



GENERAL FISHERIES COMMISSION  
FOR THE MEDITERRANEAN



COMMISSION GÉNÉRALE DES  
PÊCHES POUR LA MÉDITERRANÉE

**GENERAL FISHERIES COMMISSION FOR THE  
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**SCIENTIFIC ADVISORY COMMITTEE**

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**PRELIMINARY OUTLINE FOR A PAPER ON THE  
ASSESSMENT OF THE MAIN RESULTS OF THE JOINT  
GFCM/ICCAT WORKING GROUP ON LARGE PELAGIC  
SPECIES**

**I. BACKGROUND**

1. At its 19<sup>th</sup> session, held in Livorno, Italy, 27 February–3 March 1989, the General Fisheries Commission for the Mediterranean (GFCM) welcomed the outcomes of the Second Technical Consultation on Stock Assessment in the Eastern Mediterranean and appreciated in particular the importance given by this Consultation to large pelagic species and their rational management. The Commission (at that time, the Council) also acknowledged the offer made by the representative of the International Convention for the Conservation of Atlantic Tuna (ICCAT) to further develop cooperation with GFCM, including to make its database available to GFCM members and provide experts to help set up statistical data-collecting systems for tunas<sup>1</sup>.

2. GFCM stressed the need for close collaboration with ICCAT, in order to develop a basis for the proper assessment of the relevant stocks, especially bluefin tuna and swordfish. Consequently, the Commission endorsed a suggestion made at the 7<sup>th</sup> session of its Committee on Resource Management, that a joint GFCM/ICCAT meeting be held<sup>2</sup>, open to the Members of GFCM and ICCAT and aimed at evaluating the stocks of large pelagic species in the Mediterranean.

3. GFCM also requested its Members to implement relevant ICCAT Recommendations. In particular, the Commission recommended that Members take care before initiating new fisheries for bluefin, (in view of ICCAT recommendation) that fishing effort should not be

<sup>1</sup> Paragraphs 48 and 49 of the Report of the 19<sup>th</sup> session

<sup>2</sup> Paragraph 50 of the Report of the 19<sup>th</sup> session.

increased. GFCM further requested national administrators to promote the gathering of data on tuna and swordfish catches<sup>3</sup>.

4. Hence, a first GFCM/ICCAT Expert Consultation on Evaluation of Stocks of Large Pelagic species was held in Bari, Italy, in June 1990, and a second Consultation was organized in Iraklion, Greece, in September 1992.

5. At its 20th session in 1993, GFCM endorsed the recommendations of the second GFCM/ICCAT Expert Consultations established the Joint GFCM/ICCAT *Ad Hoc* Working Group on Large Pelagic Species. The Working Group held its first meeting in September 1994 (Fuengirola, Spain). The GFCM Secretariat was entrusted with administrative work while ICCAT provided the technical secretariat<sup>4</sup>. The Joint *ad hoc* Working group met thereafter every year up to 1998, as well as in 2000 and 2004. An excerpt of the main outcome of these meetings is provided in Appendix 3. These meetings were organized under the broad mandate expelled at the 19<sup>th</sup> session of GFCM but without consolidated terms of reference nor any explicit acknowledgement of its *modus operandi*.

## II. CONTEXT FOR THE PAPER

6. Since its inception, the Joint *Ad Hoc* Working Group has held seven meetings. The focus of the Working group has been to compile statistics and improve the knowledge-base for stock assessments. It served as a mechanism to facilitate the sharing and consistency of information and data and as a means to avoid duplication of effort between the GFCM and ICCAT.

7. In 1997, the GFCM adopted its structural change in respect of its subsidiary bodies through establishing the Scientific Advisory Committee (SAC) and its four multidisciplinary Sub-Committees, in order, *inter alia*, to take into consideration all the scientific and technical dimensions of fisheries management and particularly to be better geared to properly address the monitoring and control of fishing effort and fleet capacity, with due consideration to ecosystems frameworks. In so doing, GFCM did not specifically refer to the Joint *ad hoc* Working group which was assumed to be a subsidiary of the SAC Sub-Committee on Stock Assessment (SCSA) while it was considered to be a direct subsidiary body of the Scientific Committee on Research and Statistics (SCRS) of ICCAT<sup>5</sup>. Initially, the Working Group reported to the SCSA and since 2000, directly to the SAC in order to be consistent with the format used in the SCRS.

