

October 2007



GENERAL FISHERIES COMMISSION FOR THE
MEDITERRANEAN

COMMISSION GÉNÉRALE DES PÊCHES POUR
LA MÉDITERRANÉE



**GENERAL FISHERIES COMMISSION FOR THE
MEDITERRANEAN**

SCIENTIFIC ADVISORY COMMITTEE

Tenth Session

Nicosia, Cyprus, 22-26 October 2007

**REPORT OF THE EIGHTH SESSION OF THE SUB-COMMITTEE
ON STATISTICS AND INFORMATION (SCSI)*
Kavala, Greece, 17–20 September 2007**

*** Available only in English**

OPENING AND ARRANGEMENT OF MEETING

1. The eighth session of the Sub-Committee on Statistics and Information was opened by the SCSI Coordinator and GFCM Biostatistician, Mr Matthew Camilleri. It was attended by 13 experts from eight (8) Members of SAC. He welcomed the participants and reviewed the work accomplished during the intersessional period with particular reference to the Task 1 - Operational Units workshop and the development of the Task 1 electronic tool. He reminded the participants that the Task 1 Resolution was in force and that the first set of data was due by the end of 2007.

2. The Sub-Committee was reminded of the importance of the following issues which were expected to be addressed during the meeting:

- pending issues on Task 1 including transversal issues;
- amendment to the FAO STATLANT 37A form taking into account the Geographical Sub-Areas (GSAs);
- the development of Fishery Ecosystem Information System (FEIS) at regional level;
- the development of a regional fleet register for the Mediterranean;

- fishing effort measurement and standardization;
- state of the art of MEDSTAT and the planned program of work.

3. Mr Lavrendios Vassiliades was appointed Rapporteur.

ADOPTION OF AGENDA

4. It was suggested that the discussion related to MEDSTAT should be included under agenda item 3. The participants (list provided in Appendix 2) approved the agenda contained in Appendix 1.

PRESENTATION OF NATIONAL AND REGIONAL ACTIVITIES

AdriaMed Database on Fisheries Social Survey Data (DBS)

5. The presentation of the AdriaMed database on fisheries social surveys data (DBS) was performed. The software is a stand alone application designed to organize, store and undertake the initial processing and analysis of the data available after the AdriaMed Social Survey of Albanian Marine Fisheries executed in 2003 in collaboration with the Albanian Fisheries Directorate. The characteristics of the system were illustrated. Data collected are included according to the questionnaires structures used during the survey (personal data, maritime district characteristics, and crew working conditions and fishing strategies). Although the database has been created for Albania, the structure is very flexible and could be easily customized accordingly to user's need (e.g. the database has been personalized for Montenegro social survey). Moreover DBS has a section including features to upload data directly from the national fleet register, and effort to develop a routine to export data directly for the GFCM task 1 has been put in place. Appreciation was made for the work carried out by the project. The Sub Committee highlighted the utility of this tool particularly for its flexibility and capacity to be adapted to produce data consistent with the GFCM task 1.

Fisheries Ecosystem Information System (FEIS)

6. The FEIS, developed under the MedSudMed project, is intended to support scientific communities and country administrations in monitoring fisheries resources and ecosystems through the organization and standardization of present and past data produced in their areas of competence, complemented by accessory data and information obtainable from the Internet, and duly structured to enable its access for immediate and/or further pooled processing. The aim of this system is to act as an analytical tool to study marine ecosystems, natural phenomena and fisheries, by providing a framework within which the FEIS participants can share information and data. The key information concerns biological aspects of the resources, environmental parameters, fishery statistics and accessory data. The primary motivation is to standardize, aggregate and process the data, and enable them to be exported on a Geographical Information System (GIS).

7. If its application is extended to the whole Region, the primary users and beneficiaries would be all the national and regional scientific institutions of the GFCM. Further use through the WEB will also be open to the external world with limitations on information produced for which authorization might be necessary.

8. There was a general consensus for further developing FEIS and implementing it to the GFCM rank. The meeting was informed that while MedSudMed does not have the resources for

the development of the Regional system it can provide adequate support for the handover of the system to the GFCM.

9. The Sub-Committee agreed on the need for further development of FEIS at regional level.

Actual situation of Statistics system in Morocco

10. Mr Said Benchoucha presented a report on the “*Actual situation of Statistics system in Morocco*” (86 artisanal landing points and 7 main landing ports).

11. Data is collected by:

- *INRH (Institut National de Recherche Halieutique)*: Catch and effort Surveys in all ports and in artisanal landings points, species biological sampling, investigation surveys in the sea on board a research boat and commercial fishing vessels;
- *DPM (Delegations of Ministry of Fisheries in ports)*: licenses fleet register: power, tonnage, age, length of fishing vessels;
- *ONP (Office National des Peches)*: MAI system: landings in Kg, value in Dh and effort by day, by fishing boat, by port and by species.

12. The main constraint occurring in monitoring Moroccan fisheries is a fleet mobility between the Mediterranean Sea and Atlantic Ocean (see also Appendix 3).

Current situation in Turkey

13. Mr Kemal Can Bizsel presented the current situation that exists in Turkey.

14. The main issues currently being addressed are:

- system for vessel monitoring;
- register system for all landings;
- legislation issues (Territorial waters licenses constitute right to operate any area the fisherman prefers with no restrictions).

15. Vessels are categorized into 5 main categories:

- trawlers;
- purse seiner;
- cargo vessels;
- others(various gears);
- multipurpose vessels.

16. Licenses are issued separately for two years.

17. The fleet registration is strictly an essential component of any fisheries management initiatives. However, it is not sufficient alone in both cases that the mobility of the fleet over the fishing grounds is not traced and/or the multiple fishing gears are used by the vessels in highly site and time specific patterns. As an example for the former case, the territorial waters, based on the constitutional rights, are considered as “common property” in Turkey, and hence, every citizen who has license for fishing has also right to fish any fishing ground within the frame defined by the fisheries circular in act. Consequently, the mobility of the fleet becomes an

important parameter for determining the fishing capacity and/or performance of a fleet or a segment of a fleet. For the latter, the most typical example is the vessels which are capable of using multiple fishing gears, synchronously or simultaneously. Furthermore, the only gear specifications parameterized are the mesh sizes of the nets and the numbers of the hooks. Thus, the number of hooks on a long-line or the dimensions (=length and width) of the nets usually remain unknown. As conclusion, the mobility of fleet and the variety of their gears should be reflected in the fleet registrations and landing records.

