SHORT-TERM CONTRACT FOR MODELLING APPROACHES: SUPPORT TO BFT ASSESSMENT (GBYP 05/2018) OF THE ATLANTIC-WIDE RESEARCH PROGRAMME FOR
BLUEFIN TUNA (ICCAT-GBYP – Phase 8)

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Workplan (June 2018 – February 2019)

The following tasks were decided by the species group and representatives of the Core Modelling Group at the recent ICCAT Bluefin and North Atlantic Swordfish MSE meeting. These were detailed in the summary report of the Bluefin MSE chair, Prof. Butterworth.

The timeline for these tasks has been moved back by 1 month due to the development of alternative stock of origin methods to better inform operating models:

1.   End of June – Completion of updates to the OM based on this meeting (T. Carruthers)

2.   Mid July – Comments on updated OMs

3.   Early August – T. Carruthers circulates updated package on the basis of finalisedrevised revisions

4.   Mid August to early September a) developers rerun adjusted CMPs on updated package;. (b) Documents prepared on further condition issues requiring attention.

5.   Activities occurring after early October are driven by the recommendations in section 12. Decisions in this regards will be made by the SCRS Chair, BFT Rapporteurs and the secretariat.

Overview of suggested operating model revisions following the 2018 Bluefin tuna and North Atlantic MSE meeting

Table 1. Changes arising from MSE intersessional. Red items have yet to be included, yellow items have been included but not tested, green items have been included and fully tested

SUGGESTED CHANGE	IN ABT-MSE v3.1
Data	
Reinterpretation of genetics and otolith microchemistry data	🟩 (green)
Split French aerial survey index	🟩 (green)
Add US RR > 177 index	🟩 (green)
Include JPN LL GOM 1974-1981	🟨 (yellow)
Remove Canada combined index, replace with SWNS and GSL	🟩 (green)
All indices start in 1975	🟩 (green)
Indices provided to MPs for years before 1975	🟨 (yellow)
Observation model	
Indices are y-2 lagged, Catches are y-3, Catches in TAC y-2/y-1 are the TAC	🟨 (yellow)
Include Canada acoustic index as a western projected index	🟨 (yellow)
OM calculations	
Revisit BMSY calculation in light of R0 estimation and stock-recruit models	🟩 (green)
Dynamic B0 calculation	🟨 (yellow)
Dynamic BMSY calculation	🟨 (yellow)
Dynamics B0/BMSY plots	🟥 (red)
Add update interval to OM object	🟩 (green)
Beverton-holt stock recruitment model included	🟩 (green)
Hockey-stick stock recruitment model included	🟩 (green)
Stock recruitment shift model (BH – HS, BH(low) – BH(high))	🟥 (red)
OM fitting	
Move final year to 2016 or 2017	🟥 CATDIS to 2015 only
Investigate 7-area model	🟩 (green)
Correctly account for autocorrelation in index fitting	🟥 (red)
Robustness OMs	
Split Med larval	🟩 (green)
2% fishing efficiency gain for CPUE indices	🟩 (green)
Increasing gravity in GSL	🟥 (red)
Automatic reports / plotting	
Index fit – AC report	🟥 (red)
Stock mixing plot	🟥 (red)
Historical SSB depletions (ie including the SRA phase)	🟥 (red)
Dynamic B0-BMSY plots	🟥 (red)
Like-with-like length composition plots	🟥 (red)
Cryptic biomass diagnostics	🟥 (red)
Create an automatic Candidate MP performance report	🟥 (red)
Various scale and labelling bugs (e.g. Shuya y-axis scale issues)	🟩 (green)
Average annual yield – negative only edition	🟩 (green)
Trial specifications document	
Update to reflect MSE intersessional changes	🟩 (green)