software, training, etc) and collect data through a pilot survey (at least 6 months).
 - Review the system continuously during the pilot survey and expect summary statistics at the end of the year.
 - Carry out a qualitative assessment of the results.
 - Re-launch the survey in the following year ensuring its sustainability.
97. Furthermore, MedFisis considers that if CAS exercises have been previously carried out in a country, the systems and data have to be preserved (source of valuable information) and that, at least for one year, the old and new systems should run in parallel (refer also to MedFisis complete approach to fisheries statistical surveys at www.faomedfisis.org). It is envisaged that the MedFisis CAS system will be adapted to each country requesting assistance and will be in a position to provide the necessary data to comply with task 1.2 and 1.4.
98. If a country intends to report Task 1.2 and 1.4 by 2012, it should start the CAS at the beginning of 2011 since setting it up (preparation, training, pilot survey and software plus hardware) will take at least 6 months and its full implementation takes not less than one year.
99. It was acknowledged that although MedFisis could provide support in upgrading or implementing from scratch the CAS, it could only do so if the project is extended in 2011, funds permitting.
100. The MedFisis role, progress and plans in each country are carried in this report under the sub-sections related to the respective countries (pg.4 – pg. 14).

EXCHANGE OF EXPERIENCES ON THE PROCESS GOING FROM THE DATA COLLECTION TO THE SUBMISSION TO GFCM TASK 1

Clarification on the GFCM protocol for data submissions

101. The participants were first reminded that the GFCM recommendation is binding to the GFCM Member countries. The current practice is that the GFCM heads of delegation are informed when a recommendation comes into force, and may receive, on some occasions, reminders for the submission of information and data. In order to be more focused on the specific actions related to the GFCM Task 1, the workshop **recommended the official nomination by the Member countries, of a National Correspondent for all issues regarding data and information submissions, including contact details.** This person should have the mandate/prerogatives to coordinate the appropriate actions to fulfil the obligations, and be the person interacting directly with the GFCM secretariat on these issues. The GFCM secretariat will send frequent

reminders and related news to the National Correspondents for data submission, with a copy to the heads of delegation, SAC focal points, and the GFCM bureau.

102. The workshop also **recommended the different GFCM Member countries to inform the GFCM secretariat in due time on the difficulties** encountered when using the Task 1 application or submitting the datasets.

Available sources of information for the fulfilment of Task 1.1, 1.2 & 1.4 data submission obligations

103. The participants to the workshop discussed a detailed list of available sources of information both for large vessels and small scale vessels. The list is meant to serve as a toolbox that can provide information regarding the sub-tasks of Task 1, with specificities, advantages and disadvantages.
104. The following description of pros and cons of every source of information is not an exhaustive exercise, but the salient points identified by the group for helping the countries in using, at their best, the different sources listed.
105. Fleet Register :
- *Relation to Task 1*: Provides all information for Task 1.1, & part of Task 1.2 and 1.3, i.e. vessel characteristics, main gears used, and optionally GSA visited (in MEDFISIS system).
 - *Advantages*: The Fleet register is known to be the cornerstone in the constitution of a National information system.
106. Licences :
- *Relation to Task 1*: Provides information for Task 1.1 and 1.2. i.e. date of validity, vessel identification, optionally characteristics of the vessels, GSA visited, gears used and areas (depending on the country since different types of licences exist).
 - *Advantages* : reliable source of information
107. Port control :
- *Relation to Task 1*: Provides information to Task 1.1 and part of 1.2. The information collected includes vessel identification, gear used, and number of trips (knowing that in the GFCM area, one trip is often equivalent to one day at sea and one fishing day).
 - *Advantages*: Infrastructure often available for other obligations.
108. Sales notes :
- *Relation to Task 1*: Provides information to Task 1.4 and part of Task 1.3, i.e. volume of fish sold by species and value.
 - *Advantages*: Infrastructure often available for other obligations. Fishing auctions are important for transparency of the transactions and development of the price per kilo of the different species.
 - *Inconveniences*: Information may be incomplete, and information on the gear used and areas fished are generally absent. Information on the date may also be absent in some cases.

109. VMS :

- *Relation to Task 1*: Provides information for part of Task 1.1. VMS provides estimation on some fishing effort (only if more than one data point is collected every 2 hours, which is the minimum rate requested by the GFCM). The reliability of the effort estimation from VMS data is not the same for all types of gears and vessels. For example, for trawlers it could provide a good estimate of effort; however, for passive gears, this estimation could be inadequate.
- *Advantages* : Given to be reliable information,
- *Limitations*: Normally, only available for vessels > 15 m.

