**STECF
EXPERT WORKING GROUP EWG 19-10**

**on Stock Assessments:
demersal stocks in the western Mediterranean Sea**

*9-15 September, Arona, Italy*

**DG MARE focal persons:** Amanda Perez Perera

**Chair:** John Simmonds

*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 the FAO regional 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*](https://stecf.jrc.ec.europa.eu/dd/medbs/ram)*).*

*STECF 17-07[[1]](#footnote-1) defined methodological guidelines to ensure standardized practices for the preparation of stock assessment input data. EWG 18-12 should adhere to these recommendations referring to the need of: (i) coherence of all growth parameters used in the assessments; (ii) improvement in documenting and defining the growth models and age slicing; (iii) test where possible age slicing by sex;(iv) t0 should be truncated to values between 0 and -0.2; and (v) review the raw age length data, where necessary refitting growth models (section 2.2 in the EWG 17-07 report).*

**For the stocks given in the table below, the EWG 19-10 is requested:**

**ToR 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.

**ToR 2.** To compile and provide complete sets of annual data on landings and discards for the longest time series available up to and including 2018, including length frequency distribution over time.

**ToR 3.** To compile and provide complete sets of annual data on fishing effort for the longest time series available up to and including 2018. This should be described in terms of fishing days, days at sea, GT\*days and nominal effort by Member State, GSA and fishing gear.

**ToR 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 2018. Where possible, the EWG should take into account the results of the EU-funded project RECFISH[[2]](#footnote-2).

**ToR 5.** 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. To assist with development of management plans, give preference to models that allow estimation of uncertainty, in line with the recommendations of STECF EWG 17-07.

**ToR 6.** To estimate the FMSY point value, range of FMSY (i.e. MSY FLOWER and MSY FUPPER) and the conservation reference points (i.e. BPA and BLIM), or proxy. The proposed values shall be related to long-term high yields and low risk of stock/fishery collapse and ensure that the exploitation levels restore and maintain marine biological resources at least at levels which can produce the maximum sustainable yield.

**ToR 7.** To provide short and medium term forecasts of spawning stock biomass, stock biomass and catches. The forecasts shall include different management scenarios, including: the status quo fishing mortality and target FMSY range (i.e. FMSY point value, MSY FLOWER and MSY FUPPER) or other appropriate proxy by 2020 and 2025.

**ToR 8.** To summarize and concisely describe all data quality deficiencies, including possible limitations with the surveys of relevance for stock assessments and fisheries. Such review and description are to be based on the data format of the official DCF data call for the Mediterranean Sea launched on May 2019. Identify further research studies and data collection which would be required for improved fish stock assessments.

**ToR 9.** 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/dcf/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.

**ToR 10.** Using the report structure developed in 2018 (EWG 18-12), 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, range of values, conservation reference points and effort levels.

**Table** – List of suggested stocks to be assessed by the EWG 19-10.

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| **Area** | **Common name** | **Scientific name** |
| GSA 1-5-6-7 | Hake | *Merluccius merluccius* |
| GSA 1-5-6-7 | Deep-water rose shrimp | *Parapenaeus longirostris* |
| GSA 1 | Red mullet | *Mullus barbatus* |
| GSA 5 | Striped red mullet | *Mullus surmuletus* |
| GSA 6 | Red mullet | *Mullus barbatus* |
| GSA 7 | Red mullet | *Mullus barbatus* |
| GSA 5 | Norway lobster | *Nephrops norvegicus* |
| GSA 6 | Norway lobster | *Nephrops norvegicus* |
|  |  |  |
| GSA 9-10-11 | Hake | *Merluccius merluccius* |
| GSA 9-10-11 | Deep-water rose shrimp | *Parapenaeus longirostris* |
| GSA 9 | Red mullet | *Mullus barbatus* |
| GSA 10 | Red mullet | *Mullus barbatus* |
| GSA 9 | Norway lobster | *Nephrops norvegicus* |
| GSA 11 | Norway lobster | *Nephrops norvegicus* |
|  |  |  |
| GSA 1 | Blue and red shrimp | *Aristeus antennatus*  |
| GSA 5 | Blue and red shrimp | *Aristeus antennatus* (\*) |
| GSA 6-7 | Blue and red shrimp | *Aristeus antennatus* (\*) |
| GSA 9-10-11 | Giant red shrimp | *Aristaeomorpha foliacea* |
| GSA 9-10-11 | Blue and red shrimp | *Aristeus antennatus* |

(\*) Explore the possibility to merge blue and red shrimp in GSAs 5-6-7.

1. Scientific, Technical and Economic Committee for Fisheries (STECF) – Methodology for the Stock Assessments in the Mediterranean Sea (STECF-17-07). Publications Office of the European Union, Luxembourg, 2017, ISBN 978-92-79-67479-2, doi:10.2760/106023, [JRC107583](https://stecf.jrc.ec.europa.eu/documents/43805/1691180/STECF%2B17-07%2B-%2BMethods%2Bfor%2Bstock%2Bassessments%2Bin%2BMED.pdf). [↑](#footnote-ref-1)
2. Framework Contract for the provision of scientific advice for the Mediterranean and Black Seas (EASME/EMFF/2016/032). Specific contract N° 1: Recovery of fisheries historical time series for Mediterranean and Black Sea stock assessment (RECFISH). [↑](#footnote-ref-2)