Fisheries statistics and activity of the fleet in France

18. Mr Joel Vigneau presented the French fishing activity calendar. He explained that, with the objective of carrying out a census on the fleet and its fishing activity, France has implemented a regular follow-up of all fishing activities along its coast. The information collected is known as the fishing activity calendar. The population of reference corresponds to all the vessels recorded in the national fleet register. The census takes into account more than 6000 vessels operating from harbours in the North Sea, Channel, Atlantic and Mediterranean coast, without restriction on the size of the vessel. The information collected, and on a monthly basis, is as follows: the registered and operating port, the owner code, the crew size, the number of days at sea, the number of fishing days, the codification of up to 5 métiers practiced during the month. For each metier, are registered the gear used, the targeted species and the fishing area. On a yearly basis, information on the total number of fishing days, total number of days at sea and the total number of engine hours are also recorded. This exhaustive information correspond exactly to the provision of GFCM task 1.1 and 1.2 and is also the basis for the elaboration of any sampling plan.

MEDSTAT

19. Mr Salvatore Coppola presented a review of the status of implementation of MedStat in the Mediterranean and gave an insight on possible scenarios to be followed for further development¹. The sub-committee agreed that priority should be given to the fleet register, with all participating countries equipped with the second generation system.

20. A review by country (see Appendix 4) was then conducted by the Sub-Committee and respective strategies for the continued development of MedStat systems were drawn up for each case:

REVIEW AND DISCUSSION OF TRANSVERSAL ISSUES

21. Participants of the Sub-Committee participated in a transversal session for the four Sub-Committees after having briefly reviewed the items on the agenda for this session.

THE DEVELOPMENT OF THE GFCM DATABASES AND INFORMATION SYSTEMS

22. Mr Matthew Camilleri delivered a presentation on the overall framework and design of the GFCM database and information system (Appendix 5). He explained that the system is expected to be made up of 6 main databases which would be integrated through a control centre. The GFCM Information System would also be linked to the GFCM website for uploading, downloading, browsing and reporting routines. He recalled that the GFCM had adopted a data policy Recommendation (GFCM/2006/7) and that this would be kept in view during the development phase. He added that the GFCM was in the initial phase of development and that the

¹ Coppola S.R. (2007) The status of implantation of MedStat Activities in the GFCM area. *GFCM Working document – Sub-Committee on Statistics and Information*. pp 26.

GFCM system developer/programmer had yet to be recruited. However, substantial progress had already been made in designing the data structure for each database and in creating electronic data compilation / exchange tools.

23. Following this presentation, the participants noted the absence of a regional fleet register which is an essential tool in monitoring fishing capacity and in implementing responsible fisheries management. A preliminary list of data requirements for the regional fleet register was presented by the Coordinator (Appendix 6).

24. To complement the discussion, Mr Antonio Cervantes gave a presentation on the European Community Fleet Register (CFR) (see Appendix 7). The registration of vessels and the submission of data to the CFR is an obligation for EU Member States under Commission Regulation EC/26/2004. Snapshots of the national fleet register are uploaded to the CFR every three months. Mr Cervantes explained that the CFR plays an important role in the implementation of the EU Common Fisheries Policy. All EU Member States have a fleet capacity ceiling (in tonnage and power) and Member States are responsible for any updates of information concerning their fleet. The database includes all fishing vessels and is publicly available on the web.

25. Mr Nicos Hadjistephanou pointed out that one must consider that difficulties may arise from the duplication of work by the national authorities responsible for the fleet register.

26. Mr Bizsel informed the Sub-Committee of the problems faced in Turkey with the presence of two registers:

- the unrestricted mobility of the fleet: A fishing boat can fish any fishing ground as long as it obeys the time, space and gear prohibitions and/or restrictions FR with information related to fisheries;
- integrating a second register for vessel navigation licenses to the register for fishing vessels.

27. The Sub-Committee agreed on the urgent need to have an *ad hoc* meeting on the development of a GFCM Regional Fleet Register, preferably in early 2008 (see Appendix 8 for Terms of Reference).

28. Issues on Task 1 and capture data (STATLANT 37A) are dealt with separately under agenda items 6 and 9 respectively.

ACTIONS TO BE UNDERTAKEN FOR THE IMPLEMENTATION OF GFCM TASK 1

29. Each of the actions to be undertaken by the SCSI as recommended by the Workshop entitled “Transversal Workshop on the Compilation of the GFCM Task 1 Data”, held in Casablanca from 19 to 22 June 2007, were discussed and the following decisions taken:

- Further guidelines on reporting catch data for target species, associated species and by-catch should be included in the Task 1 data entry tool. The relevant text was agreed upon.
- For the time being, the list and definition of parameters in Task 1 need not be altered.
- Fishing effort should be reported through the use of four separate fields (following the standard fishing effort measurement provided in the Task 1 resolution):
 - time;
 - capacity;

- activity;
 - gear units.
- The definition for miscellaneous gear as given in the FAO Technical Paper TP222 (Appendix 8) should be clearly visible in the appropriate section of the Task 1 data entry tool.
 - When selecting the gear class “other gear” the user should specify the related gear in a separate data field.
 - For the time being, there is no need to report the port of landing.
 - The deadline for the submission of Task 1 data should be specified in the Resolution as 30th of June (data of previous year is to be reported).

COMPATIBILITY BETWEEN GFCM TASK 1 AND OTHER REGIONAL INITIATIVES

30. The Sub-Committee had a joint discussion with the SCESS on this issue and both Sub-Committees acknowledged that the fleet segmentation was of major concern. They noted that recent discussions and studies (EC Nantes 2006 Workshop²) suggested that the fleet segmentation should be revised. The participants were also informed that according to the results of the statistical analysis carried out during the EU Mediterranean Regional Coordination Meeting, a split at 6m was justified while no preference was shown between a split at 15m and a split at 18m.

31. In view of the above it was recommended that a workshop should be convened in due course (Appendix 9). Nevertheless, the SCSI stressed that such a workshop could only be productive after sufficient amounts of data would have been compiled and analyzed within the Task 1 framework.

REVIEW OF FAO-GFCM STATISTICAL SUBDIVISIONS AND THE RELATIONSHIP WITH GSAs

32. The transition of reporting data, particularly catch and effort, by FAO subdivision to GSA resolution was discussed. Whilst an effort to provide data in the latter format is encouraged, the meeting noted that there may be practical constraints at national level to switch to a new system which may also require amendments to be made to logbooks, other catch declaration forms and survey questionnaires.

33. Since this agenda item is linked to various issues, the subject was discussed under item 6 and item 9 of the agenda.

THE FAO-GFCM CATCH STATISTICS REPORTING FORM “STATLANT37A”: CURRENT STATUS AND FUTURE DEVELOPMENT

34. The Coordinator introduced the FAO STATLANT 37A form for reporting annual catch data and explained that the compilation of catch statistics at a disaggregated level for the Mediterranean was the responsibility of the GFCM (FAO requires catch statistics at regional level i.e. area 37). He explained that the FAO statistical sub-divisions were of limited relevance to the GFCM management strategy and that the Commission has requested that data should be available by GFCM Geographical Sub-Area. In this respect, he put forward a proposal (Appendix 10) whereby Countries would continue reporting catches by sub-division and then, if possible, split the catches by the corresponding GSAs (or part of the GSA) within that sub-division. The Sub-Committee agreed that this proposal was a workable solution to gradually implement a “GSA

² http://fishnet.jrc.it/c/portal/layout?p_1_id=PUB.1013.20

compatible” catch reporting system. Parallel reporting by sub-division and GSA should run for at least three years, after which an analysis could be undertaken and further decisions on the way forward could be taken.