110. Logbooks and other declarative forms :

- *Description*: the declarative forms described here are the logbooks and the monthly declarative forms. The monthly declarative form may provide the same information as the logbook or more aggregated information. The ERS (electronic logbook) is expected to improve the quality of the declarative information. Catch activity forms from protected areas and voluntary declarations (fishermen cooperation, self sampling) can also be included in this source description. For the latter, there is need to identify for which fisheries this is possible, then undertake the exercise and analyse whether this is successful or not, and if the data can be used for scientific purposes.
- *Relation to Task 1*: Provides information on Task 1.2 and 1.4, and part of 1.3. The information contained may be very rich, and include landing / transshipment, volume per species, the gear used, areas, fishing time, species caught and optionally volume of discards. The activity / inactivity status can also be derived from the logbooks and other declarative forms.
- *Pre-conditions*: Need a strong infrastructure to cope with centralising all the incoming information and enforcement, since this tool is firstly a tool dedicated to control.
- *Advantages*: The quantity of information gathered, and their direct relation to Task 1.
- *Inconveniences*: There is a risk of being incomplete, unless 100% of the fleet is covered during the full year. The information gathered need to be checked for quality, and contrasted with other sources (sales notes, licenses ...). The induced cost may be important (paper printing, data entry). Illiteracy may constitute a serious obstacle to the implementation of a declarative system.
- *Limitations*: generally available only for larger vessels (> 10 or 12 m). The use of a threshold to report the catches directly affects the accuracy of the information.

111. Fishermen organisations books (Cooperative, prud'hommies, cofradías...)

- *Relation to task 1*: Needs to be questioned. Information possibly held: vessel id., catches per species and gears, socio-economic data (fuel, number of fishermen on board, etc.)
- *Pre-conditions*: Need to evaluate who is collecting what, where, how and when (how often), and the scope of the organisations (national level, local). Need also to contact and try to evaluate how to benefit and use this data and if there is a need to adjust.
- *Advantages*: Availability of this information. In some countries scientists and fishermen are collecting data together in order to cross-check information to see if

the same output can be obtained following different approaches. Quality Check Surveys may be carried out to check the compatibility between the organisations information and the surveys carried out.

- *Inconveniences*: Risk of double accounting if there is no cooperation. Data collected following a different protocol and different specifications than those of the GFCM Task 1.

112. Catch & Effort Assessment Surveys (CAS) :

- *Description*: See MedFisis website³ for complete details on methodologies currently used.
- *Relation to Task 1*: Fully compatible. The CAS can be tailored to GFCM Task 1 and other obligations (EC DCF, ICCAT...). It is the best tool to update the fleet register. Normally the census survey is carried out once every few years, and the CAS is useful to update the state of the fleet register. MedFisis has added an extra code in the fleet register indicating that the information comes from the CAS. Keeping the register information updated is costly and therefore this updating system is also a good option.
- *Pre-conditions*: Implementing a CAS requires a strong infrastructure and long term commitment (capacity building, avoidance of gaps in the time series, trust on all the operators). The recorders for the CAS must be very well trained. A CAS needs a learning phase, periodic adjustment, annual optimisation, and timely supervision. Historical data must be taken into account when implementing a CAS in order to ensure historical continuity.
- *Advantages*: The information collected can be quality controlled, and accompanied by an estimation of uncertainty. The precision objectives are directly linked to the sampling effort and thus the cost may be adapted. There are a variety of methods with different properties, in relation with the objective situation and the local specificities.
- *Limitations*: It is usually very difficult to find expertise in fisheries statistics. Very often the staff committed to these programmes are statisticians dealing with other sectors and do not know the specificities of the fisheries sector.

113. It was noted that several training courses on statistics are carried out by different international organisms like ICES or CIHEAM. These courses are usually very specialised and provided to a small group of participants only (difficulty of access). They usually offer some grants for 2 participants from certain countries; however, the normal prices are very high.

