07 May 2025

2025 FRSG Expert Group ToRs

Contents

Generic ToRs for Regional and Species Working Groups

Approved in Resolutions meeting on 6 November 2024

The following ToRs apply to: AFWG, HAWG, NWWG, NIPAG, WGWIDE, WGBAST, WGBFAS, WGNSSK, WGCSE, WGDEEP, WGBIE, WGEEL, WGEF, WGHANSA, WGNAS and WGNEP.

The working group should focus on:

a) Conduct an assessment on the stock(s) to be addressed in 2025 using the method (assessment, forecast or trends indicators) as described in the stock annex and documented in TAF; - complete and document an audit of the calculations and results; and produce a **brief** report of the work carried out regarding the stock, providing summaries of the following where relevant:

Quality control and quality assurance of input data. In the event of late, missing or inconsistent data document issues and deviations from the stock annex.

i) Where misreporting of catches is significant, provide qualitative and where possible quantitative information and describe the methods used to obtain the information;

ii) For relevant stocks (i.e., all stocks for NEAFC request advice), estimate the percentage of the total catch that has been taken in the NEAFC Regulatory Area in the most recent years.

iii) For Category 3 stocks replace the former 2 over 3 advice rule (2 over 5 for elasmobranchs) which is no longer considered precautionary for any remaining stocks not using the appropriate rule in Table 1 of ICES 2023.

iv) Evaluate spawning stock biomass, total stock biomass, fishing mortality, catches (projected landings and discards) using the method described in the stock annex;

1) for category 1 and 2 stocks, in addition to the other relevant model diagnostics, the recommendations and decision tree formulated by WKFORBIAS (see Annex 2 of https://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/Fisheries%20Resources%20Steering%20Group/2020/WKFORBIAS_2019.pdf) should be considered as guidance to determine whether an assessment remains sufficiently robust for providing advice.

2) If the assessment is deemed no longer suitable as basis for advice, provide advice using an appropriate Category 2-5 approach as described in ICES technical guidance for harvest control rules and stock assessments for stocks in categories 2 and 3 or in Advice on fishing opportunities (for Cat 5 & 6).

3) If the assessment has been moved to a Category 2-5 approach in the past year, consider what is necessary to move back to a Category 1 and develop proposal for the appropriate benchmark process.

v) Provide all requested catch scenarios for the year(s) beyond the terminal year of the data (These are listed in ICES Guidance for completing single-stock advice)

vi) Historical and analytical performance of the assessment and catch options with a succinct description of associated quality issues. For the analytical performance of category 1 and 2 age-structured assessments, report the mean Mohn's rho (assessment retrospective bias analysis) values for time series of recruitment, spawning stock biomass, and fishing mortality rate. The WG report should include a plot of this retrospective analysis. The values should be calculated in accordance with the "Guidance for completing ToR viii) of the Generic ToRs for Regional and Species Working Groups - Retrospective bias in assessment" and reported using the ICES application for this purpose.

b) Produce and quality assure a first draft of the advice for each stock according to ACOM guidelines.

c) Include non-fisheries conservation considerations in accordance with the "ICES Guidelines on Non-Fisheries Conservation Considerations".

d) Review progress on benchmark issues and processes of relevance to the Expert Group.

   i) update the benchmark issues lists for the individual stocks in SID;

   ii) review progress on benchmark issues and identify potential benchmarks to be initiated in 2025 for conclusion in 2026;

   iii) determine the prioritization score for benchmarks proposed for 2027–2028;

   iv) as necessary, document generic issues to be addressed by the Benchmark Oversight Group (BOG)

e) Prepare the data calls for the next year's update assessment and for planned data evaluation workshops;

f) Identify research needs of relevance to the work of the Expert Group.

g) Review and update information regarding operational issues and research priorities on the Fisheries Resources Steering Group SharePoint site.

h) Update TAF, SAG, ASD (Advice and Scenarios database) and SID with final assessment input and output and advice information.

i) Consider and comment on Ecosystem and Fisheries Overviews with a focus on:

   i) identifying and correcting mistakes and errors (both in the text, tables and figures), and

   ii) proposing concrete evidence-based input that is considered essential for the advice but is currently under-developed or missing (with references and Data Profiling Tool entries, as appropriate).

Information of the stocks to be considered by each Expert Group is available here.

AFWG – Arctic Fisheries Working Group

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG02 The **Arctic Fisheries Working Group** (AFWG), chaired by Daniel Howell, Norway, will meet in Copenhagen, Denmark 7–11 April 2025 to:

a) Address generic ToRs for Regional and Species Working Groups, for all regionally relevant stocks.

b) Conduct reviews as required of any time-series computed using the STOX and ECA open source software for use in assessment in the Barents Sea.

c) Where relevant, provide references to other available sources of scientific assessment and advice for fisheries in the region.

The assessments will be carried out on the basis of the stock annex. The assessments must be available for audit on the first day of the meeting.

Material and data relevant for the meeting must be available to the group on the dates specified in the 2025 ICES data call.

AFWG will report by 6 May 2025 for the attention of the Advisory Committee.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group.

HAWG – Herring Assessment Working Group for the Area South of 62°N

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG03 The **Herring Assessment Working Group for the Area South of 62ºN** (HAWG), chaired by Aaron Brazier, UK, and Nis Sand Jacobsen, Denmark, will meet:

In ICES HQ, Copenhagen, Denmark 20–22 January 2025 to:

a) Compile the catch data of sandeel in assessment areas 1r, 2r, 3r, 4, 5r, 6, 6a and 7r and address generic ToRs for Regional and Species Working Groups that are specific to sandeel stocks in the North Sea ecoregion;

and online and in Copenhagen, Denmark UK, 10-11 and 17-21 March 2025 to:

b) Compile the catch data of North Sea and Western Baltic herring on 10-11 March;

c) Address generic ToRs for Regional and Species Working Groups on 17-21 March, for all other stocks assessed by HAWG.

The assessments will be carried out based on the Stock Annex. The assessments must be available for audit on the first day of the meeting.

Material and data relevant for the meeting must be available to the group on the dates specified in the 2025 ICES data call.

HAWG will report by 05 February (sandeel), 02 April (sprat and herring) 2025 for the attention of ACOM.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group

NIPAG – Joint NAFO/ICES Pandalus Assessment Working Group

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG04 The **Joint NAFO/ICES *Pandalus* Assessment Working Group** (NIPAG), chaired by Fabian Zimmermann, Norway (ICES Chair) and Martha Krohn, Canada (NAFO Chair), will meet from 5–9 May 2025 in Lysekil, Sweden to:

a) Address generic ToRs for Regional and Species Working Groups for Northern shrimp in divisions 3.a and 4.a East and 4.a.West.

b) The WG will reconvene in the autumn (TBC) to address generic ToRs for Regional and Species Working Groups, for other regionally relevant stocks."

NIPAG will report by 23 May 2025 for the attention of ACOM.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group

NWWG – Northwestern Working Group

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG05 **The Northwestern Working Group** (NWWG), chaired by Helga Bára Mohr Vang*, Faroe Islands, will meet at ICES Headquarters, 28 April – 2 May 2025 to:

a) Address generic ToRs for Regional and Species Working Groups for all stocks except those listed in ToR b)

and online during 27 - 30 October 2025 to:

b) Address generic ToRs for Regional and Species Working Groups, for Cod (Gadus morhua) in Subdivision 5.b.1 (Faroe Plateau), Cod in Subdivision 5.b.2 (Faroe Bank,) Haddock (Melanogrammus aeglefinus) in Division 5.b (Faroes grounds) and Saithe (Pollachius virens) in Division 5.b (Faroes grounds).

The assessments will be carried out on the basis of the stock annex. The assessments must be available for audit on the first day of the meeting.

Material and data relevant for the meeting must be available to the group on the dates specified in the 2025 ICES data call.

