**Suggested ToR for an ad hoc contract in support of the EWG on stocks assessments and to improve the assessment of the stock of hake in GSAs 1, 5, 6 and 7.(for discussion).**

Ad hoc contract (suggest 7 days) – follow up on EWG2501, EWG2506 and PLEN2502

ToRs:

1. Create the FLStock and FLIndex for the assessment, using the data held by the JRC, submitted through the EU Mediterranean and Black Sea data call.
2. Convert length-based input data for stock assessment (commercial catches and MEDITS abundance indices) into age-based data using the stochastic slicing method commonly applied by the EWG. The slicing should be performed quarterly, applying the combined growth model as defined in EWG2506.
   1. Output: FLStock and FLIndex objects ready for use in the statistical catch-at-age model implemented by a4a.
3. Improve the a4a model proposed in EWG2506 (run 3.2 with fmodel tensor to increase flexibility in capturing changes in the selection pattern) and provide associated diagnostics. In particular, the impact of different levels of smoothness in the fmodel should be evaluated by running a grid of options with varying k values. Assess whether any other submodels beyond the fmodel require modifications.
   1. Output: updated submodels, fitted object, diagnostics and grid results.
4. Run the model selected based on the outcomes of item 2 using the age-based data produced in item 1.
   1. Output: fitted model and diagnostics.