114. The WS participants discussed the possibility of organising training activities like, for example, an Open University format (need to find an university that can accept an agreement to have a course on fisheries statistics). The participants supported the idea of organising training for CAS experts (like ICES training programmes). It was noted that different components should be established for a training course on fisheries statistics depending on the level. Training for fleet recorders differ from that for scientists or statisticians. MedFisis pointed out that it has prepared training packages aimed at different levels (recorders, statisticians). The workshop raised an important demand for FAO regional projects to **carry out training courses on different levels** (recorders,

³

MedFisis Website : <http://www.faomedfisis.org>

supervisors, statisticians, etc) carried out in different regions to achieve higher attendance. These courses should be specific for particular needs.

Differences between the EU obligations and Task 1

Eurostat

115. There are currently 9 GFCM Countries members of EUROSTAT, providing data on fisheries catches by area, landings and aquaculture production in the Mediterranean and Black Sea by the end of June each year. Part of this data is the same as required under GFCM Task 1, which raises the questions of the double submission of the same information by Member Countries and the risk of inconsistencies if two different services provide data for GFCM and for EUROSTAT.

116. For helping Member Countries in submitting their data, EUROSTAT has developed a SDMX (Statistical Data and Metadata eXchange) system. SDMX is a kind of platform to share data, used to simplify the work of Member States and avoid discrepancies. EUROSTAT is also working towards a harmonised system within the different EU directions, for receiving data from Member States. The data received once from Member States would then be forwarded to relevant EU Directorates depending on pre-defined needs, and possibly to RFMOs such as GFCM, in a second stage. 1. In order to progress on this issue, a review of all the data requirements should be made (FAO, GFCM, DG MARE, and EUROSTAT). EUROSTAT also indicated that they will organise a workshop next 28th October 2010 on data quality GFCM will be kept informed about this initiative. EUROSTAT also will regularly inform GFCM secretariat about the progresses made in the implementation of the SDMX platform, in particular, the harmonisation of the code lists and DSDs (Data System Definitions) set up in cooperation with different EC and international fisheries organisations.

European Union Data Collection framework

117. The European Union has organised the collection of basic data for supporting the fisheries management since 2002 for all its Member States. In 2009, the EU adopted a new version of its data collection Regulation (DCF⁴) in order to adapt the needs to collect metier-based and bio-economic data, and some basic ecosystem indicators, amongst others. In its revision, the different RFMOs, including GFCM, could interact and provide their basic needs so as to ensure the compatibility of the EU system with their own data requirements. The first submission of Task 1 data to the GFCM format was thus the test to evaluate the degree of compatibility of the two systems.

⁴

DCF : Data Collection Framework

118. The Task 1 fleet segment x gear matrix vs. the DCF fleet segment x Metier matrix:

- The length classes of the vessels are fully compatible since a specific length class cut at 6 meters is included in the DCF matrix for the Mediterranean and Black Sea area. The EU DCF includes more classes but the boundaries are matching with the GFCM Task 1

EU DCF	]0 – 6m[	[6 – 12m[	[12 – 18m[	[18 – 24m[	[24 – 40m[	>=40m
GFCM Task 1	]0 - 6m[	[6 - 12m[	[12 - 24m[		>= 24m	

- The segmentation of the fleet is based on the same basis of dominance of gear but is slightly different and not entirely compatible

GFCM Task 1	EU DCF	Compatibility of the EU DCF vs. GFCM Task 1
Polyvalent small-scale vessels without engine	Vessels using passive gears less than 6 m. (without distinction on the presence of an engine or not).	No distinction is made on the absence/presence of an engine in the DCF
Polyvalent small-scale vessels with engine less than 6 m. / 6 – 12 m.	Vessels using polyvalent passive gears less than 6 m. / 6 – 12m (with an option to distinguish the gear types in the GFCM area)	Full
	Vessels using polyvalent active gears less than 6 m. / 6 – 12m	
	Vessels using polyvalent passive and active gears less than 6 m. / 6 – 12m	
Trawlers less than 12 m / 12 – 24 m / >=24 m.	Demersal trawlers and/or demersal seiners (all LOA classes distinguished)	Concerns for Demersal seiners.
	Beam trawlers (all LOA classes distinguished)	
Purse seiners between 6 and 12 m / >= 12 m.	Purse seiners (all LOA classes distinguished)	Not compatible
Tuna seiners.		
Longliners longer than 6 m	Vessels using hooks (all LOA classes distinguished)	Concerns for vessels using hooks other than longlines (trolling line,