CALIBRATION OF FISHING EFFORT UNITS AND THE IMPLICATION FOR FISHERY MANAGEMENT

35. After some discussion, it was agreed that at present the committee cannot pursue the issue of calibration of units any further since it did not have sufficient information. The committee also stated that the first priority was to standardize the measurement of fishing effort by fishing operation.

CONCLUSIONS AND RECOMMENDATIONS

- Proceed with the compilation of Task 1 data as requested by the Resolution, noting that in future when sufficient data are received the fleet segmentation will have to be reviewed. It is noted that since the Transversal Workshop on the Compilation of the GFCM Task 1 Data (Casablanca, 19-22 June 2007), the data entry tool has been improved and there were positive remarks by the participants.
- Amend Resolution GFCM 31/2007/1 by including an annual deadline for the submission of Task 1 data. Deadline to be set at 30th June (submission of data for previous year).
- An ad hoc meeting on the GFCM Regional Fleet Register should be organized in early 2008 (Appendix 11).
- Implement a testing period for the proposed “GSA compatible” STATLANT37 A form (Appendix 10).
- Further development of FEIS at regional level under the responsibility of GFCM.
- Implement a program of work for the further development of MEDSTAT within various countries giving priority to the fleet register.
- The SCSI should be informed about any activities carried out in the field of database development.
- Convene a workshop to review the fleet segmentation (Appendix 9) after sufficient quantities of data would have been compiled and analyzed within the Task 1 framework.
- On the issue of fishing effort measurement, first priority should be given to the standardization of the measurement of fishing effort by fishing operation. Calibration of fishing effort of different gears will occur in a second step after a first round of data is collected and compiled through GFCM Task 1.

36. The general conclusion of the SCSI is to mainly focus, in 2008, on the development of the Regional fleet register together with the development and or upgrading of National fleet registers where necessary.

WORKPLAN FOR SCSI (2008)

- Compilation of Task 1 data, processing and analysis;
- Regional fleet register ad hoc meeting (early 2008);
- Implement a testing phase for the proposed “GSA compatible” STATLANT 37A for the collection of catch data;
- Further development of FEIS through testing/implementing in other sub-regions with a vision to develop FEIS at regional level under the responsibility of the GFCM;

- Further development of MedStat, with GFCM support, in selected countries with special priority to the fleet register.

FUNCTIONING OF THE SCSI REGARDING THE ACTIVITIES, IN CONNECTION WITH ITS WORKING GROUPS AND WITH TRANSVERSAL ACTIVITIES.

37. The participants agreed that the functioning of the SCSI has been satisfactory throughout the years, with good collaboration with all other sub-committees. The main effort has so far been in getting the Operational Units issue off the ground and success has been recorded through the recent launching and implementation of the Task 1 Resolution. They agreed that new challenges lie ahead, particularly in the development of the GFCM regional fleet register and the GFCM information system in general.

ANY OTHER MATTERS

38. No other subjects were raised under this agenda item.

NOMINATION OF THE NEXT SCSI COORDINATOR

39. The Sub-Committee proposed the nomination Mr Joel Vigneau as the next SCSI Coordinator.

DATE AND VENUE OF NEXT MEETING:

40. Mr Kemal Can Bizsel informed the Sub-Committee that Turkey had kindly offered to host next year's sub-committee sessions.

ADOPTION OF THE REPORT

41. The report was adopted on 20 September 2007.

Appendix 1

Agenda

- 1. Opening and arrangement of meeting**
- 2. Adoption of the agenda**
- 3. Presentations on national and regional initiatives**
 - FAO-GFCM sub-regional projects
 - Other sub-regional initiatives
 - National initiatives
- 4. Review and discussion of transversal issues**
 - 4.1. Preliminary review by the Sub-Committee
 - 4.2. Review and discussion by the Sub-Committees transversal session ³
- 5. The development of the GFCM databases and information systems**
- 6. Actions to be undertaken for the implementation of GFCM Task 1** (following the outcome of the workshop and general discussion of the transversal session)
- 7. Compatibility between GFCM Task 1 and other regional initiatives**
 - the case of the fleet-fishery matrix of the new European Commission Data Collection Regulation
 - other cases (if any)
- 8. Review of FAO-GFCM Statistical Sub-Divisions and the relationship with GSAs**
- 9. The FAO-GFCM catch statistics reporting form “STATLANT37A”: current status and future developments.**
- 10. Calibration of fishing effort units and the implications for fishery management**
- 11. Conclusions and recommendations**
- 12. 2008 SCSI workplan**
- 13. Functioning of the SCSI regarding the scientific activities, in connection with its Working Groups and with the transversal activities.**
- 14. Any other matters**
- 15. Nomination of SCSI Coordinator**
- 16. Date and venue of the next meeting**
- 17. Adoption of the report**

³ This agenda item (see content in Appendix) will be attended by the 4 Sub-Committees. Some issues may not be of direct interest to all SCs.

Annex 1**CONTENT OF THE SUB-COMMITTEES
TRANSVERSAL SESSION
(Agenda item 4.2)**

- 1) **Methodology to Analyse Disaggregated Fishery Data (by J.Lleonart)**
 - Conclusions of the Workshop on disaggregated Fishery Data (France, 12-16 March 2007)
 - Elaboration of guidelines on the use of disaggregated data to identify fisheries parameters (OU, fishing effort...)
- 2) **Selectivity in the Mediterranean trawl fisheries (by K.R. Constantina/Sacchi).**
 - Conclusions of the Workshop on selectivity in the Mediterranean trawl fisheries (Spain, 2-4 April 2007)
 - Presentation of the document on reference technics on impact of certain fishing gears on the environment
 - Works on improving gear selectivity, with special attention to trawls
- 3) **Ecosystem Approach to Fisheries (by M.N Bradai).**
 - Conclusions of the Workshop on EAF (Tunisia, 22-23 May 2007)
 - Common framework for the implementation of EAF in the Mediterranean, according to the FAO guidelines, including feasibility studies in selected GFCM GSAs.
- 4) **Marine Protected Areas (MPAs) (by C. Rais).**
 - Conclusions of the Workshop on MPAs (Tunisia, 24-25 May 2007)
 - Presentation of the inventory/synthesis of published studies on fisheries and biodiversity of the Mediterranean deep sea.
 - Proposition of new fisheries restricted areas
- 5) **The compilation of GFCM Task 1 data (by M. Camilleri).**
 - Conclusions of the Workshop on the compilation of GFCM task 1 (Morocco, 19-22 June 2007)

