EU data request to support the Technical Measures Regulation Review Expert Working Group

Service summary

ICES has produced, as a technical service to DGMARE, FLStock and FLFleet objects (where available) for stocks listed in Table A1 that are assessed analytically, corresponding to the published advice from 2020.

ICES Data Centre produced the outputs using ICES Transparent Assessment Framework (TAF)*, Stockassessment.org (SAO)[†], and through the SharePoint data folders or reports of ICES stock assessment working groups (Table A1).[‡]

Request

ICES is requested to:

Provide FLStock objects, aggregated by stock, and FLFleet objects, disaggregated by fleet, for the list of ICES stocks that were identified to have age-structured information available, in accordance with **Annex XIV of Regulation (EU) No 2019/1241: Species for selectivity performance indicators** *(attachment: "Species annex XIV and MAPS stock list ICES 21_04.xlsx").*

The information request can be seen as "tiered" approach Tier 1 - 3, depending on data availability in the form "FLStock" and "FLFleet" objects **based on assessments conducted in 2020**, *such that:*

Tier 1: All FLFleet (or FLFleet_ext) and the associated FLStock objects that are available (e.g. from WGMIXFISH)
Tier 2: All FLStock objects that are available
Tier 3: If Tier 1-2 is not available, the following information is requested in the unified format:

• *F-at-age matrix*
• *M-at-age*
• *Catch-at-age matrix*
• *Weight-at-age matrix*
• *Age range for Fbar*
• *Numbers-at-age matrix*
• *Maturity-at-age*

Attached is:
(1) The list of identified stocks that match the requested species list by ICES region: "Species annex XIV and MAPS stock list ICES 21_04.xlsx". Also identified are FLFleet objects that should be readily available in the requested format according the respective annexes of WGMIXFISH. However, this request shall not necessarily be limited to these pre-identified FLFleet objects in cases where additional FLFleet data can be provided (e.g. for the Baltic Sea).

The request aims at supporting the production of guidelines on the evaluation of Joint Recommendations which will be submitted under the Technical Measures Regulation.

Elaboration on the service

Matrices are available in an archived form at ICES website[§].

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* https://taf.ices.dk.
[†] https://stockassessment.org
[‡] The code is available at https://github.com/ices-taf/2021_4029-29_SpecialRequest.
[§] https://doi.org/10.17895/ices.data.8285

Basis of the service

The aim of the request is to support the performance of technical measures to conserve fishery resources and protect marine ecosystems according to Article 31 of EU Regulation 2019/1241 (EU, 2019).

The present request is a result of STECF being asked to review the Technical Measures Regulation (EU, 2019) that entered into force in 2019. In 2020, STECF was requested to assess the extent to which technical measures at the regional and European Union level have contributed, since 2013, to achieving the objectives set out in Article 3 and the targets set out in Article 4 of Regulation 2019/1241 (EU, 2019). This includes, e.g. selectivity improvements, protection of marine habitats and sensitive species, and the calculation of selectivity indicators, as laid out in Article 31(2) of the Regulation, for the key indicator stocks for the species listed in Annex XIV of the Regulation (EU, 2019). STECF needs additional data to be able to carry out the requested task.

Methods

Process

ICES Secretariat compiled and retrieved the necessary data and used the Transparent Assessment Framework (TAF)[**] to create and/or collate the FLStock and FLFleet objects required. A summary of the process is described below:

The source of the input and output data was determined and appropriate scripts written to extract the data depending on the source. The sources available were:

a. ICES WGMIXFISH data inputs; all inputs were already in FLStocks. Some stocks (Southwestern waters) only available as FLFleet objects.
b. ICES Transparent Assessment Framework (TAF); for information at the stock level the procedure depended on the assessment method (SAM, SS3, XSA)
c. Stockassessment.org; all models were SAM models and extraction was the same in all cases
d. Expert group SharePoint data folder; variable depending on stock assessor and method
e. Assessment report; simply extracting from the published expert group report

A total of 21 stock assessments were investigated, corresponding to the species and areas listed in the request. Of these, seven were held on TAF, seven on Stockassessment.org (with some duplication), six available via ICES SharePoint, and three from expert group reports. Of the 21 stocks, nine were available through the WGMIXFISH data input, and these were used in place of the aforementioned sources.

Data outputs

The data outputs are:

- FLstock objects
- FLFleet objects where available

Caveats

For plaice in Division 7.a (ple.27.7a), 40% of the discards are assumed to survive. Hence, fishing mortality data for this stock do not account for the total catch but only for the dead catch, i.e. landings plus 60% of the discards.

For haddock in Subarea 4, Division 6.a, and Subdivision 20 (had.27.46a20), estimates refer to the full year (January–December) except for age 0, for which the mortality rate given refers to the second half-year only (July–December). The 2020 estimates are TSA forecasts.

Hake age information was not available and so could not be provided. WGMIXFISH use a length-based approach for Southwestern water stocks, and so this information was not available from the WGMIXFISH data input.

[**] https://taf.ices.dk.

Sources and references

EU. 2019. Regulation (EU) 2019/1241 of the European Parliament and of the Council of 20 June 2019 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures, amending Council Regulations (EC) No 1967/2006, (EC) No 1224/2009 and Regulations (EU) No 1380/2013, (EU) 2016/1139, (EU) 2018/973, (EU) 2019/472 and (EU) 2019/1022 of the European Parliament and of the Council, and repealing Council Regulations (EC) No 894/97, (EC) No 850/98, (EC) No 2549/2000, (EC) No 254/2002, (EC) No 812/2004 and (EC) No 2187/2005. Official Journal of the European Union, L 198: 105–201. http://data.europa.eu/eli/reg/2019/1241/oj.

ICES. 2020a. ICES Transparent Assessment Framework. Copenhagen, Denmark. ICES. 31.09.2020. https://taf.ices.dk.

ICES. 2020b. Working Group for the Bay of Biscay and the Iberian Waters Ecoregion (WGBIE). ICES Scientific Reports, 2:49. 845 pp. https://doi.org/10.17895/ices.pub.6033.

ICES. 2020c. Working Group for the Celtic Seas Ecoregion (WGCSE). ICES Scientific Reports, 2:40. 924 pp. https://doi.org/10.17895/ices.pub.5978.

ICES. 2020d. Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). ICES Scientific Reports, 2:61. 1140 pp. http://doi.org/10.17895/ices.pub.6092.

ICES. 2021. Working Group on Mixed Fisheries Methodology (WGMIXFISH-METHODS; outputs from 2020 meeting). ICES Scientific Reports. 3:39. 232 pp. https://doi.org/10.17895/ices.pub.8040.

Magnusson, A. and Millar, C. 2020. ICES TAF: Functions to Support the ICES Transparent Assessment Framework. R package version 3.5.0.9004. https://taf.ices.dk.

Annex

Table A1   List of stocks for which F-at-age data were requested.

Area	Species	Stock code
North Sea	Cod	cod.27.47d20
	Haddock	had.27.46a20
	Saithe	pok.27.3a46
	Whiting	whg.27.47d
	Plaice	ple.27.7d
	Plaice	ple.27.420
Northwestern waters	Cod	cod.27.6a
	Cod	cod.27.7e-k
	Haddock	had.27.6b
	Haddock	had.27.7a
	Haddock	had.27.7b-k
	Whiting	whg.27.7b-ce-k
	Plaice	ple.27.7a
Southwestern waters	Hake	hke.27.3a46-8abd
Baltic Sea	Plaice	ple.27.24-32
	Cod	cod.27.24-32
	Plaice	ple.27.21-23