

**STECF
EXPERT WORKING GROUP (EWG 25-01)**

Methodological guidelines for data preparation and stock assessment procedures

3-7 March 2025, JRC, physical

Chair: Ernesto Jardim, Danai Mantopoulou Palouka

JRC focal point: tbd

DG MARE focal point: Chato Osio

Background:

This EWG builds on preliminary work conducted in STECF 22-03 and during discussions in STECF PLEN 23-01 and 24-02. Additional issues highlighted in the past and reiterated during STECF PLEN 24-10. In response to the experts and STECF Bureau request to update and streamline a number of data preparation decisions and routines as well as stock assessment methodologies, MARE agreed to launch a Methodological EWG for the Mediterranean in 2025.

TERMS OF REFERENCE

The EWG should address the two TORs detailed below and **build specific examples/case studies depending on the issues highlighted in specific stocks by EWG 24-10 and PLEN 24-03 (e.g. HKE 1-5-6-7; MUT 7; DPS stocks; etc.)** and in other stocks depending on additional issues observed during the EWG.

TOR 1.

Data Preparation for stock assessment

- Resume and update/refine the tools (scripts and markdown files) developed by JRC and during EWG 21-02 and EWG 22-03 to improve the standardization of the data preparation process and the evaluation of data quality by stock. The scripts offer a good support in getting issues to be reported also through the DTMT tool;
- Defining guidelines on how to deal with gaps in time series of length frequency distributions (LFDs) or scientific surveys and which could be the impact of different assumptions (e.g. using reconstructed distributions, leaving the model to estimate missing years, etc.);

- Defining a decision-making tree and evaluate the effect of the t_0 correction applied during the slicing procedure to obtain number-at-age from number-at-length distributions. Evaluate a change in the maturity at age and/or length vector should be expected if a t_0 correction were applied;
- Defining the procedures and methodology for natural mortality vectors (e.g., selection of the most adequate model) and evaluation of the impact of different M vectors on the fishing mortality estimation;
- Standardize the cohort consistencies exploration within the report (different scripts are circulating);

TOR 2

Standardization of stock assessment routines

- Standardize the estimation of F (fishing mortality) at age by fleet (i.e. GSA/Gear level) matrices when these are not directly estimated by the modelling framework;
- Setting up rules for Short Term Forecasts (STFs) also in relation to the rules defined in estimating the adopted Biomass Reference Points (BRPs) (i.e. how to set recruitment in the intermediate year);
- Defining guidelines about the use of multiple model fits, potentially from different modelling frameworks;
- Standardize the diagnostics procedures and presentation within the reports (currently there are different ways to present main diagnostics), potentially further exploring the use of the a4adiags package;