NWWG will report by 15 May, 10 September, and 10 November 2024 for the attention of ACOM.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group

WGAMEEL – Working Group on American Eel

Approved on the Resolutions Forum on 20 January 2025

2024/MT/FRSG06 The Working Group on American Eel (WGAMEEL), co-chaired by Thomas Pratt (Canada) and Laura M. Lee* (US) will work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	VENUE	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 2025	November 2025 (TBD)	virtual	Interim report to Fisheries Research Steering Group	Introduction of new US co-chair, Laura Lee
Year 2026	November 2026 (TBD)	virtual	Interim report to Fisheries Research Steering Group	
Year 2027	November 2027 (TBD)	virtual	Final report to Fisheries Research Steering Group	

ToR descriptors[1]

ToR	Description	Background	Science Plan Codes	Duration	Expected Deliverables
a	Tabulate the main types of required data, and their current availability, for each major potential approach to stock assessment or spatial modeling. Evaluate the feasibility of obtaining missing data, especially data which are imperative for approach implementation. Assess the feasibility of a rangewide assessment plan.	Availability of eel life history parameters specific to habitat types and regions will be reported, as will be further information that is needed to evaluate the consequences of anthropogenic impacts. This will include, for dams, the effects that upstream passage blockage may exert on density-dependent survival and growth and potential turbine mortality, and for fisheries, the proportion of the eel stock that is subject to fishing.	1.7, 1.8, 3.1	Years 1, 2 & 3	Final report
b	Evaluate, and where practical, develop and test, assessment approaches that have promise to improve understanding of American eel stock dynamics and/or guide sustainable management.	US and European experiences of applying index-based methods to anguillid eels will be reviewed, and this approach, if deemed promising and feasible, will be implemented in a joint analysis of Canadian and US indices. Solutions will be sought to overcome impediments to pooled index use (confidentiality of some data sets, variability in standardization techniques). Other assessment approaches, including spawner-per-recruit and catch-only methods, will be reviewed, and implemented if deemed promising and feasible.	3.3, 4.3, 5.1	Years 1, 2 & 3	Final report; peer-reviewed manuscript
c	Enhance current understanding of eel spatial distribution, abundances, alternative management strategies, and appreciation of the cultural and social significance of eels by integrating social science, Indigenous methodologies, and Indigenous Knowledge Systems (IKS) to complement current scientific knowledge.	IKS is becoming increasingly recognized as a distinct way of knowing and for its contribution as a form of adaptive management that may enhance sustainable management of resources. However, few attempts to integrate scientific knowledge and IKS exist for eels. The WG will compile existing Indigenous knowledge for the purpose of enhancing current understanding and to improve the management and sustainability of eels.	3.6, 7.1, 7.5	Years 1, 2 & 3	Final report

[1] Avoid generic terms such as "Discuss" or "Consider". Aim at drafting specific and clear ToR, the delivery of which can be assessed

d	Continue development of models that relate American eel distribution to environmental variables, and, where feasible, strengthen model coverage of lentic waters (estuaries, lakes, ponds) and explore potential model linkages to population parameters that are relevant to formulation of management advice.	Growth-phase American eels are known to use all sheltered coastal (bay, estuary) and all accessible freshwater (river, stream, lake, pond) habitat types. However, knowledge of eel status is often based on habitat-specific series-of-opportunity (e.g. stream electrofishing, estuary netting and potting), leaving data gaps in other habitats (lakes and ponds). This effort will use GIS-based modelling tools to advance a pan-habitat understanding of growth-phase American eel status and relative abundance. This work will be done in consultation with the ICES WKSMEEL project, and with New Zealand's spatial modelling project for the longfin eel.	1.8, 3.2	Years 1, 2 & 3	Final report; peer-reviewed manuscript
e	Summarize available American eel data relevant to stock assessment and spatial modelling in the Greater Caribbean Basin and in US and Mexican drainages of the Gulf of Mexico, and seek opportunities to improve the scientific basis of eel assessment in this region.	International governance (i.e., stock assessment and management) remains undeveloped for the American eel, which is comprised of a single, panmictic population shared among many jurisdictions. Practitioners of eel biology and survey work outside the current scope of WGAMEEL will be invited to provide syntheses. Potential contributions will be sought from national governments in the region, from ICES members which hold territories in the region (US, UK, France, Netherlands), and from non-governmental organizations with an interest in eels in the southern part of their range (notably the Sargasso Sea Commission and IUCN).	1.7, 3.1	Years 2 & 3	Final report

Summary of the Work Plan

Year 1	The WG will meet to address the first 4 TORs.
Year 2	The WG will meet to address all TORs.
Year 3	The WG will meet to address all TORs. The WG will review drafts of papers developed following the first 2 years.

Supporting information

Priority	The current activities of this Group will lead ICES into issues related to the ecosystem effects of fisheries, especially with regard to the application of the Precautionary Approach. Consequently, these activities are considered to have a very high priority.
Resource requirements	The research programmes which provide the main input to this group are already underway, and resources are already committed. The additional resources required to undertake additional activities in the framework of this group is small.

Participants	The Group should be attended by some 20–25 members and guests.
Secretariat facilities	None.
Financial	No financial implications.
Linkages to ACOM and groups under ACOM	Links to ACOM, FRSG, and WGDIAD.
Linkages to other committees or groups	Interactions will be sought with WGEEL.
Linkages to other organizations	There are linkages to a number of organizations and institutions throughout North America and Europe, such as the Research Programme on European eel from the General Fisheries Commission for the Mediterranean.

WGBAST – Baltic Salmon and Trout Assessment Working Group

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG07 The **Baltic Salmon and Trout Assessment Working Group** (WGBAST), Katarina Magnusson (Sweden) and Katarzyna Nadolna-Ałtyn (Poland) will meet online 25-26 March 2025 and in-person 01-08 April 2025 in Estonia to:

a) Address relevant points in the Generic ToRs for Regional and Species Working Groups;

Material and data relevant to the meeting must be available to the group on the dates specified for the 2025 ICES data call.

WGBAST will report by 17 April 2025 for the attention of ACOM.

Further specific terms of reference and/or workshops linked to WGBAST may arise.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group.

WGBFAS – Baltic Fisheries Assessment Working Group

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG08 The **Baltic Fisheries Assessment Working Group** (WGBFAS), chaired by Stefanie Haase*, Germany and Marie Storr-Paulsen*, Denmark will meet on 9-10 April 2025 online and on 22-29April 2025 in Gdynia, Poland to:

a. Address generic ToRs for Regional and Species Working Groups.
b. Review the main result from WGMIXFISH, WGIAB, WGSAM, WGBIFS, WKPLAICE, and WKNEWREF, with main focus on the biological processes and interactions of key species in the Baltic Sea.
c. In collaboration with RCGs, progress work on species misreporting in commercial catches.

The assessments will be carried out based on the stock annexes. The assessments must be available for audit on the first day of the meeting.

Material and data relevant to the meeting must be available to the group on the dates to be specified in the 2025 ICES data call.

WGBFAS will report by 8 May 2025 for the attention of ACOM.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group.

WGBIE– Working Group for the Bay of Biscay and Iberian Waters Ecoregion

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG09 The **Working Group for the Bay of Biscay and Iberian Waters Ecoregion** (WGBIE), chaired by Michel Bertignac*, France and Santiago Cerviño, Spain, will meet on 28 April 2025–2 May 2025 at ICES HQ, Copenhagen, Denmark and 5–9 May 2025 online to:

a) Address generic ToRs for Regional and Species Working Groups;
b) Review results and recommendations from benchmark and other interim relevant workshops held in 2024 and early 2025;
c) Update on the use of genetic data for informing about stock connectivity and for abundance estimation: This ToR will 1) examine available genetic information on stock connectivity for assessed species, including implications of recent findings (e.g. misidentification and hybridization in anglerfish and isolation-by-distance in hake) in assessment, and 2) update on the developments towards the application of CKMR for abundance estimation in hake.

The assessments will be carried out based on the stock annex. The assessments must be available for audit on the first day of the meeting.

Material and data relevant to the meeting must be available to the group on the dates specified in the 2025 ICES data call.

WGBIE will report by 27 May 2025, for the attention of the Advisory Committee.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group.

WGCSE – Working Group for the Celtic Seas Ecoregion

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG10 The **Working Group for the Celtic Seas Ecoregion** (WGCSE), chaired by TBA, TBA and Ruth Kelly, UK will meet 7–16 May 2025 in ICES HQ Copenhagen, Denmark to:

a) Address generic ToRs for Regional and Species Working Groups;

And September 2025, online to:

b) Address generic ToRs for Regional and Species Working Groups for anglerfish and megrim in Rockall.

The assessments will be carried out based on the stock annex. The assessments must be available for audit on the first day of the meeting.

Material and data relevant to the meeting must be available to the group on the dates specified in the 2025 ICES data call.