8. In 2002, GFCM decided that, in view of the expansion of bluefin tuna farming in the Mediterranean, practical guidelines were required to ensure the sustainability of this activity and therefore invited ICCAT to establish a Joint *Ad Hoc* GFCM/ICCAT Working group on Sustainable Bluefin Tuna Farming/Fattening in the Mediterranean. This Working group was endowed with precise terms of reference, a delimited time span and pre-established *modus operandi*. It was multidisciplinary, open to private sector representatives and output oriented. The Working group held three sessions between 2003 and 2005. It formulated the requested guidelines and was consequently disbanded.

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<sup>3</sup> Paragraph 51 of the Report of the 19<sup>th</sup> session.

<sup>4</sup> Paragraph 61 of the Report of the 20<sup>th</sup> session.

<sup>5</sup> Over the period a practice developed by which the meeting of the Joint Working group was possibly held together or just prior to the ICCAT/SCRC, so that the common data base and assessments could be examined jointly. In addition, pertinent Resolution and Recommendations adopted by ICCAT that have relevance to tuna and tuna like-species in the Mediterranean have been reviewed and adopted by GFCM, thus applying also to GFCM Members which were not Members of ICCAT (they were 15 in 1993 which compare to only four at present). Since 1994, GFCM Members also cooperated in providing data for the ICCAT Bluefin Tuna Statistical Document Programme.

9. At its Seventh session, in 2004, the SAC stressed the need to further strengthen collaboration with the SCRS with special emphasis on the need to properly monitor small tuna species, in addition to the larger pelagic species, including collecting and analysing socio-economic data and environmental information on these fisheries, at the sub-regional and regional levels. It was suggested to fill these gaps through the *ad hoc* Working group, with support from the four Sub-Committees, whilst avoiding overlapping with activities fully covered by the ICCAT. The SAC recognized that this would entail updating and formalizing the status of this subsidiary in order to make it an appropriate *ad hoc* transversal Working group endowed with a mandate broader than only gathering data for stock assessments, as it is at present.

10. Following the request from SAC, GFCM and ICCAT Secretariats prepared preliminary terms of reference for the Joint Working group for further formalization and possible adoption by the two parent bodies. At its 18<sup>th</sup> Session (New Orleans, USA, November 2004) ICCAT acknowledged the need to strengthen the cooperation with the GFCM, through the Joint *Ad Hoc* Working group on Large Pelagic Species but without specific reference to consolidated Terms of reference.

11. At its 29<sup>th</sup> session, the GFCM favoured the strengthening of the mandate of the Joint Working group, reviewed its consolidated terms of reference (attached as Appendix 2, for ease of reference) and requested the Chair of the Commission to officially convey this proposal to the ICCAT for its consideration and possible endorsement, prior to adopting them formally<sup>6</sup>. The issue was consequently raised at the 19<sup>th</sup> Regular meeting of ICCAT (Sevilla, Spain, November 2005) which acknowledged the proposal and decided to return it in 2006, once GFCM has taken a decision on this matter<sup>7</sup>.

12. At its 30<sup>th</sup> session, the Commission expressed its satisfaction for the excellent collaboration and cooperation with ICCAT and welcomed ongoing efforts of synergy between the two Commissions, which further strengthened the knowledge on Mediterranean tuna fisheries, in particular in relation to its multidisciplinary aspects. The Commission also acknowledged once more the positive achievements of the Joint GFCM/ICCAT Working Group on Large Pelagic Species since its establishment in 1993. In view of the wish expressed by ICCAT to consider the proposed updated mandate for the Joint Working Group at its next plenary session, the Commission decided to review progress made on this issue at its Thirty-first session. In this context, the Secretariat was invited to assess the main results of the Working Group since its establishment, since the Commission considered that such assessment would facilitate the programming of the future activities of the Working Group<sup>8</sup>.

### **III. SUGGESTED ACTION BY THE COMMITTEE**

13. The Working Group being a subsidiary body of SAC, the Secretariat took the initiative to prepare a draft annotated outline of the paper to be presented at its Thirty-first session, for consideration by the Committee. SAC may wish to provide further guidance on the content of such paper.