Appendix 2

List of participants

Said BENCHOUCHA
 Institut National de Recherche Halieutique
 Centre Régional de Tanger
 BP 5268 Dradeb Tanger - Maroc
 Tel.: +21239325139/ +21262607444
 Fax: +21239325139
 E-mail: bench2468@yahoo.fr

Kemal CAN BIZSEL
 Dokuz Eylul University
 Institute of Marine Science and Technology
 İnciralti, İzmir - Turkey
 Tel: 0090 232 2785112
 Fax: 0090 232 2785082
 Email: can.bizsel@deu.edu.tr

Antonio CERVANTES
 European Commission
 Directorate General for Fisheries
 and Maritime Affairs
 79, rue Joseph II
 1049 Brussels - Belgium
 Tel.: 00.322.2965162
 Fax: 00.322.2957862
 E-mail: Antonio.cervantes.europa.eu

Kalliopi KOUNDOURADAKI (Ms)
 Ministry of Rural Development And Food
 General Directorate of Fisheries
 Directorate of Marine Fisheries
 Department of Coastal Fisheries
 Sygrou Avenue 150
 176 71 Athens - Greece
 Tel.: +30 210 9287175
 Fax: +30 210 9287110
 E-mail: syg015@minagric.gr

Spaso POPOVIC
 Ministry of Agriculture, Forestry and Water
 Management
 Rimski trg bb, 81 000 Podgorica
 Montenegro
 Tel.: +382 81 621007
 Fax: +382 81 621008
 E-mail: spasop@mn.yu

Sotirios TASOULAS
 Ministry of Rural Development And Food
 General Directorate of Fisheries
 Directorate of Marine Fisheries
 Department of Coastal Fisheries
 Sygrou Avenue 150
 176 71 Athens - Greece
 Tel.: +30 210 9287175
 Fax: +30 210 9287110
 E-mail: syg015@minagric.gr

Konstantinos TOPALOGLOU
 Ministry of Mercantile Marine
 Port Police Directorate
 Fisheries Department
 Grigoriou Lampraki 150 Str
 18518 – Piraeus - Greece
 Tel.: +302104519901
 Fax: +302104285466
 E-mail: dlag@yen.gr

Joel VIGNEAU
 Ifremer
 14520 Port-en-Bessin – France
 Tel.: +33 2 31 515600
 Fax: +33 2 31 515601
 E-mail: joel.vigneau@ifremer.fr

Akram ALTURKY
 Marine Biology research Centre
 Tajura-Libya
 B.O.Box 30830
 Tel 0021821369001
 Fax 0021821369002
 Email: Akram_Turky@yahoo.com

Eric MUSCAT
 Malta Centre for Fisheries Science
 Fort San Lucjan
 M'XLOKK BBG06
 MALTA
 Tel: 00356 21685525
 Email: eric.muscat@gov.mt

Lavrendios VASSILIADES
Department of Fisheries and Marine
Research
Bethleem 101, Nicosia 1416
Cyprus
Tel: 0035722807858
Fax: 0035722775955
Email: lvasiliades@dfmr.moa.gov.cy

Nicos HADJISTEPHANOU
Department of Fisheries and Marine
Research
Bethleem 101, Nicosia 1416
Cyprus
Tel: 0035722807866
Fax: 0035722775955
Email: nhadjistephanou@dfmr.moa.gov.cy

Topaloglou KONSTANTINOS
Ministry of Mercantile Marine Port Police
Directorate
Fisheries Department
Grigoriou Lampraki 150 Str
18518-Piraeus-Greece
Tel: 00302104519901
Fax: 00309104985466
Email: dlag@yen.gr

FAO
Viale delle Terme di Caracalla
00153 Rome

Matthew CAMILLERI
GFCM Bio-Statistician
International Institutions and Liaison
Service
Fisheries and Aquaculture Economics and
Policy Division
Viale delle Terme di Caracalla
Rome 00153
Tel.: +39 06 57056435
Fax: +39 06 57056500
E-mail: matthew.camilleri@fao.org

Federico DE ROSSI
GFCM Data Management Consultant
International Institutions and Liaison
Service
Fisheries and Aquaculture Economics and
Policy Division
Tel.: +39 06 57056435
Fax: +39 06 57056500
E-mail: federico.derossi@fao.org

Salvatore COPPOLA
Senior Adviser
Fisheries Management and Conservation
Service
Fisheries and Aquaculture Management
Division
Tel.: +39 06 57053034
Fax: +39 06 57053020
E-mail: rino.coppola@fao.org

Nicoletta MILONE
Fisheries Information Officer
Fisheries Management and Conservation
Service
Fisheries and Aquaculture Management
Division
Tel.: +39 06 57055467
Fax: +39 06 57053020
Email: nicoletta.milone@fao.org

Appendix 3

Actual situation of the statistic system in Morocco Application of the Matrix «Task 1» to the Moroccan fisheries

Saïd BENCHOUCHA & Aziz LAMTAI

National Halieutic Research Institut (INRH), Tangier Regional Center

Abstract

The Moroccan fisheries are composite, multispecies and multigears. They are known by their seasonality and their mobility from the Mediterranean sea to Atlantic ocean. The statistic database is collected by mainly three gouvernemental administrations ; the National halieutic Research Institute (INRH) witch conduct catch and effort Surveys, biological species sampling, economic data collecting, investigations in the sea and the monitoring of fishing activities ; the Delegations of Ministry of Fisheries (DPM) witch are in charge of the fleet licenses register (power, tonnage, age, length of fishing vessels) and the National Fisheries Office (ONP) witch developed an electronic MAI system reporting the landings in Kg, a value in Dh and effort by day, by fishing boat, by port and by species. A unique database is needed for all the Mediterranean countries. The Matrix Task 1 multidisciplinary database is a solution to solve all the issues for the Moroccan fisheries because of their multispecies and multigears characteristic. The main constraints occurring in Moroccan fisheries are the standardization of fishing effort and the fleet mobility between Mediterranean sea and Atlantic ocean.

Appendix 4**MEDSTAT Country review****Albania**

The Albanian Statistical system (AlbaniaStat) was developed as a prototype to further extend the coverage of MedStat to other countries in ADRIAMED as was done with countries in COPEMED. Apart from the establishment of a Statistical Unit in the Fishery Department and the upgrading of the skills of the national staff, the computerised fishery census, based on national methodology, and national and international standards and requirements has definitely been the most conspicuous result. The census, with built-in enhancements and functionalities, introduced at the request of the Albanian Administration, as well as the upgrading introduced, is, *de facto*, the national fishing register.

A catch and effort assessment survey for Commercial Fishery based on a made-to-measure methodology that conforms to national criteria, with a high degree of harmony with the regional context and, at the same time, taking into account the difficult restrictions the Albanian Administration were facing, was put in place. In addition, for the small-scale fishery, the “MedStat Albanian small-scale fishing census” has been designed and the database developed.

Albania’s immediate priority is to complete the census on artisanal fisheries and start the related catch assessment survey.