WGCSE will report by 30th May 2025 for the attention of ACOM, and by October 2025 for anglerfish and megrim in Rockall.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group

WGDEEP – Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG11 The **Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources (WGDEEP)**, chaired by Rui Vieira*, United Kingdom and Juan Gil Herrera, Spain, will meet in the Faroe Islands, 30 April-6 May 2025 to:

a) Address generic ToRs for Regional and Species Working Groups.
b) Update the description of deep-water fisheries in both the NEAFC regulatory areas and ICES area(s) by compiling data on catch/landings, fishing effort (inside versus outside the EEZs, in spawning areas, areas of local depletion, etc.), and discard statistics at the finest spatial resolution possible by ICES Subarea and Division and NEAFC regulatory areas. In particular, describe and prepare a first advice draft of any new emerging deep-water fishery with the available data in the NEAFC regulatory areas.
c) Continue work on exploratory assessments for deep-water species.
d) Evaluate the status of stocks for the provision of advice in 2024.

The assessments will be carried out based on the Stock Annex. The assessments must be available for audit on the first day of the meeting.

Material and data relevant for the meeting must be available to the group on the dates specified in the 2025 ICES data call.

WGDEEP will report by 12 May 2025 for the attention of ACOM.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group.

WGDIAD – Working Group on Science to Support Conservation, Restoration, and Management of Diadromous Species

Initially approved on Resolutions forum on 9 December 2024; new chair approved on Resolutions forum on 25 February 2025

2024/MT/FRSG12 The **Working Group on Science to Support Conservation, Restoration, and Management of Diadromous Species** (WGDIAD), chaired by Jenni Prokkola, Finland (2024-2026) and Joana Boavida-Portugal, Portugal (2025-2027) will meet by correspondence and annually at the ICES ASCs in September 2025, 2026, and 2027 to work on the ToRs and generate deliverables as listed in the Table below.

WGDIAD will report on the activities of each year to FRSG by 31 December of that year.

Terms of Reference

a) Support the integration of diadromous fish data into ICES databases and development of freshwater data protocols;
b) Review and synthesize habitat restoration practices and their effect on assessment work and ICES advice;
c) Address knowledge and training needs raised by diadromous WGs on age reading and genetic approaches;
d) Coordinate research priorities and policy alignment on diadromous species with RCGs and external partners.

ToR descriptors

ToR	Description	Background	Science plan codes	Duration	Expected Deliverables
a	Support the integration of diadromous fish data into ICES databases and development of freshwater data protocols.	Collaborate with the ICES data centre and relevant expert groups (e.g. RDBESGOV) to facilitate the inclusion of diadromous species data—both for their freshwater and marine lifecycle phases—into ICES databases (e.g. RDBES). This work can benefit from close collaboration with DIASPARA project, where diadromous species database is being developed. Explore ways to enhance information acquisition on diadromous species bycatch at sea. Engage with relevant WG chairs through regular online meetings to discuss best courses of action.	1.4, 6.2, 5.2	Year 1, 2 and 3	Report of the WG and maintenance of a previously established network of diadromous fish experts.
b	Review and synthesize habitat restoration practices and their effect on assessment work and ICES advice.	Major ecosystem changes due to climate change are particularly impacting diadromous species, and increasing habitat restoration efforts will be needed to support reproductive success in these species to avoid population collapses. WGDIAD, in collaboration with relevant groups such as WGTRUTTA, will coordinate a workshop for diadromous species groups, which is highly pertinent given the increasing restoration efforts, for example, under the new EU Nature Restoration Regulation and similar initiatives in other ICES countries. The proposed intersessional group would synthesize evidence of restoration success and failure and share knowledge on how restoration can be better integrated into assessment work through published recommendations. The workshop will also consider how restoration should be accounted for in ICES advice. WGDIAD will engage organizations like the World Fish Migration Foundation and involve expertise on non-salmonid diadromous species, such as shads and lampreys, in the initiative.	6.2, 1.7, 1.9	Year 1, 2 and 3	Organise theme sessions, symposia or EGs. Liaise with experts of other EGs, and relevant sources outside ICES on issues relevant to diadromous fish, and report back on these activities in the annual report.

c	Address knowledge and training needs raised by diadromous WGs on age reading and genetic approaches.	Engage with working groups, like WGTRUTTA, to map their training needs for genetic approaches/age reading in assessment and conservation. WGDIAD will propose ToRs for a targeted training course on these techniques, with a focus on building capacity and enhancing practical skills within ICES working groups. WGDIAD will draft a clear framework for ICES support and collaboration and aligning with client needs and requests, such as those from NASCO.	3.2, 6.1, 5.2	Year 1, 2 and 3	Organise theme sessions, symposia or expert groups. Co-ordinate feedback from these sources for use in publications and CRR documents. Liaise with and support chairs of EGs and WKs to achieve their aims.
d	Coordinate research priorities and policy alignment on diadromous species with RCGs and external partners.	During the annual meetings of WGDIAD, engage with the Regional Coordination Groups (RCGs), NASCO, FAO, and other external bodies, such as the DIASPARA and DiadSea projects, to align research priorities and support the diadromous species data into broader policy frameworks, including the EU's Nature Restoration Regulation and UK Fisheries Act. Improve connectedness of WGDIAD and NPAFC to improve information sharing, for example through a memorandum of understanding. To address one of the largest knowledge gaps, WGDIAD will propose a theme session for the 2026 ASC focused on most recent research on the marine ecology and migratory routes of diadromous species, including the impact of bycatch on populations. As an output of the session, compile a perspective paper summarizing the collective research priorities to support management and conservation across working groups represented in WGDIAD.	5.2, 5.1	Year 1, 2 and 3	Keep ICES abreast of important issues relating to Diadromous fish species and ensure these issues are communicated within the ICES community to relevant EGs and SGs.

Summary of the Work Plan

Year 1	Coordinate scientific activities (theme sessions, symposia, EGs, CRRs and reports to FRSG)
Year 2	Coordinate scientific activities (theme sessions, symposia, EGs, CRRs and reports to FRSG)
Year 3	Coordinate scientific activities (theme sessions, symposia, EGs, CRRs and reports to FRSG)

Supporting information

Priority	The Working Group will provide the mechanism to coordinate scientific activities relating to diadromous fish species and their environment in support of the ICES Science Plan. It will also permit ICES to respond fully to requests from NASCO and the EU/FAO/IUCN/CITES for scientific advice on management strategies, research needs and data deficiencies.
Resource requirements	Meeting facilities at the ASC in 2024-2026, including teleconferencing facilities
Participants	National representatives and other invited experts working with diadromous species
Secretariat facilities	Secretarial support for organisation of the meeting and preparation of the report.
Financial	No financial implications.
Linkages to ACOM and groups under ACOM	The proposal originates from FRSG but will have direct significance to ACOM for advice from WGNAS, WGBAST, WGTRUTTA, and WGEEL in particular.
Linkages to other committees or groups	Besides FRSG, there are linkages to the SCICOM Steering Groups Ecosystem Observation, Human Activities, Pressures, and Impacts, and Ecosystem Processes and Dynamics and all Expert Groups working on issues of relevance for diadromous species in relation to improving scientific understanding and coordinating scientific activities.
Linkages to other organizations	NASCO, FAO, EIFAAC and GFCM, HELCOM, CITES, NPAFC.

WGEEL – Joint EIFAAC/ICES/GFCM Working Group on Eels

Approved in Resolutions meeting on 6 November 2024 & dates approved on Resolutions Forum on 15 January 2025

2024/AT/FRSG13 The **Joint EIFAAC/ICES/GFCM Working Group on Eels** (WGEEL), chaired by Jan-Dag Pohlmann, Thünen Institute, Germany and Caroline Durif, Norway will meet, in a split meeting from 25-29 August 2025 (online) and 29 September – 06 October 2025 (Rennes, France) to:

a) Address the generic EG ToRs from ICES, and any requests from EIFAAC or GFCM;

b) Report on developments in the state of the European eel (*Anguilla anguilla*) stock, the fisheries on it and other anthropogenic impacts;

c) Report on updates to the scientific basis of the advice, including any new or emerging threats or opportunities;

d) Identify and address Mediterranean-specific issues on European eel;

e) Implement the roadmap proposed by WKFEA (as amended in WGEEL report 2024);

f) Address the issue of areas without estimates of fishing mortality or stock biomass in relation to a wholistic stock assessment;

g) In collaboration with the ICES communications team, design an information sheet destined to inform non-scientisits and stakeholders on the status of the eel population;

h) To the extent possible, provide information on potential data needs and associated methods for the EU regional workplans, particularly in relation to DCF data collection.

Material and data relevant for the meeting must be available to the group on the dates specified in the 2024 ICES data call.

WGEEL will report by 16 October 2025 for the attention of ACOM, WGDIAD, FRSG and FAO, EIFAAC and GFCM.