GFCM Task 1	EU DCF	Compatibility of the EU DCF vs. GFCM Task 1
		hand and poll line)
Pelagic trawlers longer than 6 m.	Pelagic trawlers (all LOA classes distinguished)	Full
Dredgers longer than 6 m.	Dredgers (all LOA classes distinguished)	Full
Polyvalent vessels longer than 12 m.	Vessels using polyvalent passive gears (all LOA classes distinguished)	Full
	Vessels using polyvalent active gears (all LOA classes distinguished)	
	Vessels using polyvalent passive and active gears (all LOA classes distinguished)	

- The group pointed out three discrepancies, two being EU DCF fleet segments having a definition wider than the GFCM task 1, and the non distinction of the tuna seiner fleet segment in the EU DCF. The group expressed concerns about this discrepancy given the importance of this fleet in the Mediterranean and raised also the issue that in the GFCM Task 1, a vessel is classified as a tuna seiner if it has operated at least once a purse seine targeting tuna during the year. **The group recommended SCSI to evaluate these discrepancies, and if the Tuna segment is confirmed as an issue, to seek an arrangement with the European Union through its Mediterranean and Black Sea coordination forum (RCM⁵) and STECF⁶ bodies, in order to include this fleet segment in its DCF obligations.**
- The gear distinctions (column of the Task 1 matrix) are compatible with the metier description at level 4 of the EU DCF appendix IV, at the exception of 'Grappling and Wounding' and 'Harvesting machine' absent from the EU Regulation. An evaluation of the importance of these two gears must be done at the GFCM level to see if it is worth calling for a modification of the EU DCF. **In the mean time, the group wishes to call the attention of the SCSI on this issue for further consideration.**

119. The definitions used in the EU DCF are in line with the GFCM glossary.

Clarification on some technical issues

120. This section intends to provide clarifications on technical issues raised during the presentation made by Member Countries (section 3). The problems encountered were listed and the possible ways forward discussed within the group.

⁵ RCM : Regional Coordination Meeting

⁶ STECF : Scientific, Technical, and Economic Committee for Fisheries

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121. Identifying the Target (group of) Species: The definition in the GFCM glossary reads as follows "Group of species sought by the fisher". It was pointed out that several methods exist for identifying target species, but these are not always practical for a field implementation. The workshop listed four of them :
- Classify the catches and take the most important group of species in terms of weight or value;
 - Carry out interviews to fishermen;
 - Inclusion of a field in the declaration form (this poses the problem of non controllable variable);
 - Expert knowledge.
122. Moreover, although fishermen know very well which species they are looking for, they are often more interested in more than one species during the same fishing operation, and this makes it difficult for the field recorder to identify the target species homogeneously, within and between Member Countries. The GFCM secretariat will conduct an exercise on a clear identification method, and table a proposal at the next SCSI, focusing on the possibility of using the ISCAAP groups.
123. Reporting the season (in case of non calendar year season). Some countries raised the issue of having fisheries seasons that cross over from one year to another and would like to have guidance on how to report these fisheries, either split according to the calendar year or report the whole fishing season together.
124. The workshop agreed that the reporting should be done by calendar year. Besides, if a country wants to carry out analysis for a fishery in particular, it is possible to aggregate them in the system. This is the approach that should be taken for this type of fisheries since it is in agreement with the production statistics.
125. Expression of the effort. There was concern regarding the definitions/expressions used for the calculations of the fishing effort. The calculation is made up from four variables (not all used with all gears).
- Time: total number of days;
 - Capacity: GT value;
 - Gear units: gear measurement and number of units;
 - Activity: number of fishing operations.
126. The total effort for a particular vessel is the sum of product of all the variables. When calculating the total effort for a group of vessels or Operational Units, the total effort could be approximated by the product of the total for one parameter and the average values of the other parameters."
127. It was noted that not all these variables are to be reported since the number of variables used to calculate the effort depend on the gear. The Secretariat will improve the data entry by disabling the fields that are not referent to each gear.
128. It was suggested that some study should be carried out to decide on which procedure should be included in the Task 1 application. The workshop recommended GFCM Secretariat to refine the Task 1 application and clarify the requirements after approval by SCSI

129. Polyvalent fisheries using different gears during the trip / day / month

130. Ideally, catches and effort should be split among the gear used; when this is not possible, “miscellaneous gear” should be reported. If one gear is predominant and the other(s) are marginal, the Main gear can be used, taking care of not introducing weird combinations of gear-species. In any case, when it is possible to report each gear individually, this is the preferred solution.

131. Definition of variables (including economic variables). The GFCM suggested preparing, from all documentation available, a full list of definitions used in the data entry application and presenting it for SCSI consideration. A glossary of terms specific for Task 1 should be developed.