Algeria

The situation in Algeria, during the Copemed Project, was that the Frame Survey (listing approach) was conducted and probably covered all the vessels, but an in-depth assessment of the saved data has revealed a consistent omission of data in the database contents (structural characteristics, fishing habits, season, etc.) which appeared to be poor. Though it is not the latest release, Algeria MedStat Census database is of a second generation and in French.

It was suggested that Algeria should ask for further assistance directly to the GFCM Secretariat without waiting for the start of the COPEMED II project or of a possible FAO Technical Cooperation Project.

Croatia

The Adriamed Project has supported the review of the Croatian Fishery Statistical system, within the framework of the MedStat programme, since the beginning. The country was under pressure to prepare all national infrastructures to fulfill EU requirements. The MedStat team undertook a severe review of the statistical system in Croatia (2002), including a preliminary assessment to launch a catch assessment survey. In 2004, Croatia started receiving direct support from the EU within its accession programme and that the national statistical programme was included in that plan of action. Therefore, no further assistance from GFCM/FAO is envisaged.

Egypt

Egypt, like Syria and Lebanon, was also among the first countries assisted by the TCP/INT/2904-MedFisis in the rehabilitation of the national statistical system using the MedStat system. An assessment was made in 2004 in collaboration with GAFR and several activities were planned and undertaken aiming at implementing a census and the related fishing fleet register. However,

the attempt to develop an Arabic version of the MedStat fleet register did not materialize due to a number of difficulties and the programme was totally abandoned.

It was suggested that assistance could be provided to Egypt to recuperate all data available and provide the second generation of MedStat.

Lebanon

MedStat work in Lebanon mainly concentrated on the Lebanese Fishing Register and was carried out in 2004-2005. Through this initiative Lebanon has, for the first time in its history, a census of its fishing fleet. This census resulted in a computerized Fishing Vessel Register. This register conforms to the standards set by FAO/GFCM, is developed in the second generation version and is, like that of Syria, one of the most advanced.

Further assistance to Lebanon is envisaged in the development of a catch assessment survey.

Libya

In Libya, the census of artisanal and industrial fishing vessels was conducted and completed in 2001. The work also consisted of the development, installation, training and full operation of the database of the national register of fishing vessels with all the data management functionalities and updating procedures. The Libyan authorities have reiterated on various occasions (GFCM, SAC and MedSudMed meetings) their willingness to rehabilitate the MedStat system and proceed with the CAS. Also in Libya, MedStat is a second generation application.

It was suggested that initially a quality check survey should be conducted on the census data (2001) to identify discrepancies with the present reality, and update this as appropriate. A catch assessment survey carried out by local officers could follow with the assistance of GFCM/FAO.

Malta

At present Malta is using the first generation MedStat databases including the Fishing Vessel Register, CAS Logbook and CAS Artisanal Fishery. Malta would like to upgrade its present databases into the second generation databases developed by FAO/GFCM. The new databases have to be networked on a multi-user system through the national authority responsible for the government networking and IT in Malta, MITTS. However in order for Malta to be able to manage the second generation software and network the databases with subsequent maintenance and support, Malta has to recruit expertise from a subcontracted company since MITTS does not provide maintenance and upgrade of databases. The subcontractor has to work in collaboration with FAO/GFCM to incorporate all the MEDSTAT components into the information system in Malta.

Montenegro

In Montenegro the first MedStat - Fishing Vessel Register was implemented in 2004 with support of AdriaMed Project and MedFisis. In the beginning of 2007 a new project was started with EU assistance (Technical support to fishery sector in Montenegro) and under this project the established Fishing Vessel Register will be compatible with the Data Collection Regulation. It will be implemented in the middle of 2008.

A catch and effort survey will be implemented at the end of 2008. It will be organized through AdriaMed and have some synergy with other projects.

Morocco

In Morocco, the INRH (Institut National de Recherche Halieutique) is responsible for the assessment, monitoring and advising in fisheries management. The INRH works in collaboration with DPM (Delegations of Ministry delegations) and ONP (Office National des Peches). Catch and effort assessment surveys in Morocco is a priority. This surveys were done under COPMED 1 project and stopped when this project ended.

The list of fishing vessels operating in the Mediterranean is provided by DPM by port. In Morocco the assessment of the landings and effort is based on the market approach (all catch brought to the market) and with the surveys conducted by the Research Institute (INRH). The species landings identification is also done by the INRH scientists surveys in order to correct the weakness in some species landings species in parallel work together with the local authorities.

Morocco may need further assistance from GFCM/FAO, within the MedStat framework, in finding the best possible, or at least the most appropriate, approach, by applying different techniques and models, targeting the improvement of data collection in Morocco

Slovenia

The census of the Slovenian fishing fleet was conducted under the MedStat programme and the database was completed and certified. In 2003, prior to the accession of Slovenia to the EU, further resources had been provided by the European Commission to the Ministry of Agriculture Fishery and Forestry to upgrade the MedStat system. Therefore, no further assistance from GFCM/FAO is envisaged.

Syria

One of the first activities of the FAO/TCP/INT/2904-MedFisis project was the design and implementation of the Census of the fishing fleet in Syria. The whole MedStat census programme has been undertaken from the design, training, field work, database development, data management and, finally, consolidation. In Syria, a second generation system is running and is one of the most advanced.

Syria has undertaken a preliminary exercise to implement a catch assessment survey, but requires further assistance to proceed with a fully fledged system.

Tunisia

MedStat experts are collaborating with the INSTM as well as with the DG Pêche within the framework of the World Bank (WB) Project (component 5) project implementation for the reorganization of the Fishery Statistical Sector in Tunisia. The Census of Fishing Vessels and, subsequently, the Catch and Effort survey are the two domains where a strong synergy was identified between the World Bank project and MedStat supported by the Copemed Project. The software developed and adapted for Tunisia is second generation, although not the latest.