Supporting Information

Priority	i) The status of the European eel stock remains outside safe biological limits and continuing and further management actions are required to recover the stock. ii) The present stock status assessment is based on recruitment time series, which have no predictive power and therefore cannot be used to identify the most effective way to recover the stock nor the time scale over which recovery might be achieved. Therefore, the development and application of further status assessment methods are urgently required. Therefore the findings of WKFEA require particular attention. iii) The Council Regulation (EC) 1100/2007 obliges EU Member States to report national stock indicators, to take management measures and to report progress. Non-EU countries have no such legal obligation, but the same aspirations are necessary to provide a whole-stock assessment and management. The Working Group continues to provide EIFAAC, ICES and the GFCM countries with support in implementing and improving such actions. iv) The EU has requested annually recurring scientific advice on the European eel. Specifically, for eel, the advice is sought in support of the Eel Regulation (EC 1100/2007).
Scientific justification	European eel life history is complex and atypical among aquatic species. The stock is genetically panmictic and data indicate random arrival of adults in the spawning area. The continental eel stock is widely distributed and there are strong local and regional differences in population dynamics and local stock structures. Fisheries on all continental life stages take place throughout the distribution area. Local impacts by fisheries vary from almost nil to heavy overexploitation. Other forms of anthropogenic mortality (e.g. hydropower, pumping stations) also impact on eel and vary in distribution and local relevance. Most but not all EU Member States reported quantitative estimates of the required stock indicators to the EU in 2012, 2015, 2018 and 2021. The reliability and accuracy of these data have not yet been fully evaluated, but the ICES WKEMP will examine this. Furthermore, the stock indicators of some non-European countries within the natural range are lacking.
Resource requirements	SharePoint, WebEx
Participants	EIFAAC, ICES and GFCM Working Group Participants, Invited Country Administrations, Client representative
Secretariat facilities	Support to organize the logistics of the meeting.
Financial	At countries expense
Linkages to advisory committees	ACOM
Linkages to other committees or groups	WGDIAD, SCICOM, FRSG
Linkages to other organizations	FAO EIFAAC, GFCM, EU DG-MARE, EU DG-ENV

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group.

WGEF – Working Group on Elasmobranch Fishes

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG14 The **Working Group Elasmobranch Fishes** (WGEF), chaired by Sophy McCully Phillips (UK) and Teresa Moura (Portugal), will meet:

online 4–5 June 2025 to:

a) Compile the catch and length data for all elasmobranch stocks;

and in Hafnarfjörður, Iceland, from 24–28 June 2025 to:

b) Address generic ToRs for Regional and Species Working Groups.

c) Update the description of elasmobranch fisheries for deep-water, pelagic and demersal species in the ICES area and compile landings, effort and discard statistics by ICES Subarea and Division, and catch data by NEAFC regulatory areas. Describe and prepare a first Advice draft of any emerging elasmobranch fishery with the available data on catch/landings, fishing effort and discard statistics at the finest spatial resolution possible in the NEAFC RA and ICES area(s);

d) Evaluate the stock status for the provision of biennial advice due in 2025 for: (i) skate stocks in the North Sea ecoregion, the Azores and MAR; (ii) catsharks (Scyliorhinidae) in the Greater North Sea, Celtic Seas and Bay of Biscay and Iberian Coast ecoregions; and (iii) smooth-hounds in the Northeast Atlantic;

e) Collate landings and discard data from countries and fleets according to the ICES data call to follow recommendations from WKSHARK5 to: (i) address the following issues: data quality and onboard coverage; raising factors; discard retention patterns between fleets and countries; discard survival; (ii) advise on how to include discard information in the advisory process; and (iii) develop a coherent data-base for landings/discard information used in the assessments.

f) Follow the outcomes of WKSKATE and make the best use of survey indices in the assessments where appropriate.

g) Work intersessionally to draft/update stock annexes and then develop a procedure and schedule for subsequent reviews.

The assessments will be carried out on the basis of the stock annex in National Laboratories, prior to the meeting. The assessments must be available for audit on the first day of the meeting.

Material and data relevant for the meeting as specified in the 2025 ICES data call must be available to the group no later than 14 days prior to the starting date.

WGEF will report by 25 August 2025 for the attention of ACOM.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group.

WGHANSA – Working Group on Southern Horse Mackerel Anchovy and Sardine

Approved on the Resolutions Forum on 10 April 2025

2024/AT/FRSG15 The **Working Group on Southern Horse Mackerel Anchovy and Sardine** (WGHANSA), chaired by Rosana Ourens (UK) will meet online 27-30 May 2025 (WGHANSA-1) to:

a) Address generic ToRs for Regional and Species Working Groups for relevant stocks (ane.27.9aW and hom.27.9a);

and in Nantes, France 24-28 November 2025 (WGHANSA-2) to:

b) Address generic ToRs for Regional and Species Working Groups for remaining relevant stocks (ane.27.8, ane.27.9aS, pil.27.7, pil.27.8abd, and pil.27.8c9a).

The assessments will be carried out on the basis of the Stock Annexes. The assessments must be available for audit on the first day of the meeting.

Material and data relevant for the meeting must be available to the group on the dates specified in the 2025 ICES data call.

WGHANSA-1 will report by 11 June 2025 and WGHANSA-2 will report by XX December 2025 for the attention of ACOM.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group.

WGMIXFISH-ADVICE – Working Group on Mixed Fisheries Advice

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG16 The **Working Group on Mixed Fisheries Advice (WGMIXFISH-ADVICE)**, chaired by Klaas Sys* (Belgium) and Matthew Pace* (UK), will hold a hybrid meeting in Copenhagen, on 29 September - 3 October 2025 and online on 13-14 October 2025 to:

a) Carry out mixed fisheries projections for the Bay of Biscay taking into account the single species advice and the management measures in place for 2026 for anglerfish, megrim, sea bass, hake, sole, Norway lobster, whiting, pollack, mackerel, horse mackerel, blue whiting and smooth hound produced by WGBIE, WGWIDE and WGEF in 2025.

b) Carry out mixed demersal fisheries projections for the Celtic Sea taking into account the single species advice and the management measures in place for 2026 for cod, haddock, whiting, hake, megrim, monkfish, sole and Norway lobster that is produced by WGCSE and WGBIE in 2026.

c) Carry out mixed fisheries projections for Iberian waters taking into account the single species advice and the management measures in place for 2026 for hake, four-spot megrim, megrim and anglerfish that is produced by WGBIE in 2025.

d) Carry out mixed demersal fisheries projections for the Irish Sea taking into account the single species advice and the management measures in place for 2026 for cod, haddock, whiting, plaice, sole, and Norway lobster that is

produced by WGCSE in 2025.

e) Carry out mixed demersal fisheries projections for the North Sea taking into account the single species advice and the management measures in place for 2026 for cod, haddock, whiting, saithe, plaice, sole, turbot, brill, Norway lobster, and witch that is produced by WGNSSK in 2025;

f) Produce draft mixed-fisheries sections for the ICES advisory report 2025 that includes a dissemination of the fleet and fisheries data and forecasts for the North Sea, Celtic Sea, Irish Sea, Bay of Biscay, and Iberian waters.
g) Produce and quality assure a first draft of the advice for each region.

WGMIXFISH-Advice will report by 31 October 2025 for the attention of ACOM.

WGMIXFISH-METHODS – Working Group on Mixed Fisheries Advice Methodology

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG17 The **Working Group on Mixed Fisheries Advice Methodology** (WGMIXFISH-METHODS), chaired by Klaas Sys*, Belgium, and Matthew Pace*, UK, will hold a hybrid meeting in Lisbon, Portugal, on 16-20 June 2025, to:

a) Continue the improvement of WGMIXFISH-ADVICE data call, data processing, methodological framework, workflow, auditing, updating associated documentation and increasing transparency
b) Exploration of the RDBES data to improve fleet and métier definitions used in mixed fisheries models.
c) Continue contributing to the Fisheries Overviews and fisheriesXplorer, standardizing figures across relevant ecoregions, and ensuring data is in the correct format for use by the app;
d) Exploration of developments in methodology and advice;
e) Respond to the outcomes and issues encountered during WGMIXFISH-Advice;

WGMIXFISH-METHODS will report by 25 July 2025 for the attention of ACOM.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group.