132. Submission of Economic data (Task 1.3). The group expressed doubts on the reference data that has to be submitted annually to the secretariat. The concerns focused on whether data for year n-2 or year n-1 had to be submitted and also the problems to disaggregate some variables to O.U. It was confirmed that economic data has to be supplied for reference year n-2.

133. Submission of biological data (Task 1.5). The same question was also raised regarding the submission of biological data. This was clarified by the GFCM secretariat which indicated that 2008 data must be sent by January 2011 by compiling this data in the 2008 file together with Task 1.1, 1.2 and 1.4 and resent again. The data for 2009 should be submitted by May 2011 as a full Task 1 pack.

Clarification on the GFCM Task 1 application

134. There are two ways of inputting data into the system:

- Manually: it is used by countries which do not have great amounts of data. This possibility is quite convenient to do modifications, additions, etc. However, entering the whole set of data manually could be very time consuming.
- XML scheme, used to upload the data automatically from a centralised database.

135. The workshop suggested that the GFCM defines the structure of a CSV file to add a third option for data entry. A set of tables with primary key fields would be of great help together with strict format for variables. It could be possible to create a button on the Task 1 application to import from CSV format with error checking routines. Following that option would mean that the Member Country would enter the data in the Task 1 application nationally, and send the resulting database to GFCM secretariat, once the importation showed no errors.

136. Some countries asked whether they can pass their excel files into access, so that it can be adjusted to the CSV format and then be exported.

137. It was said that arranging this third option from national databases cannot be used as an excuse to delay the data submission. The **workshop recommended organising a workshop on how to use the tools made available by the GFCM secretariat**. In this regard, the role of FAO sub-regional projects was considered of strategic importance.

Quality issues

138. In the “Comments” section of the data entry tool prepared by the GFCM secretariat, it is possible to introduce information on the origin of the data (census, logbook, sampling at sea, etc) and the methodology. New features can be added into the application, like having 2 sections for “comments” so that explicit data can be entered for small and large vessels for example, or use the possibility to underline several options in the entry list. These refinements will be presented in the forthcoming SCSI.
139. It was also discussed the possibility to attach a document (pdf), with a limitation on the resulting increased size of the file to submit. This solution was agreed, under the condition of avoiding the attachment of pictures and big documents.
140. The reliability of the data raised concerns. The only way to certify the datasets is to insert an indicator for each of the variables. This is a cumbersome work done only at great expense by some countries. SCSI should discuss this issue and try to come with a workable solution.
141. For the moment, there is an option in the application, to enter the Reporting Authority which means that the responsibility for the reliability of the data falls into this authority. There are also some quality checks built-in in the system (for example, certain species cannot be linked to certain gears).
142. For more details, the workshop suggested the reading of the ICES 2008, Report on Accuracy of fisheries data. This document browses all potential sources of bias for each parameter, and proposes a scorecard system. This is an issue to be discussed in the forthcoming SCSI.

ANTICIPATION OF PROBLEMS RELATED TO SUBMISSION OF TASK 1.3 AND 1.5 DATA

143. Clarification on the reference year for these two sub-tasks: it was suggested that on January 2011 the submission of Task 1.3 and Task 1.5 should refer to the year 2008, and in May 2011, all sub-tasks should refer to 2009 data.
144. The protocol for sending data should be as follows: re-use the 2008 Database already submitted, complete it with data for Task 1.3 and 1.5 and resend the whole set. This is applicable for countries that have submitted data for 2008. In this way, the secretariat will update the full datasets. It is not possible to send data on task 1.3 and 1.5 on their own.
145. It is recalled that only minimum and maximum length and average length by period and O.U. are concerned for Task 1.5, as recommended by SCSI in 2009 (the maturity and sex were removed).
146. It is anticipated that all species will not be covered. However, it was stressed that it was important, at regional level, to see what data is available or not.

147. Task 1.3: definitions are part of the application (question marks next to each field). The secretariat will carry out an exercise to revise all available documents with information and provide a list to be reviewed at the sub-committees. The GFCM Secretariat encouraged Member Countries to send any data the countries have even if this is an estimate, or if it is not complete.