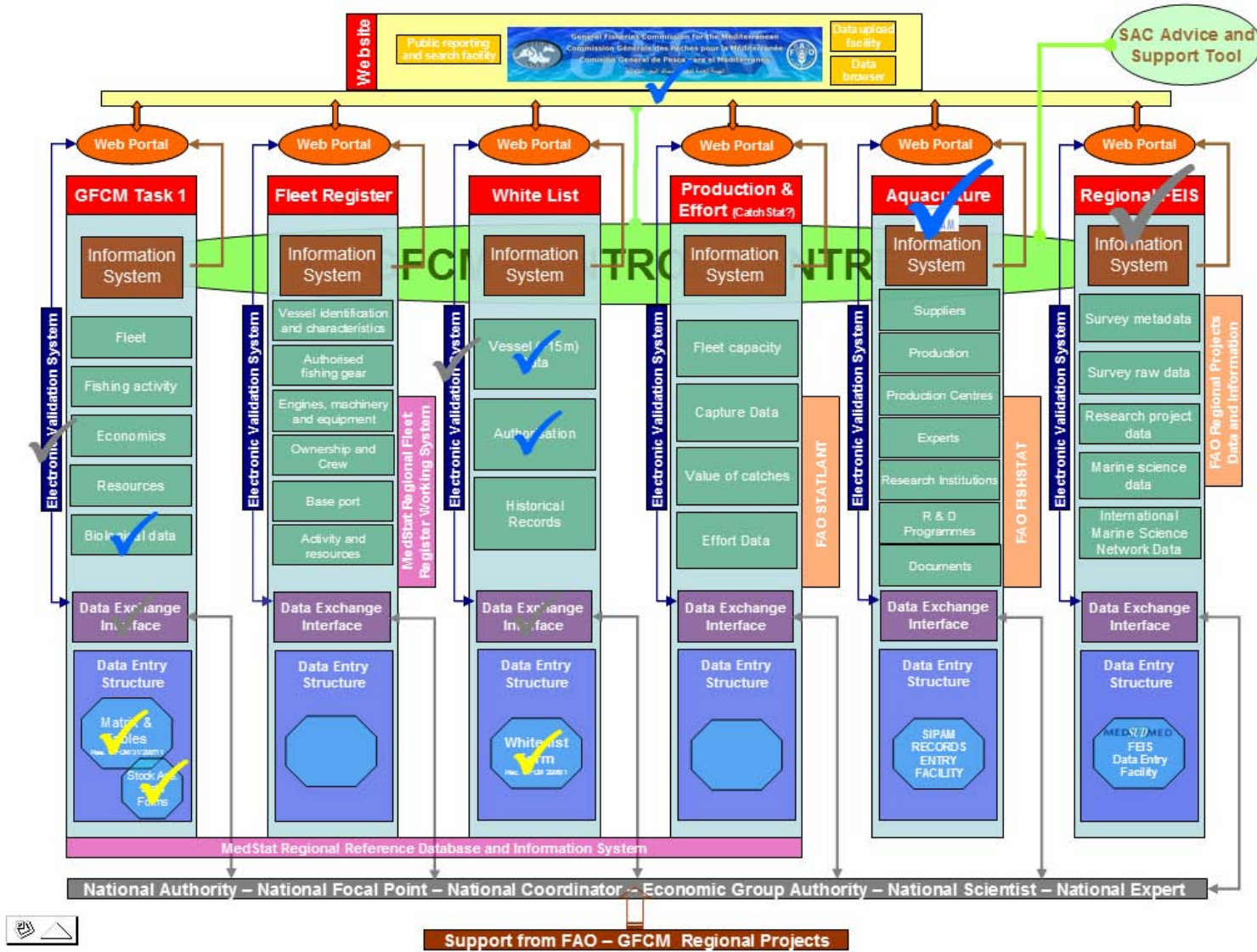
Tunisia's priorities are to complete the quality assessment of the artisanal database and to launch a catch and effort survey on a national scale. For this task, the World Bank agreed to have GFCM support.

Turkey

Turkey is in the accession phase with the EC and is almost at the same level as Croatia. The working plan has been implemented by the authorities. Within the frame of twinning and technical assistance project establishing a country wide infrastructure including an information system. Interfacing with MedStat as a member of the GFCM, will be a targeted approach though it will require additional efforts to match the two systems. Stock assessment survey, excluding large pelagics, is in the planning phase. The survey will comprise a complete census by checking the registry available. The survey, targeting the small pelagics and demersals stocks to be assessed within the next five consecutive years. Establishing a continuous fisheries monitoring system is one of main outcome at the end of the survey. Meanwhile, Turkey has been expecting some clearance from the GFCM on the status of the Black Sea in near future.

Appendix 5

GFCM database and information system



Appendix 6

Preliminary proposal for GFCM regional fleet register data fields

GFCM Vessel Register

Reporting country: _____ Year: _____

<div style="background-color: #ffff00; text-align: center; font-weight: bold; padding: 2px;">FISHING VESSEL IDENTIFICATION CHARACTERISTICS</div> <p style="text-align: right;">Flag <input style="width: 100px;" type="text"/></p> <p>Registration number <input style="width: 100px;" type="text"/></p> <p>Registration authority <input style="width: 100px;" type="text"/></p> <p>GFCM registration number <input style="width: 100px;" type="text"/></p> <p>IRCS <input style="width: 50px;" type="text"/></p> <p>Vessel name <input style="width: 100px;" type="text"/></p> <p>Vessel Type <input style="width: 100px;" type="text"/></p> <p>Operational Status <input style="width: 50px;" type="text"/></p> <p>Base port <input style="width: 100px;" type="text"/></p>	<div style="background-color: #ffff00; text-align: center; font-weight: bold; padding: 2px;">ENGINE</div> <p style="text-align: right;">Powered <input type="checkbox"/></p> <p style="text-align: right;">Power of main engine (KW) <input style="width: 50px;" type="text"/></p> <p style="text-align: right;">Power of auxilliary engines (KW) <input style="width: 50px;" type="text"/></p>
<div style="background-color: #ffff00; text-align: center; font-weight: bold; padding: 2px;">FISHING AUTHORISATION</div> <p>Year of entry into fishery <input style="width: 50px;" type="text"/></p> <p>Type of fishing authorisation <input style="width: 100px;" type="text"/></p> <p>Time period authorized for fishing and/or transhipping</p> <p>From <input style="width: 30px;" type="text"/> <input style="width: 30px;" type="text"/> <input style="width: 30px;" type="text"/> To <input style="width: 30px;" type="text"/> <input style="width: 30px;" type="text"/> <input style="width: 30px;" type="text"/></p> <p style="text-align: center;">Fishing gear</p> <p>Main <input style="width: 100px;" type="text"/></p> <p>Secondary <input style="width: 100px;" type="text"/></p> <p>Fishing Area (Geographical Sub-Area)</p> <p>1 <input style="width: 100px;" type="text"/></p> <p>2 <input style="width: 100px;" type="text"/></p> <p>3 <input style="width: 100px;" type="text"/></p>	<div style="background-color: #ffff00; text-align: center; font-weight: bold; padding: 2px;">OWNERSHIP AND CREW</div> <p>Name of owner / company <input style="width: 100px;" type="text"/></p> <p>Operated by <input style="width: 50px;" type="text"/></p> <p>Address of owner / company</p> <p>Address <input style="width: 100px;" type="text"/></p> <p>Postal code <input style="width: 50px;" type="text"/></p> <p>Town <input style="width: 50px;" type="text"/></p> <p>Contry <input style="width: 50px;" type="text"/></p> <p style="text-align: right;">min <input style="width: 20px;" type="text"/> max <input style="width: 20px;" type="text"/></p> <p>Number of the crew <input style="width: 20px;" type="text"/></p>
<div style="background-color: #ffff00; text-align: center; font-weight: bold; padding: 2px;">STRUCTURAL CHARACTERISTICS</div> <p>Length overall (m) <input style="width: 50px;" type="text"/> Decked <input type="checkbox"/></p> <p>GT <input style="width: 50px;" type="text"/> GRT <input style="width: 50px;" type="text"/></p> <p>Contruction: Year <input style="width: 50px;" type="text"/> Place <input style="width: 100px;" type="text"/></p> <p>Hull material <input style="width: 100px;" type="text"/></p>	<div style="background-color: #ffff00; text-align: center; font-weight: bold; padding: 2px;">ELECTRONIC AND OTHER EQUIPMENT</div> <p style="text-align: right;">VMS <input type="checkbox"/></p> <p style="text-align: right;">Navigation equipment <input type="checkbox"/></p> <p style="text-align: right;">Communication equipment <input type="checkbox"/></p> <p style="text-align: right;">Fish finder <input type="checkbox"/></p> <p style="text-align: right;">Deck machinery to operate fishing gear <input type="checkbox"/></p> <p style="text-align: right;">Fish hold capacity (m³) <input style="width: 50px;" type="text"/></p> <p style="text-align: right;">Refrigeration equipment <input type="checkbox"/></p> <p style="text-align: right;">Fish processing equipment <input type="checkbox"/></p> <p style="text-align: right;">Lights for fishing <input type="checkbox"/></p> <p style="text-align: right;">Safety equipment <input type="checkbox"/></p>
<div style="background-color: #ffff00; text-align: center; font-weight: bold; padding: 2px;">NOTE</div> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	