Supporting information

Priority:	The work is essential to ICES to progress in the development of its capacity to provide advice on multispecies fisheries. Such advice is necessary to fulfil the requirements stipulated in the MoUs between ICES and its client commissions.
Scientific justification and relation to action plan:	The issue of providing advice for mixed fisheries remains an important one for ICES. The Aframe project, which started on 1 April 2007 and finished on 31 march 2009 developed further methodologies for mixed fisheries forecasts. The work under this project included the development and testing of the FCube approach to modelling and forecasts.

	In 2008, SGMIXMAN produced an outline of a possible advisory format that included mixed fisheries forecasts. Subsequently, WKMIXFISH was tasked with investigating the application of this to North Sea advice for 2010. AGMIXNS further developed the approach when it met in November 2009 and produced a draft template for mixed fisheries advice. WGMIXFISH has continued this work since 2010.
Resource requirements:	No specific resource requirements, beyond the need for members to prepare for and participate in the meeting.
Participants:	Experts with qualifications regarding mixed fisheries aspects, fisheries management and modelling based on limited and uncertain data.
Secretariat facilities:	Meeting facilities, production of report.
Financial:	None
Linkages to advisory committee:	ACOM
Linkages to other committees or groups:	SCICOM through the WGMG. Strong link to STECF.
Linkages to other organizations:	This work serves as a mechanism in fulfilment of the MoU with EC and fisheries commissions. It is also linked with STECF work on mixed fisheries.

WGNAM – Working Group on Northwest Atlantic Mackerel Ecology and Assessment

RESOLUTION PENDING

2024/MT/FRSG18

WGNAS – Working Group on North Atlantic Salmon

Approved in Resolutions meeting on 6 November 2024; amended an approved on the Resolutions forum on 9 December 2024

2024/AT/FRSG19 The **Working Group on North Atlantic Salmon** (WGNAS), chaired by Alan Walker (UK), will meet at the Institut Agro, Rennes, France, 17-27 March 2025 to address the ToRs detailed below:

1. **With respect to Atlantic salmon in the North Atlantic area:**
   1.1. provide an overview of salmon catches and landings by country, including unreported catches and catch and release, and production of farmed and ranched Atlantic salmon in 2024[1];
   1.2. report on significant new or emerging threats to, or opportunities for, salmon conservation and management[2];

1.3. provide a compilation of tag releases by country in 2024; and
1.4. identify relevant data deficiencies, monitoring needs and research requirements.

2. **With respect to Atlantic salmon in the North-East Atlantic Commission area:**
   2.1. describe the key events of the 2024 fisheries[3];
   2.2. review and report on the development of age-specific stock conservation limits (CLs), including updating the time-series of the number of river stocks with established CLs by jurisdiction; and
   2.3. describe the status of the stocks, including updating the time-series of trends in the number of river stocks meeting CLs by jurisdiction.
3. **With respect to Atlantic salmon in the North American Commission area:**
   3.1. describe the key events of the 2024 fisheries (including the fishery at St Pierre and Miquelon)[3];
   3.2. update age-specific stock CLs based on new information as available, including updating the time-series of the number of river stocks with established CLs by jurisdiction; and
   3.3. describe the status of the stocks, including updating the time-series of trends in the number of river stocks meeting CLs by jurisdiction.
4. **With respect to Atlantic salmon in the West Greenland Commission area:**
   4.1. describe the key events of the 2024 fisheries[3]; and
   4.2. describe the status of the stocks[4]
5. **Address relevant points in the Generic ToRs for Regional and Species Working Groups for each salmon stock complex.**

Material and data relevant for the meeting must be available to the group by the dates specified in the 2025 ICES data call.

The assessments will be carried out on the basis of the stock annex and the most recent benchmark as agreed by ACOM (i.e., on the basis of WKBSalmon 2023).

Notes:

[1] With regard to ToR 1.1, for the estimates of unreported catch the information provided should, where possible, indicate the location of the unreported catch in the following categories: in-river; estuarine; and coastal. Numbers and estimated weight of salmon caught and released in recreational fisheries should be provided.

[2] With regard to ToR 1.2, ICES is requested to include reports on any significant advances in understanding of the biology of Atlantic salmon that is pertinent to NASCO.

[3] In the responses to ToRs 2.1, 3.1 and 4.1, ICES is asked to provide details of catch, gear, effort, composition and origin of the catch and rates of exploitation. For homewater fisheries, the information provided should indicate the location of the catch in the following categories: in-river; estuarine; and coastal. Information on any other sources of fishing mortality for salmon is also requested. For ToR 4.1, if any new surveys are conducted and reported to ICES, ICES should review the results and advise on the appropriateness of incorporating resulting estimates into the assessment process.

[4] In response to ToR 4.2, ICES is requested to provide a brief summary of the status of North American and North-East Atlantic salmon stocks. The detailed information on the status of these stocks should be provided in response to ToRs 2.3 and 3.3.

WGNAS will report by 04 April 2025 for the attention of the Advisory Committee.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group.

WGNSSK – Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG21 TheWorking Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK), chaired by Lies Vansteenbrugge, Belgium, and Alessandro Orio, Sweden, will meet from 23 April to 2 May 2025 in Copenhagen and online in September 2025 to:

a) Address generic ToRs for Regional and Species Working Groups.

b) Assess Norway pout assessments by correspondence.

c) Report on reopened advice as appropriate;

The assessments will be carried out on the basis of the stock annex. The assessments must be available for audit on the first day of the meeting.

Material and data relevant for the meeting must be available to the group on the dates specified in the 2025 ICES data call.

WGNSSK will report by 25 May 2025, and by 28 September 2025 (Norway pout) for the attention of ACOM.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group

WGRFS – Working Group on Recreational Fisheries Surveys

Approved on the Resolutions forum in May 2024.

2024/MT/FRSG22 The **Working Group on Recreational Fisheries Surveys (**WGRFS**)**, chaired by Kieran Hyder, UK, and Estanis Mugerza, Spain, will work on ToRs and generate deliverables as listed in the table below.

	Meeting dates	Venue	Reporting details	Comments (change in Chair, etc.)
Year 2023	19–23 June 2023	Ancona, Italy	Interim report by 01 November 2023 to FRSG	
Year 2024	10–14 June 2024	Horta, Azores, Portugal	Interim report by 01 November 2024 to FRSG	Estanis Mugerza completes 3 years as chair
Year 2025	14–18 June 2025	TBD	Final report by 01 November 2025 to FRSG	Kieran Hyder completes 3 years as chair

ToR descriptors

ToR	Description	Background	Science Plan codes	Duration	Expected Deliverables
a	Collate, review quality, and identify significant gaps of coverage and species of the:	Most countries are engaged in data collection. This activity collates national	2.1, 3.1, 3.2, 5.4	Regular activity in each year, with intersessional	Report WG that identifies and prioritises MRF data gaps of

ToR	Description	Background	Science Plan codes	Duration	Expected Deliverables
	i) National submissions to the ICES data call on Marine recreational fisheries (MRF). ii) National estimates of recreational catch and effort, catch-and-release impacts, and socio- economic benefits for candidate stocks available to experts attending WGRFS.	participation, catch and socio-economic data sets together, understands the quality of data, and highlights where new data are needed. This is important for supporting the ICES TAF and ecosystem approach. WGRFS chairs, ICES Secretariat and ACOM have started a process to identify the relevant contacts and organizations dealing with MRF as well as the specifications of the data collected across ICES Member Countries. The intersessional group on regional coordination & data storage will work on the data submitted to ICES in response to the data call for the possible incorporation into the RDBES agreed upon format, possible use by ICES assessment groups and support end users needs.		tasks and workshops to develop new approaches.	relevance to assessment WGs and ICES advice, publication of scientific papers and report to relevant assessment experts groups. Ensure MRF data is integrated into the RDBES structure with appropriate raising and estimation in TAF
b	Assess the validity of traditional knowledge, new survey designs, novel methods (e.g. citizen science, apps), innovative statistical methods for data provision, and approaches for selecting appropriate cost-effective methods.	Recreational data can be collected in many ways, with different associated biases. This supports improvement of analysis of existing surveys and understanding the utility of new methods. This will lead to the most robust and broad evidence- base to underpin assessment and advice.	3.1, 3.2, 3.3, 3.6, 4.1, 4.3, 4.4, 5.4	Regular activity in each year, with intersessional tasks and workshops to develop new approaches.	Report WG perspectives and publication of scientific papers
c	Provide guidance and input to benchmark processes and special requests. Inform ACOM on the availability of data, design of data collection programs, data storage systems, use of data in assessments, catch allocation, and ecosystem approach.	Recreational catches are not included in many assessments and data collection is limited to a few species. This activity supports data collection requirements, access to data and methods needed. This will facilitate embedding recreational	3.1, 3.2, 3.3, 3.5, 3.6, 5,1	Regular activity in each year, with intersessional tasks and workshops to develop new approaches.	Better inclusion on MRF data into stock assessments and advice,