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<sup>6</sup> Paragraph 55 of the Report of the 29<sup>th</sup> session.

<sup>7</sup> Paragraph 13 of the Report of the 19<sup>th</sup> session of ICCAT.

<sup>8</sup> Paragraphs 72 and 73 of the Report of the 30<sup>th</sup> session.

**Appendix 1****Draft annotated outline for a paper on the assessment of the main achievements of the Joint *Ad Hoc* GFCM/ICCAT Working group on Large Pelagic Species in the Mediterranean****1. Institutional frameworks supporting the establishment of the GFCM/ICCAT Working Group on Large Pelagic Species**

The mandates of both GFCM and ICCAT with regard to large pelagic species in the Mediterranean will be reviewed. GFCM mandate covers the conservation and management of all marine living resources in the Mediterranean Sea (and the Black Sea), including all large pelagic species in its area of competence. GFCM mandate also covers the development of marine aquaculture. ICCAT mandate covers all tuna and tuna-like species in the Atlantic Ocean and connecting waters, the latter including the Mediterranean. Both organizations are specifically responsible for the collection of data related to these species, for carrying out stock assessments, undertaking relevant research, including on fishing effort, to serve as a foundation to prepare fisheries management advice. The subsidiary structure established to implement these activities (e.g: the SCRS species groups or the SAC Sub-Committees) will be described.

GFCM (through FAO) and ICCAT are signatories of a Memorandum of Understanding (MoU). This MoU is, however, very broad in scope and would need to be reviewed in future. Moreover, each Regional Fisheries Management Organization (RFMOs) enjoys an Observer status with the other one.

The rationale for this unique cooperation between the two RFMOs will be recalled, including:

- the stocks of large pelagic fishes in the Mediterranean Sea are of common interest to both organizations; their status related advice on fisheries management need to be assessed and analyzed in a consistent manner this advice should be consistent between the two organizations;
- assessments of fish stocks have to be conducted for the whole areas of their geographical distribution, accounting for all the catches taken from the stocks in these areas with special reference to the Atlantic bluefin stock which is distributed in both the Mediterranean Sea and the Atlantic;
- the joint membership in both RFMOs will be emphasized, through providing a Table of its evolution over time;
- recent international fisheries instruments (e.g., the 1982 UN Convention on the Law of the Sea; the 1995 FAO Code of Conduct for Responsible Fisheries; the 1995 UN Fish Stock Agreement) request such cooperation among RFMOs, including to combat IUU fishing.

**2. GFCM activities concerning large pelagic species prior to 1990's**

The activities (mainly on tagging) and related recommendations of GFCM before the establishment of the Joint *ad hoc* Working group will be described. In this respect, it will be recalled that the GFCM and ICCAT launched their cooperation even before the creation of the Working Group, including through exchange and harmonization of data, through FAO/FIDI. Major trends in landings of the main large pelagic species from 1972 to 1990 will be valuted (graphs).

### **3. GFCM activities concerning Large pelagic carried out through the Joint Working group (1993-2004)**

Since its inception, the GFCM/ICCAT WG on Large Pelagic Species has met regularly. The first two joint GFCM/ICCAT meetings took form of GFCM/ICCAT Expert Consultations on Evaluation of Stocks of Large Pelagics. At its 20th Session in 1993, the Joint GFCM/ICCAT Ad Hoc Working group on Large Pelagic Species was established, composed of experts from GFCM and ICCAT member countries.

The focus of activities of the Working group on Large Pelagic Species has been to compile statistics on catches of tuna and tuna-like species in the Mediterranean Sea and to improve the knowledge base for stock assessments. It mainly served as a mechanism to facilitate exchange of data and other information on these species; to check and improve the consistency of this information, and to avoid duplication of activities between the two RFMOs. The core of the paper will be dedicated to reviewing the outcome of each meeting, including summarizing the knowledge accumulated. It will analyze major trends in landings of the main large pelagic species from 1990 to 2004 (graphs). It can be anticipated for example that Tuna catches by GFCM's four member countries that are not members of ICCAT (Bulgaria, Egypt, Israel, Lebanon and Serbia and Montenegro) is presently small (2,350 t in 2004) as compared to the total catch of these species in the GFCM area (60,044 t), but this catch consists of almost only small tunas and other tuna-like species (2341 t) and represents, however, a significant portion (13 %) of the total catch of these species. The lack of socio-economic and fleet related data for most fisheries will be emphasized, particularly in relation with the need for catch assessment surveys as a basis to identify current effort and capacity.

