

**STECF**  
**EXPERT WORKING GROUP EWG 22-16**

EWG 22-16: Stock Assessment in the Adriatic, Ionian, Strait of Sicily and  
Aegean Sea 2022

*Date: 17-23 October 2022*

*Venue: Rome*

**Chair:** John Simmonds

**DG MARE focal person:** Chato Osio (MARE D1)

*GENERAL GUIDELINES: unless the data used and information provided comes from the official DCF data calls, the experts are requested to indicate the data source from where certain information has been taken (e.g. L-W relationships, prices) or if it is an experts' reasoned guess.*

*Data collected outside the DCF shall be used as well and merged with DCF data whenever necessary and following quality check. Due account shall also be given to data used and assessments carried out within projects co-funded by the European Commission and EU-Member States in particular when using data collected through the DCF/DCR and EU funded research projects, studies and other types of EU funding.*

*The raw data used to generate the input data, assessment scripts as well as input files should be made available to the JRC for reproducibility of the assessments and compilation of the STECF stock assessment database (<https://stecf.jrc.ec.europa.eu/dd/medbs/ram>)*

*STECF 17-07<sup>1</sup> defined methodological guidelines to ensure standardized practices for the preparation of stock assessment input data. STECF 21-02 implemented data quality checks and cleaning to stabilize the time series. EWG 21-15 should adhere to these recommendations from STECF 17-07 and used data prepared in STECF 22-03, where possible.*

**For the stocks given in Annex I, the EWG 22-16 is requested:**

**ToR 1. Data preparation for the stock assessments:**

---

<sup>1</sup> [https://stecf.jrc.ec.europa.eu/documents/43805/1691180/STECF+17-07+-+Methods+for+stock+assessments+in+MED\\_JRCxxx.pdf](https://stecf.jrc.ec.europa.eu/documents/43805/1691180/STECF+17-07+-+Methods+for+stock+assessments+in+MED_JRCxxx.pdf)

1. To compile and provide the most updated information on stock identification and boundaries, length and age composition, growth, maturity, feeding, essential fish habitats and natural mortality.
2. To compile and provide complete sets of annual data on landings and discards for the longest time series available up to and including 2021 while also considering/comparing the results of STECF 21-02 and 22-03. This should be presented by fishing gear as well as by size/age structure.
3. For GSA 17&18 to compile and provide complete sets of annual data on fishing effort for the longest time series available up to and including 2021, based on the FDI database for the recent part and from prior Mediterranean & Black Sea Data calls for the older part. This should be described in terms of number of vessels, time (days at sea, soaking time, or other relevant parameter) and fishing power (gear size, boat size (linear and/or GT), engine power kW, etc.) by Member State/Country, vessel length and fishing gear. Data shall be the most detailed possible to support the implementation of a fishing effort management regime.
4. To compile and provide indices of abundances and biomass by year and size/age structure for the longest time series available up to and including 2020 by GSA and Country.

**ToR 2.** To assess trends in historic and recent stock parameters on fishing mortality, stock biomass, spawning stock biomass, and recruitment. Different assessment models should be applied as appropriate, including retrospective analyses. The selection of the most reliable assessment shall be explained. Assumptions and uncertainties shall be specified. Where a benchmark has been performed by GFCM (Hake GSA 17-18, Hake GSA 19) and the stock object is available, the benchmark should be considered for the updated assessment. In absence of the stock object and for robustness testing, other statistical catch at age models may be fitted.

**ToR 3.** For the stocks listed in Annex I address the specific points as follows:

1. For the stock of Norway lobster in the Adriatic Sea, as in prior EWGs, update the SPICT assessment to give overall stock assessment which will reflect total and overall exploitation. In second priority, in line with Tor 3 of EWG 21-15, update the analysis of local trends with the MEDITS biomass indices in 4 areas to evaluate local trends.
2. To further work on the assessment of red mullet in GSA 17-18 in view of contributing to the GFCM benchmark of this stock.
3. Address outstanding issues in the Sole assessment in GSA 17 as identified in EWG 21-15.

- ToR 4.**
1. For all stocks in Annex I, using the report structure of 2021 (EWG 21-12), provide a synoptic overview of: (i) the fishery, (ii) the most recent state of the stock (spawning stock biomass, stock biomass, recruits and exploitation level by fishing gear); (iii) the source of data and methods and (iv) the management advice, including FMSY value, conservation and biomass reference points and effort levels.
  2. For stocks under the GFCM demersal MAP (GFCM/43/2019/5) and marked by (^) in Annex I, provide a summary table showing the progress made in the transition towards MSY as well as the catch advice for 2023-24 and F to reach Fmsy by 2026. Account should also be taken of a linear reduction of fishing effort of 7% for OTB and 3% TBB in 2022.
  3. For the other stocks in Annex I provide a short-term forecast for 2023-24 on the basis of a linear reduction of F that will allow reaching Fmsy in 2028.

**ToR 5.** Additional, stock-specific analyses are requested as follows:

1. Quantify the partial fishing mortality stemming from longlines (LLS) and, if possible, within the current model, from other gears (GNS, GTR and TBB) catching Mediterranean hake in GSA 17-18.
2. Quantify the partial fishing mortality stemming from GNS, GTR, DRB and OTB gear catching common sole in GSA 17.
3. For Giant red shrimp, Blue and Red shrimp stocks in GSA 18-19-20:
  - quantify the catch share by stock for GSA 18,
  - quantify the partial F for catches in GSA 18,
  - advise on an catch limit for GSA 18 under a linear transition to reach Fmsy in 2028.

**ToR 6.** To ensure that all unresolved data transmission issues encountered prior to and during the EWG meeting are reported on line via the Data Transmission Monitoring Tool (DTMT) available at <https://datacollection.jrc.ec.europa.eu/web/pcf/dtmt>. Guidance on precisely what should be inserted in the DTMT, log-on credentials and access rights will be provided separately by the STECF Secretariat focal point for the EWG.

ANNEX I

Table I – List of suggested stocks to be assessed by the EWG 22-16.

	Area	Common name	Scientific name
1	GSA 17-18* (improve benchmark and include TBB and GNS/GTR)	Hake^	<i>Merluccius merluccius</i>
2	GSA 17-18 (improve on benchmark models)	Red mullet^	<i>Mullus barbatus</i>
3	GSA 17-18 (update current SPICT)	Norway lobster^	<i>Nephrops norvegicus</i>
4	GSA 17-18-19	Deep-water shrimp^ rose	<i>Parapenaeus longirostris</i>
5	GSA 17* (update catch and identify possible improvements for benchmark assessment model)	Sole^	<i>Solea vulgaris</i>
6	GSA 18-19-20	Giant red shrimp	<i>Aristaeomorpha foliacea</i>
7	GSA 18-19-20	Blue and Red shrimp	<i>Aristeus antennatus</i>
8	GSA 19 **	Hake	<i>Merluccius merluccius</i>
9	GSA 19 (update GFCM stock object) **	Red mullet	<i>Mullus barbatus</i>
10	GSA 17-18 (development of CPUE and standardized length composition, preliminary assessment)	Venus clam	<i>Chamelea galina</i>
11	GSA 20/22 **	Hake	<i>Merluccius merluccius</i>
12	GSA 20/22 **	Red mullet	<i>Mullus barbatus</i>
13	GSA 15-16 (ad-hoc)	Norway lobster	<i>Nephrops norvegicus</i>
14	GSA 15-16 (ad-hoc)	Striped red mullet	<i>Mullus surmuletus</i>

^ key demersal stock in Recommendation GFCM/43/2019/5

\* Stock with a GFCM benchmark

\*\* Second priority