ToR	Description	Background	Science Plan codes	Duration	Expected Deliverables
		fisheries into fisheries management.			
d	Develop approaches for regional data collection programmes that generate robust data for end users and support the ecosystem approach.	Regionalisation is an important goal, but implementation is unclear This is a challenge for recreational fisheries due to the different actors, gears and survey instruments. This will underpin generation of transparent and robust regional data to support a variety of end users needs.	3.1, 3.2, 3.3, 3.6,	Regular activity in each year, with intersessional tasks and workshops to develop new approaches.	Report WG perspectives and publication of scientific papers.
e	Evaluate the use of economic (e.g. impact, valuation), social (e.g. governance, behaviour, welfare, health), and communication (e.g. participatory process, messaging) to support the assessment and management of recreational fisheries.	Recreational fisheries have broad benefits and behavioural responses are difficult to predict due to diverse motivations. Hence, understanding of the human dimension is needed. This develops understanding of the data and methods needed for codesign.	7.1, 7.4, 7.6	Regular activity in each year, with intersessional tasks and workshops to develop new approaches.	Report WG perspectives and publication of scientific papers and contribute to Fisheries Overviews and Ecosystem Overviews.
f	Review outcomes of the workshops organized by the group.	Recreational fisheries is a diverse topic, so not all aspects can be addressed at WGRFS. A number of workshops on specific topic have been done or are in the workplan. This reviews outcomes of the workshops and the implications for recreational fisheries.	5.4, 7.1, 7.4	Activity-dependent on workshop	Report WG perspectives and publication of scientific papers.

Summary of the work plan

Year 1	a)	Review progress of intersessional groups (i.e. governance, survey design, quality and analysis, regional coordination, data storage, catch-and-release impacts, novel methods, assessment and catch allocation, human dimensions, and communication) and agree approach for the next year. (a, b, c, d, e)
	b)	Evaluate the quality of up to three national survey programmes using the WGRFS Quality Assurance Toolkit (QAT) and provide feedback on tasks requested by ICES. (a, c)
	c)	Review the outputs from ICES WRGRFS led workshops and discuss next steps for the inclussion of outcomes. (f)
	d)	Scope data call for ICES based on the formats developed by WGRFS and the RDBES core group. (c, d, f)
	e)	Assess priorities for inclusion of recreational fisheries in stock assessment using data from the pilot studies. (a, c, d)
	f)	Develop ICES workshop proposal with WGCATCH for intergrating probabilistic and non-probabilistic surveys. (b)
	g)	Create ICES workshop proposal to evaluate post-release mortality estimates, potential sublethal effects, and reasonable extrapolations across species and fisheries for inclusion in stock assessments. (a)
	h)	Assess the potential for food safety and human health issues from consumption of recreational caught fish (e.g. environmental toxins). (e)
	i)	Review and share methods for engaging with stakeholders and the potential for particpatory approaches. (e)
	j)	Review progress and achievements on the actions outlined the Marine Recreational Fisheries Roadmap.
Year 2	a)	Evaluate the outcomes from the intersessional work and agree approach for the next year. (a, b, c, d, e, f)
	b)	Review national programmes including assessment of quality of up to three programmes and provide feedback on tasks requested by ICES. (a)
	c)	Assess the potential of novel survey methods to deliver recreational fisheries data (e.g. citizen science approaches, smartphone apps, traditional knowledge). (b)
	d)	Develop a framework for allocation of catches between sectors based on a review of existing systems and provide best-practice guidance. (c,d)
	e)	Develop MSE approaches to assess the impact of uncertainty in recreational catches on assessment and regional sampling programme. (d).
	f)	Review and share methods for engaging with stakeholders and the potential for particpatory approaches. (e)
	g)	Assess outcomes of workshop on inclusion of recreational data in stock assessments and other actions in the MRF roadmap (f)
Year 3	a)	Review progress of intersessional groups (i.e. governance, survey design, quality and analysis, regional coordination, data storage, catch-and-release impacts, novel methods, assessment and catch allocation, human dimensions, and communication) and agree approach for the next year. (a, b, c, d, e)
	b)	Evaluate the quality of up to three national survey programmes using the QAT and provide feedback on tasks requested by ICES. (a, c)
	c)	Review the outputs from ICES WRGRFS led workshops and discuss next steps for the inclussion of outcomes. (f)
	d)	Collate advances in survey methods that could be used to improved national approaches. (b)
	e)	Assess the potential for impact of climate change on species caught by recreational fisheries and how that coud impact on DCF and regional species requirements. (c, d)
	f)	Develop ICES workshop proposal on MSE approaches to assess the impact of uncertainty in recreational catches on assessment and regional sampling programmes. (d).
	g)	Assess the potential of novel survey methods to deliver recreational fisheries data (e.g. citizen science approaches, smartphone apps, traditional knowledge). (b)
	h)	Evaluate progress against three year plan and the MRF roadmap and develop new ToRs. (a, b, c, d, e, f)

Supporting information

Priority	High—the biological, social and economic impact of recreational fishries is becoming increasing recognised and needs to be included in the fisheries assessment and management processes.
Resource requirements	None.
Participants	The WG is normally attended by around 60 members and chair-invited experts.

Secretariat facilities	Normal backstopping support in the organization of the group.
Financial	None.
Linkages to ACOM and groups under ACOM	ACOM, WGBFAS, WGEEL, WGBAST, WGCSE, WGNSSK, WGBIE, WGMEDS, and benmarks workshops for stocks that have recrational catches.
Linkages to other committees or groups	WGCATCH, DIG, WGTFID
Linkages to other organizations	• EC, STECF, Regional Coordiantion Groups, Advisory Councils. • WECAFC/OSPESCA/CRFM/CFMC/MEDAC Working Group on Recreational Fisheries. • Many linkages to (inter)national angling associations, since WGRFS members estimate national marine recreational catches. • Links to broader organizations with interests in angling and fisheries management including EIFACC and FAO.

WGTAFGOV – Working Group on Transparent Assessment Framework Governance

Approved in Resolutions meeting on 31 October 2023

2023/MT/FRSG20 The **Working Group on Transparent Assessment Framework Governance** (WGTAFGOV), chaired by Iago Mosqueira, Netherlands, will work on ToRs and generate deliverables as listed in the Table below.

	Meeting Dates	Meeting dates and Venue	Reporting details	Comments (change in Chair, etc.)
Year 2024	1) 26 February 2024 2) 3 July 2024 3) 30 October 2024 4)	Online meeting Online meeting Online meeting	Interim business report by TBD to FRSG, DIG, ACOM, and SCICOM	Iago Mosqueira takes over as chair
Year 2025	1) 2) 3) 4)	Dates and venue TBD	Interim business report by TBD to FRSG, DIG, ACOM, and SCICOM	
Year 2026	1) 2) 3) 4)	Dates and venue TBD	Final business report by TBD to FRSG, DIG, ACOM, and SCICOM	

ToR descriptors

ToR	Description	Background	Science Plan codes	Duration	Expected Deliverables
a	Maintain overall responsibility over the TAF project, including adapting the priorities of work being carried out to the changing needs of ICES. Provide steering to the work of the ICES Secretariat TAF team.	Following the vision for TAF set by the manifesto, its translation into strategic decisions on work priorities is required, The relationships of TAF with other ICES initiatives (e.g. RDBES) are to be established so that TAF can cater to		3 years/ Generic ToR	. Annual strategic priorities for TAF. Definition of resources available. Definition of responsibilities. Collaboration of TAF and other relevant ICES initiatives.

		their needs. Guidance on handling of feedback, task prioritisation and expected resource availability is still needed.		
b	Based on the guidance established in ToR A: Provide a channel for user feedback to the Transparent Assessment Framework. Feedback will be compiled by WGTAFGOV and appropriate actions to be taken with assigned responsibilities and resource requirements will be listed and prioritised.	TAF should develop to meet the requirements of a broad range of users and thus needs to be responsive to user feedback,. Feedback will be collected and organised using GitHub and the traditional recommendations system from ICES reports. To achieve a long-term stability, availability and quality, TAF development requires a workplan with clear objectives and milestones. This can only be sucessfully implemented when resource requirements have been estimated and the availability of resources is known.	3 years/Generic ToR	A GitHub site allowing users to submit feedback and requests. Provide an annual workplan, with an agreed and prioritised list of TAF related EG recommendations along with suggested resource allocations, budget estimates and feasibility estimates.
c	Using the guidance established in ToR A and the feedback captured in ToR B: Oversee and advise on the interpretation and prioritisation of recommendations and requests addressed to the Transparent Assessment Framework.	The project planning cycle needs to be responsive (more than one meeting a year) in order to manage the TAF development effectively. Although there is an annual plan, short term priorities must be evaluated against resource availability and needs of the ICES advice processes that vary through the year.	3 years/ Generic ToR	Reformulate and maintain a project board on GitHub to manage tasks. Review project plan and agree on tasks to be completed. Review new tasks for addition to the workplan, or for consideration for the next annual workplan.
d	Oversee development of user guidance and training for the Transparent Assessment Framework.	As TAF develops over time a range of users will require various levels of training including step by step user manuals, tutorials and workshops. Documentation of	3 years/ Generic ToR	Annually updated training documentation. Workshops with specific goals proposed and planned where necessary.

	guidelines and procedures will also be necessary. Outreach activities will be required.		Relevant fora for dissemination investigated and outreach activities planned.