CONCLUSIONS AND RECOMMENDATIONS

148. The main conclusions and recommendations of the workshop are set out below:

Working strategies

- The workshop recommended that GFCM Members officially nominate a National Correspondent for all issues regarding data and information submissions, including contact details. Deadline and role of these correspondents to be discussed during the forthcoming SCSI meeting.
- The workshop recommended that national experts inform the GFCM Secretariat on the difficulties encountered in data collection and data reporting on a real time basis.

Training and assistance

- The workshop raised the demand for FAO regional projects to carry out training courses on the different levels of implementation of a Catch Assessment Survey.
- The workshop recommended organising a workshop on how to use the tools made available by the GFCM secretariat. In this regard, the role of FAO sub-regional projects was considered of strategic importance.
- Several experts highlighted the importance of the assistance which could be provided by the MedFisis Project and stressed on the need for the Project's extension beyond 2010 without any delay or time gaps.

Reporting issues and data exchange formats

- The workshop agreed that the reporting of fishing seasons should be done by calendar year.
- The workshop confirmed that economic data has to be supplied for the reference year n-2. A full dataset, including Task 1.3 and 1.5, for the reference year 2008 must be sent by January 2011; for those Member Countries which have already submitted Task 1 data for the 2008 reference year, task 1.3 and 1.5 data should be incorporated into the original 2008 file, containing Task 1.1, 1.2 and 1.4 data, and resubmitted to the GFCM Secretariat. The data for reference year 2009 should be submitted by May 2011 as a full Task 1 pack.
- The workshop recommended that the GFCM Secretariat prepares an additional exchange format for the Task 1 application based on CSV tables. The use of these tables would be done only at national level in order to upload their data in the Task 1 data entry tool, before sending the data to the GFCM Secretariat.
- The workshop reminded the national experts that it was possible to introduce information on the origin of the data (census, logbook, sampling at sea, etc), together with the details of the methodology used, in the "comments" section of the Task 1 data entry application. The workshop also suggested that the GFCM Secretariat (i) adds the possibility to enter more than one method for the different variables (in order to

distinguish, for example, small and large vessels), and (ii) to include the possibility to attach a pdf document.

- The workshop recommended to use 'Miscellaneous gear' when reporting catches per O.U. of fishing trips having operated with several gears without possibility to distinguish which (amount of) species can be attributed to each of the gear used.

Data collection issues

- The workshop wished to remind national experts about the importance of carrying out statistical analysis on the consequences of applying different thresholds for reporting catches in the logbook, as recommended by SCSI in 2009. These analyses will support the discussion in the November session of SCSI.

149. The workshop also identified the following issues to be further discussed during the SCSI meeting in November 2010:

- Evaluation of the differences in fleet segmentation definitions of the EU DCF and GFCM Task 1, together with issue of the missing segment “tuna seiner” in the segmentation of the former. In the mean time, the workshop suggested that an arrangement with the European Union through its Mediterranean and Black Sea coordination forum (RCM) and STECF bodies, should be found in order to include the “tuna seiner” fleet segment in its DCF obligations.
- The workshop brings to the SCSI attention the fact that two gears part of the GFCM Task 1 are absent of the EU DCF Appendix 4. Consequences need to be evaluated and actions undertaken to converge the two systems if this is confirmed as an issue.
- Evaluation of the possibility of using the ISCAAP groups as target species, on the basis of an exercise carried out by the GFCM Secretariat.
- The workshop suggested that the GFCM Secretariat prepares, from all documentation available, the full list of definitions used in the data entry application and present them for SCSI consideration.
- The workshop recommended that the SCSI discusses the possibility to include quality indicators for the Task 1 data stored in the GFCM database.

ADOPTION OF THE REPORT

150. The draft report was adopted by the participants at the end of the meeting.

Appendix A

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Appendix B**Agenda**

- 1. Opening and arrangement of the meeting**
- 2. Adoption of the agenda**
- 3. Appointment of rapporteur(s)**
- 4. Recalling basic concepts and tools developed specifically for the GFCM Task 1 database.**
- 5. National fisheries statistical system(s) in the Mediterranean and Black Sea and practical difficulties encountered by the expert in charge of data collection.**
- 6. Classification of the problems arising from the data submission requirements.**
- 7. Discussion on the problems encountered, exchange of experiences, and proposals of solutions, guidelines and code of good practices**
- 8. Anticipation of the problems related to the submission of Task 1.3 and 1.5 by January 2011, and the full Task 1 by May each subsequent year, following GFCM Recommendation GFCM/33/2009/3**
- 9. Conclusions and Recommendations**
- 10. Adoption of the report and closure of the meeting**