In parallel, the FAO Fishery Information, Data and Statistics Unit (FIDI) of the FAO Fisheries Department, on behalf of the GFCM, provided significant input to the activities of the Working Group, especially in regularly analyzing jointly with the ICCAT secretariat discrepancies between the FAO/GFCM and ICCAT data bases for tuna catches.

Other complementary activities on large pelagic species, such as the CopeMed project study on dolphin fish (*coryphaena hippurus*), using the SAC Operational Unit concept or current undertaking of the SAC Sub-Committee on Marine Environment and Ecosystems (SCMEE) on shark by-catch will be enlightened.

The main recommendations endorsed by ICCAT and/or adopted by the GFCM in relation to large pelagic species will be briefly commented.

### **4. Conclusions and recommendations**

Scopes for further strengthening and developing scientific and technical activities through the Joint GFCM/ICCAT Working group on Large Pelagic Species will be identified. Attention will be called to the significant deterioration of the status of some large pelagic species, necessitating more accurate information on the status of stocks and comprehensive fisheries management advice and the lack of basic information to monitor other fisheries. This includes as well, in recent years, a deterioration of the quality of data on catches and fishing effort for some important fisheries.

The comparative advantage of SAC Sub-Committees, through the utilization of the Operational Unit concept to monitor fishing effort and fleet capacity and through implementing an Ecosystem Approach to Fisheries (EAF) will be stressed, thereby emphasizing the complementarity of SAC and SCRS in these fields.

Emphasis will also be put on the fact that the GFCM/ICCAT Working Group on Large Pelagic Species provides the only formal institutional framework for scientists and other technical experts to ensure ground collaboration between the two RFMOs.

Finally, recommendations will be spelled out, including on:

- possible consolidated *modus operandi* on the Joint Working group (e.g.: liaison among Secretariats; use of modern methods of communications, e-mail, conference calls and other forms of communications through the Internet), to ensure the timely implementation of intersessional activities;
- the strengthening of the collection of fisheries data (nominal catches, catch length/age-frequencies, fishing effort and tag-recaptures) and biological research, extending the data collections to those on fishing vessels including their characteristics and nominal effort;
- possible areas to broaden present activities, e.g., in relation to the application of ecosystem approach, starting from a better monitoring of by-catches of the fisheries targeting large pelagic fishes, or on socio-economic considerations, including the impact of trade flux;
- priority species, e.g.: bluefin and swordfish to albacore and small tunas.

**Appendix 2****Preliminary consolidated Terms of Reference for the Joint *ad hoc* GFCM/ICCAT Working Group on Large Pelagic Species****1. Mandate**

The mandate of the Joint *ad hoc* GFCM/ICCAT Working Group on Large Pelagic Species in the Mediterranean, as established in 1993, shall be amended so as to provide biological, social and economic and environmental information or independent advice on all aspects of related to the management of tuna and tuna like species in the Mediterranean, the Black Sea and connecting waters, respectively to the Scientific Advisory Committee (SAC) of the General Fisheries Commission for the Mediterranean (GFCM) and to the Standing Committee on Research and Statistics (SCRS) of the International Commission for the Conservation of Atlantic Tunas (ICCAT).

It shall in particular and with inputs from other subsidiary bodies of SAC and SCRS, as appropriate:

- assess information provided by Members, relevant fisheries organizations, programmes and projects on catch and efforts data as well as related biological, socio-economic and environmental information relevant to the conservation and management of tuna fisheries, including stock assessments on large pelagic species and analysis of ecosystem trends and environmental conditions;
- collect and analyze fleet statistics in the format and following the agreed criteria relative to the registers of vessels;
- analyze the results of intersessional works and formulate preliminary advice and management options to SAC and/or SCRS on the conservation and management of tuna fisheries;
- identify cooperative research programs and monitor their implementation;
- undertake such other functions or responsibilities as may be conferred on it by the GFCM or ICCAT.