Summary of the Work Plan.

Year 1	First meeting to establish ToRs a) and b) will be a physical meeting to be followed by quarterly online meetings dealing with ToR c) and d). DIG will aid in review of ToR a).
Year 2	ToRs c) and d) will be addressed in quarterly online meetings, with the potential annual meetings for prioritising ToRs a and b).
Year 3	ToRs c) and d) will be addressed in quarterly online meetings, with the potential annual meetings for prioritising ToRs a and b).

Supporting information

Priority	High priority.
Resource requirements	A commitment of time from the members of the group consistent with progressing actions identified in the quarterly meetings.
Participants	ACOM Leadership and FRSG representative, one member each representing survey data, commercial data and stock assessments. Members with an overview of stock assessment results. ICES Secretariat and other related EG members as need be. Representative of main EGs using TAF. Members of the TAF team.
Secretariat facilities	Community Sharepoint site, remote meeting facilities.
Financial	No financial implications.
Linkages to ACOM and groups under ACOM	This is an integral component to the overall Quality Assurance Framework (of Advice) that ACOM together with the Coordination group are describing.
Linkages to other committees or groups	There is a strong linkage to DIG as the main umbrella for data/software governance structures.
Linkages to other organizations	DFO and NOAA have expressed interest in the system.

WGTRUTTA – Working Group to develop and test assessment methods for Sea trout populations (anadromous Salmo trutta)

Approved on the Resolution Forum on 3 June 2024

2024/MT/FRSG23 The **Working Group to develop and test assessment methods for Sea trout populations** (anadromous Salmo trutta) (WGTRUTTA), chaired by Johan Höjesjö, Sweden, and Alan Walker, UK, will work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	VENUE	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 1 (2024)	26 June	online meeting		Start-up meeting
Year 1 (2024)	11-15 Nov	Hybrid, Poland	Interim E-eval by 31 Dec	Progress review and workshop, update plans for year 2
Year 2 (2025)	25 June	Online meeting		Review progress to date and plans

Year 2 (2025)	10-14 Nov	Hybrid, Gothenburg, Sweden	Interim E-eval by 31 Dec	Progress review and workshop, update plans for year 3
Year 3 (2026)	24 June	Online meeting		Review progress to date and plan final reporting
Year 3 (2026)	9-13 Nov	Hybrid, Evora, Portugal	Final report by 31 Dec	Workshop and final reporting

ToR descriptors

ToR	Description	Background	Science plan codes	Duration	Expected Deliverables
A	Describe the life history drivers and distribution of sympatric sea and freshwater trout populations	The trout life cycle is highly variable over space and time, which renders assessment and management challenging. Our understanding of ecological patterns in trout phenology, life history and distribution across large scale environmental gradients is far from complete but is a prerequisite to improving sea trout management.	1.7, 3.2	3 years	A1. Develop a spatial dataset of sea trout accessible rivers across its range, and add layers about pressures, biotic and abiotic habitat characteristics. A2. Map trout distribution within 'select' rivers as a function of abiotic and biotic habitat predictors across the sea trout range (link to C2). A3. Maintain the sea trout database, updating it with datasets as the sub-groups develop these (so linking to other deliverables), and liaise with ICES Data to ensure future compatibility with official ICES databases.
B	Quantify the external pressures on trout populations in formats necessary to understand the state of local populations	Knowledge gaps regarding the ecology of trout is limiting our ability to understand the consequences for trout populations of the rapidly increasing natural, anthropogenic, additive and cumulative impacts on aquatic environments.	2.1, 2.5, 5.6	3 years	B1. Describe and quantify the current and potential future impacts of natural and anthropogenic impacts on trout populations, at both the catchment and geographic species range. B2. Describe and quantify fisheries (targeted and indirect) where sea trout stocks may be exploited at an international scale (i.e., trout from one country exploited by fisheries from another country) throughout their range.

C	Develop a toolbox of methods to assess stock and population state, based on a suite of options, and suitable for a range of scenarios found across the natural range of the sea trout.	The WG has developed approaches for assessing the state of trout populations, including (i) stock-recruitment models using metrics from various life stages by applying several curve fitting approaches to 'data rich' stocks with data from counts, returning stock estimates, catches, and juvenile abundance surveys, and (ii) length-based indicators using index catchments, to demonstrate state and identify where pressures may have had an impact; and (iii) extended the application of the Trout Habitat Scores (THS). These all require further development and testing with novel data and situations in order to advance them to a toolbox for managers and other stakeholders.	3.2, 3.3, 5.1, 6.1.	3 years	C1. Examine the S/R models from WG (2017-2019), and other assessment methods, in terms of transfer functions, types and amounts of data required for setting BRPs, additional data and better and standardized reporting of catches. C2. Develop standard juvenile assessment methods (e.g. for parr, smolts) throughout the sea trout range. C3. Define and compare conservation reference points to ensure stock sustainability that are associated with the stock assessment approaches developed in C1 and C2. C4. Develop framework(s) for data collection associated with (i) the stock assessment approaches developed here (C1, C2, C3), and (ii) analysis of pressures on stocks; and liaise with data collection coordinators (e.g. DCF regional coordination groups) to advance data collection.
D	Advance understanding of the related ecological, social and economic values of sea trout	Sustainable use and management of anadromous sea trout is challenging for many reasons, e.g. the fish use multiple environments and are subject to a variety of impacts and stressors, migrating across different ecological and legislative borders. To effectively conserve the varied and multiple contributions from sea trout to society, social scientific knowledge must complement ecology. Economic valuation studies can clarify how the public, including participants and non-participants of sea trout fishing, benefit from and value sea trout. Comparative studies of governance across countries and levels can identify	7.1, 7.4, 7.7	3 years	D1. Describe the key ecological, social and economic management objectives for sea trout fisheries across the natural range, to identify the target audience requirements to identify knowledge gaps and ways to fill these.

	"best practice" and learning across jurisdictions.

Summary of the Work Plan

Over the period 2024-2026, we plan 6 meetings of the whole WG membership, delivered through a mix of online and hybrid platforms.

Meetings will address: a start-up meeting to refresh the work plan with roles and responsibilities (these were drafted at the end of the previous term); annual review and planning meetings at the end of years 1 and 2, producing interim e-evaluation reports; workshops in years 1, 2 and 3 focussing on specific tasks; and the last workshop also preparing the final report for submission to ICES.

Subgroups will work on the ToRs between these meetings with regular contact through email and/or webinars. Most of the work regarding deliverables for the different ToRs will be planned and performed in parallel, but sub-groups will decide on their own meeting schedules and working practices.

All four ToR will be launched at the onset of the working group and be delivered in parallel throughout the three-year term. However, given that ToR D requires expertise on socio-economics that is not within the existing membership but is available through other ICES working groups and other international networks, we plan to deliver this in part through collaborations.

In addition to the ToRs described above, the WG has identified key training activities that would benefit international knowledge and best practice exchange. These topics are age reading and cross-calibration between labs, genetic tools and their applications, and a workshop sharing experiences of habitat restoration across Europe. The WG will seek opportunities to organise and deliver these training goals throughout this term.

Furthermore, the delivery format of the second phase provided regular opportunities to discuss new science, and new and emerging threats and opportunities. The WG will continue to offer this knowledge exchange but, rather than making it a specific ToR, the WG will deliver this through a standing agenda item for reporting every year.