Appendix 7

European Community Fleet Register Antonio Cervantes

Background

- A new Community Fleet Register (CFR) became operational on 1 September 2004
- Commission Regulation 26/2004 stipulates that Member States have to register their fishing vessels in the CFR
- The CFR should be up-to-date under the responsibility of the Member States and fully reflect to the current situation of their fleets
- The CFR is an essential tool for the implementation and monitoring of the Common Fisheries Policy in the EU
- In accordance with Community legislation, the Fleet Register is a database where all fishing vessels flying the flag of a Member State, and registered in a community territory, must be registered
- The main objective of the Fleet Register is to enable any Community fishing vessel and her key characteristics to be identified
- CFR is available for general public on:
<http://ec.europa.eu/fisheries/fleet/index.cfm>
- All information regarding Member States vessels is accessible, with the exception of private information regarding ownership and agent of the vessel
- Different search options are foreseen

Commission Regulation 26/2004

- determines the minimum information on vessel characteristics which must be submitted to the CFR
- lays down the obligations of Member States regarding the collection, validation and transmission of the data from their national register to the Commission
- lays down the obligations of the Commission regarding the management of the Community fishing fleet register

Recording of information in the CFR

- Every four months Member States have to send a copy of their complete national fleet register database to the Commission (so called Snapshot)
 - The FIDES (Fisheries Data Exchange System) records the data and the FRONT (Fleet Register On the Net) checks that all data are complete and consistent. For this the comprehensive IT validation system has been developed by Commission in agreement with all Member States
 - Errors and warnings messages are issued in FRONT if the validation system detects missing information or likely inconsistency between different data elements
- Recording of information in the CFR
- If there is serious need the Member States can update the CFR date for the particular vessels by sending an Interim transmission as well
 - Commission then accordingly amend these data to the CFR
 - N.B.: the CFR is entirely composed of the data submitted by Member States and Commission does not delete, correct or amend any of these data

Information which is kept in the CFR

The data contained in the Fleet Register can be classified in four different types:

- Administrative identifications: name, port, external marking, IRCS, etc.
- Technical characteristics: length, tonnage, power, fishing gear, etc.
- Historical events: entry into and exit from the fleet, modifications of characteristics.
- Personal data: agent and owner's name and address (not available for the general public).

Information on the CFR

- For further information please contact the DG FISH Fleet Management Unit:
Fleetregister@ec.europa.eu
- Statistical information on the Community fishing fleet and individual Member States figures can be found on the Commissions' fisheries web site:
<http://ec.europa.eu/fisheries/fleetstatistics/index.cfm?lng=en>

Appendix 8**Miscellaneous Gears**

Source: FAO Fisheries Technical Paper 222; Gear Classification

A great variety of fishing gear and methods not specified elsewhere or based on mixed principles. The examples;

- Scoop nets and landing nets;
- Drive-in nets;
- Gathering by hand or with simple hand implements (w/ or w/o diving equipment);
- Poisons and explosives (prohibited!!);
- Trained animals;
- Electrical Fishing.

Appendix 9

Terms of Reference for a SCESS/SCIS Workshop on the Review of the GFCM Fleet Segmentation

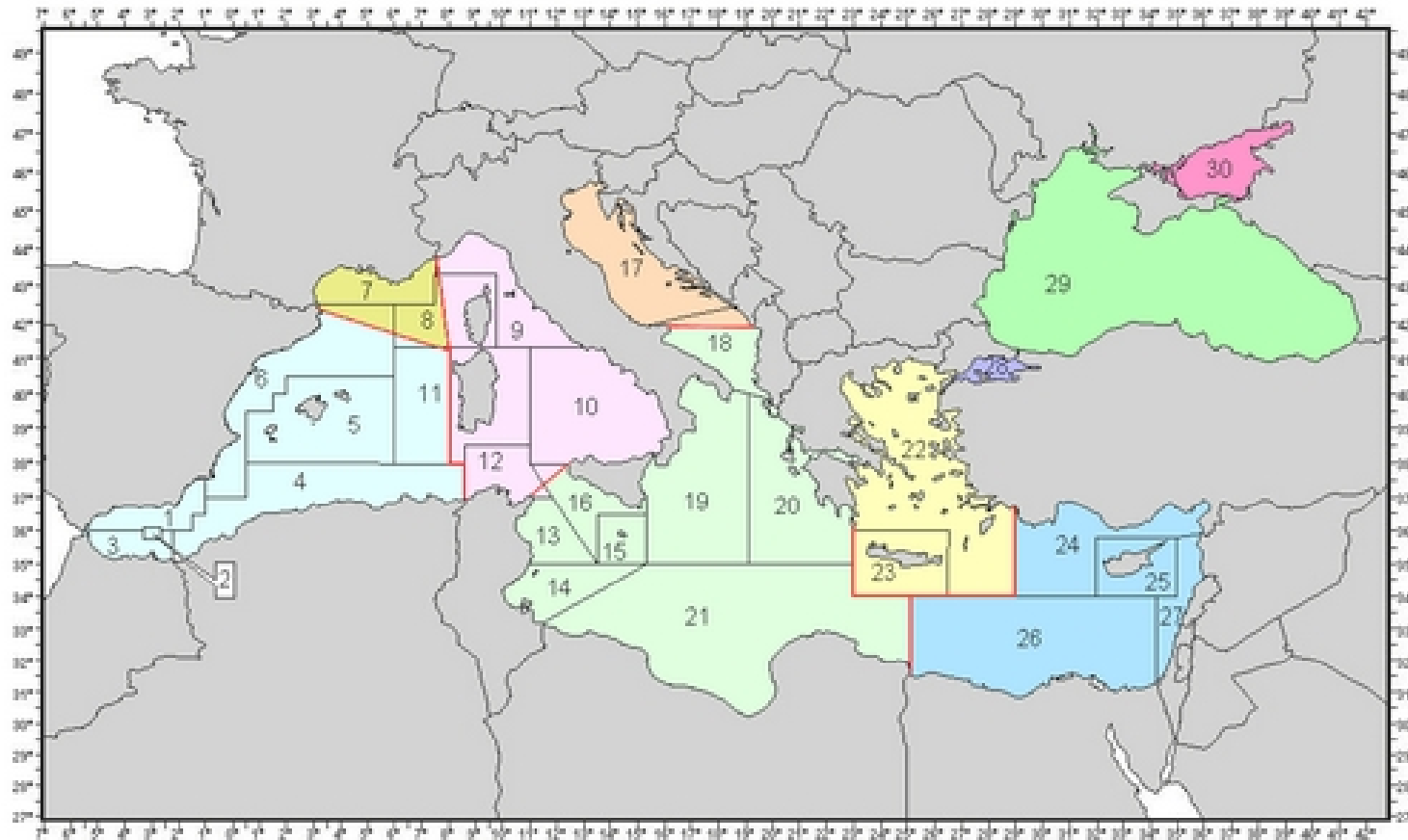
As is required in any adaptive management framework, periodic review of the methods, procedures, and tools is a necessary step to ensuring the management system's sustainability. With recent experiences in collecting data for reporting to the GFCM Task 1, issues have been identified; signalling the need to review the basic assumptions behind the GFCM fleet segmentation, such as:

- Reconsidering the fleet segmentations for clarity and internal consistency (e.g. consistent allocation criteria to be applied across the length classes) to avoid straddling of vessels across fleet segments
- Revising the name of "minor gear" categories
- Reconsidering vessels groupings (e.g. splitting large categories into several smaller segments) to minimize a loss of information through the forced merging of vessels with different exploitation patterns and, hence, a mismatch between the economic and biological characteristics attributed to the particular fleet segment
- Understanding areas of compatibility and subsequent divergence between the GFCM fleet segmentation and the European Commission fleet segmentation (e.g. vessel length categories and dominant versus exclusive gear categories)

Therefore, a SCESS/SCIS workshop is proposed to allow for proper reflection of these issues with the aid of specific examples and background data.

To assist in the discussion, a review of similar systems of fleet segmentations around the world will be presented and specific examples and data from the GFCM will be analyzed by participating members to discuss issues needing to be reviewed. The final outcome of the meeting will be either a revised GFCM fleet segmentation proposal (with relevant justifications) or the recommendation to maintain the current GFCM fleet segmentation.

(b) GFCM GSAs – FAO Sub-Divisions Map



(d) Data entry summary report (example)

STATLANT 37A - SUMMARY

Country: -	Number of species reported: 2
Year: -	Total capture (tonnes): 350

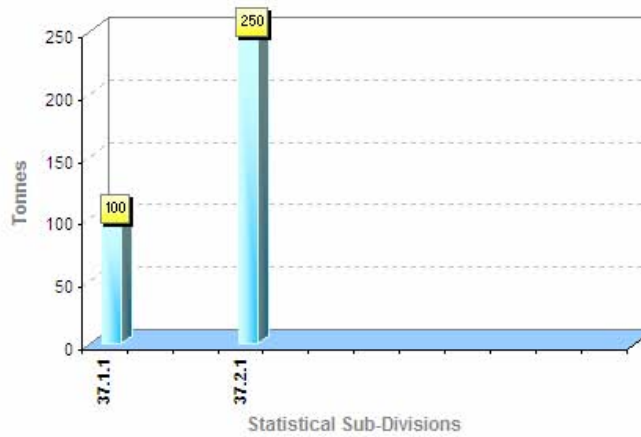
Statistical Sub-Divisions

37.1.1	x	37.3.2	
37.1.2		37.3.1	
37.1.3		37.3.2	
37.2.1	x	37.4.1	
37.2.2		37.4.2	
37.3.1		37.4.3	

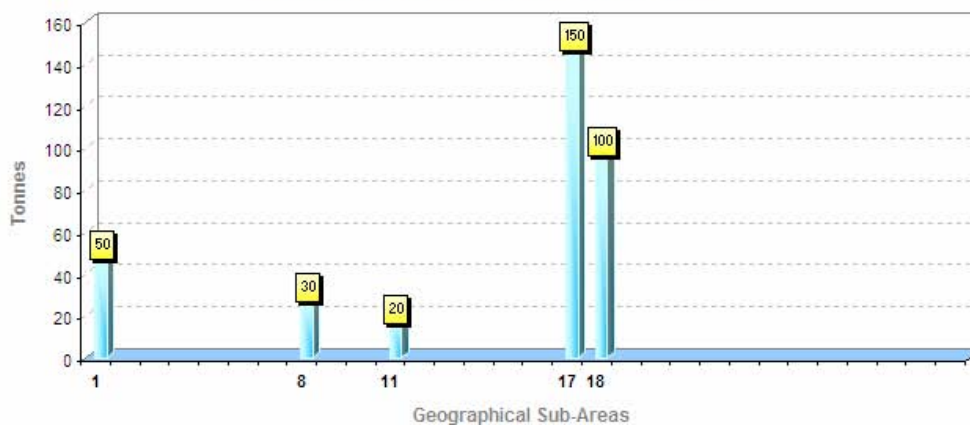
Geographical Sub-Areas

1	x	11	x	21	
2		12		22	
3		13		23	
4		14		24	
5		15		25	
6		16		26	
7		17	x	27	
8	x	18	x	28	
9		19		29	
10		20		30	

Catch by FAO Statistical Sub-Divisions



Catch by GFCM Geographical Sub-Areas



Appendix 11**Reference for *ad hoc* meeting (early 2008) for the development of the GFCM Regional Fleet Register.**

Noting the absence of a GFCM fishing vessel register which is a fundamental tool for fisheries management and, in particular, for monitoring fishery capacity as defined in the “FAO International Plan of Action for the management of fishing capacity”, an ad hoc meeting with the following terms of references is proposed:

- Review the status of the fishing vessel register in GFCM countries and/or sub-regions.
- Design and agree upon the parameters and format which should constitute the GFCM regional fleet register.
- Discuss and propose data exchange protocols for the transmission of fleet data to the GFCM Secretariat.
- Discuss and propose data updating procedures and the frequency of transmission.
- Discuss confidentiality issues within the framework of *Recommendation GFCM/2006/7* and distinguish between public, restricted and confidential data.
- Discuss and propose simple capacity monitoring tools to be incorporated into the GFCM regional fleet register.
- Discuss the relationship between the GFCM fleet register and the GFCM Authorized Vessel List database.
- To draw up an implementation and development plan including software development.

The outcome of the meeting should be considered as the guideline for the immediate implementation of the Regional Fleet Register.