**2. *Modus operandi***

The Ad hoc Working group shall carry its duty in conformity with the relevant provision of the Rules of Procedure of GFCM and ICCAT. It shall, in particular:

- be convened by the Secretariats of the two parent organizations (one convener appointed by the GFCM Secretariat and one be appointed by the ICCAT Secretariat);
- elect its Chairperson, among the participants, at each meeting;
- prepare draft terms of reference to be endorsed by SAC and/or SCRS, for each of its next meeting. The co-Conveners will refine the terms of reference and develop agenda following GFCM and/or ICCAT mechanisms for internal consultation.
- meet when requested by the parent bodies;

Both Secretariats should ensure announcement of the meetings to their Members. The Reports of the Joint *ad hoc* Working group shall be published independently by both organizations.

Members have an obligation to provide information on catch and efforts and related operational units and other related data relevant to the function of this Joint *ad hoc* Working Group in such a way as to enable the Working group to fulfill its responsibilities.

**Appendix 3****Summary outcome of the meetings of the Joint *ad hoc* Working group on Large Pelagic Species**

**1990** - *GFCM/ICCAT Expert Consultation on Evaluation of Stocks of Large Pelagic* (Bari, Italy, June)

Swordfish data for the Mediterranean Sea were collated for the first time and the catch-at-size data were created. In addition, Mediterranean bluefin data were critically reviewed and revised. Albacore data were also assembled, but this work was not continued until 2000.

**1992** - *Second GFCM/ICCAT Expert Consultation on Stocks of Large Pelagic* (Iraklion, Crete, Greece, September)

The catch-at-size data on Mediterranean swordfish, which collation was initiated at the previous Expert Consultation in 1990, was revised significantly with additional and new data. Basic catch data, for Mediterranean bluefin tuna and swordfish were also revised.

**1994** - *First Meeting* (Fuengirola near Malaga, Spain, September)

Major improvements to bluefin data were made (e.g., revision of catch-at-size data and standardization of catch-per-unit of fishing effort (CPUE) data for the first time) and an assessment for the eastern bluefin stock was conducted.

**1995** - *Second Meeting* (Bari, Italy, September).

For the first time, a relatively comprehensive stock assessment was carried out for Mediterranean swordfish.

**1996** - *Third Meeting* (Genoa, Italy, September).

Mediterranean bluefin data were reviewed and comprehensive stock assessment was conducted for the eastern bluefin stock immediately after the Third Meeting.

**1997** - *Special Meeting on Tag Recovery Network* (Messina, Italy, June).

The tagging data base was updated and a tag recovery network was established for the Mediterranean Sea.

**1998** - *Fourth Meeting* (Genoa, Italy, September).

Numerous major revisions were introduced to the historical series of Mediterranean bluefin and swordfish catch and landing data. Justifications for the changes were critically reviewed and catch- at-size and CPUE data were revised accordingly. The Meeting was followed by comprehensive assessment of bluefin tuna stocks for the east Atlantic and the Mediterranean Sea. An update of the 1996 Mediterranean swordfish assessment was also made, but the Meeting concluded that available data were not sufficient to warrant another full assessment.

**2000** – *Fifth Meeting* (Sliema, Malta, September)

Data available on: (i) annual catches, (ii) catches-at-size and (iii) fishing effort were reviewed, with particular detail for bluefin, swordfish, albacore and small tuna. In addition, results of research activities for each group were analyzed. Attention was also devoted to tagging (including electronic tagging) and its coordination.

The meeting recommended to organize another Working Group session before the next assessments of bluefin in the eastern Atlantic and the Mediterranean and to collate and prepare data for these assessments, including the standardization of time series of catch-per-unit of fishing effort (CPUE). For albacore and small tunas, it was concluded that it was not feasible to carry out stock assessments as “even approximate levels of catches of these species were unknown.”

**2004** – *Sixth Meeting* (Malaga, Spain, May)

Data on albacore was still too limited. Several contributions were made available on improving knowledge of the small tuna species, bluefin tuna, swordfish and spearfish including on biological parameters of frigate tuna, Atlantic bonito and Atlantic black skipjack. A research project/proposal aiming at improving data collection and understanding of the biology of small tuna was drafted.