Supporting information

Priority	The inclusion of sea trout and other diadromous fish in EU policy areas including the CFP and Marine Strategy Framework Directive means that it is important to improve the methods currently available to managers to assess the status of stocks and investigate the effects of management actions. The final report and recommendations will guide both individual countries in making progress on sea trout assessment and management and will steer ICES on the best next steps for sea trout science, assessment and advice.
Resource requirements	The research programmes which provide the main inputs to this group are already underway, and resources are already committed. The additional resource from ICES required to undertake additional activities in the framework of this group is only Secretarial support (see below).
Participants	The Group is normally attended by some 20-30 members and guests.
Secretariat facilities	Standard support to EG.
Financial	No financial implications.
Linkages to ACOM and groups under ACOM	Links to ACOM, FRSG, WGBAST who provide advice on Baltic sea trout, and WGDIAD regarding diadromous fish stocks, life histories, threats and sustainable use of the resource.
Linkages to other committees groups	The activities of this group will take forward the developmental work of WGTRUTTA, testing the imlementation of assessment methods, and addressing key knowledge gaps. Links will be fostered with the The Working Group on Cumulative Effects Assessments in Management (WGCEAM). This work will be losely associated with the

	ICES Ecosystem Observation Steering Group (EOSG) and by incorporating ToR D we will also link with the ICES Human Activities, Pressures and Impacts Steering Group (HAPISG) and any future work of the IEASG-WGSOCIAL.Working Group on Social Indicators.
Linkages to other organizations	Links to the EU Commission and the Data Collection Framework / EU_Multi-annual Plan (MAP), and to the associated InterSessional Sub-Group (ISSG) on Diadromous Species. Links to the EU-funded research projects of BBC-BlueBioClimate (Interreg: Sweden, Denmark, Norway).

WGWIDE– Working Group on Widely Distributed Stocks

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG24 The **Working Group on Widely Distributed Stocks** (WGWIDE), chaired by Erling Kåre Stenevik, Norway, will meet 27 August to 2 September 2025 in ICES HQ in Copenhagen to:

a) Address generic ToRs for Regional and Species Working Groups.

The assessments will be carried out based on the stock annex. The assessments must be available for audit on the first day of the meeting.

Material and data relevant to the meeting must be available to the group no later than 14 days prior to the starting date.

WGWIDE will report by 10 September 2025 for the attention of ACOM.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group.

WKTSAT– Workshop on TAF Stock Assessment Templates

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG25 The **Workshop on TAF Templates for Stock Assessments** (WKTSAT), chaired by Iago Mosquiera, The Netherlands and Colin Millar, Denmark, will be established and will meet in ICES Headquarters, Denmark, 13–15 Jan 2025 to:

a. Review templates for the main stock assessment methods used in ICES, with initial focus on: SAM, SS3 and RFB-rule;

b. Provide comments on the recently developed templates for WKRebuild2, WKNEWREF and WKMFOA.

c. Develop a general approach for developing a TAF stock assessment template for use by ICES experts.

d. Provide as complete and tested as possible templates for stock assessment approaches considered in a).

WKTSAT will report by March for the attention of the ACOM Committee.

Supporting information

Priority	In order to provide robust and timely scientific advice for fisheries, it is necessary to have well written and tested code, with consistent implementation of methods, that are easy for the stock assessor to use. The main output of this workshop is the development of code templates that wi address these issues, and serve as the basis for future ICES stock assessments.

Scientific justification	Term of Reference a) Current examples of TAF stock assessments exist but require more work to used as a general code template. A review of these examples will give an overview of what is available to use, and provide a base to build upon. Term of Reference b) Several recent ICES workshops have operated by providing pre-written cod for attending experts to use as the basis for answering the WGs ToRs. As ful working examples, these templates are useful as real world examples of hov complex an analysis can get. A review of the approaches taken will be usefu when developing templates in Term of Reference d). Term of Reference c) Using the reviews in Terms of Reference a) and b), devise a general approac for writing TAF stock assessment templates, as well as advice on the structu file name conventions, and outputs expected from a general stock assessme template. It is essential that these templates are well-written examples following the TAF structure, in order to serve both as the basis for current stock assessments and as learning materials for those learning TAF. Term of Reference d) Apply the general approach to create templates for SAM, SS3 and RFB-rule stock assessments, and test them on the TAF server.
Resource requirements	ICES secretariate support, meeting facilities at ICES HQ, Copenhagen.
Participants	The Group requires attendance by stock assessment experts with expertise i R coding, and experience with TAF as much as possible.
Secretariat facilities	Secretarial support, web conference and meeting room.
Financial	There are no financial implications.
Linkages to advisory committees	ACOM.
Linkages to other committees or groups	FRSG, DIG.
Linkages to other organizations	None.

WKTCP– Workshop on TAF Code Publishing

Approved in Resolutions meeting on 6 November 2024

2024/AT/FRSG26 The **Workshop on Transparent Assessment Framework Code Publishing** (WKTCP), chaired by Iago Mosquiera, The Netherlands and Colin Millar, Denmark, will be established and will meet in ICES Headquarters, Denmark, 16–17 Jan 2025 to:

a. Develop ICES guidelines to provide reviews on code written for stock assessment for publication.

b. Review the current stock assessment audit process that integrates with the ICES advice and benchmark processes.

c. Provide a worked example of a review on a stock assessment produced using a template developed in WKTSAT.

d. Discuss issues related to code maintenance and ownership, for example, with reference to benchmark processes, and changes of stock assessor.

e. Recommend changes, to incorporate code review, to the current advisory process (Stock assessment working groups, advice drafting groups, benchmark groups).

WKTCP will report by March for the attention of the ACOM Committee.

Supporting information

Priority	In order to publish the code behind robust and timely scientific advice for fisheries, well-written and tested code, consistent implementation of metho and a process for reviewing it are necessary. The main output of this workshop is to provide a guideline on how to review TAF code for stock assessments, considering the current advice audit processes and the use of TAF stock assessment templates (WKSAT).
Scientific justification	Term of Reference a) Currently, stock assessments go through an audit process, but there are no guidelines for reviewing the underlying code. An approach for reviewing code will to be developed while taking into consideration the use of TAF st assessment templates. Term of Reference b) The current audit process does not directly incorporate TAF. A review of th current audit process will be undertaken and modified to take into account: the benchmark process; and the use of TAF stock assessment templates. Term of Reference c) Using one of the TAF stock assessment templates produced by WKSAT as a reference, test the code review process developed in Terms of Reference a), producing a worked example of an ICES TAF stock assessment code review Term of Reference d) An important part of the documentation of stock assessment code is to kno who is the code owner/maintainer. As code is passed from stock assessor to stock assessor, within and between institutes, and from benchmark to stock assessment EG, it is important to have clear documentation of code ownersl and maintenance responsibilities. Term of Reference e) In order to implement code reviews in the ICES advisory process, a change the current system will be required, recommendations of how this could be done will be valuable, and the most efficient solution may be the formation a new group, but it is not clear when and how this group would operate.
Resource requirements	ICES secretariate support, meeting facilities at ICES HQ, Copenhagen.
Participants	The Group requires attendance by stock assessment experts, some with expertise in R coding, others with knowledge of the ICES advisory process,, and benchmarks.
Secretariat facilities	Secretariate support, web conference and meeting room.
Financial	No financial implications.
Linkages to advisory committees	ACOM.
Linkages to other committees or groups	DIG, FRSG, WKFAQ.
Linkages to other organizations	None.

WGNEPH– Working Group for the assessment of Nephrops stocks

2024/AT/FRSG27 The **Working Group for the assessment of Nephrops stocks** (WGNEPH), chaired by Jennifer Doyle, Ireland and Guldborg Søvik, Norway, will be established and will meet on at ICES HQ, Copenhagen, Denmark and online, 28 April – 2 May 2025, as well as online, 16 – 23 September 2025:

a) Address generic ToRs for Regional and Species Working Groups;
b) Review results and recommendations from benchmark and other interim relevant workshops held in 2024 and early 2025;

c) Present fisheries dependent data and previous year state of stocks to ecoregion WGs in the spring.
d) Plan future benchmark preparatory work on *Nephrops* stocks.

The assessments will be carried out based on the stock annex. The assessments must be available for audit on the first day of the meeting in which the assessment is being reviewed.

Material and data relevant to the meeting must be available to the group on the dates specified in the 2025 ICES data call.

WGNEPH will report by 30 May 2025, for stocks where advice is provided in the spring advice release, and 6 October 2025, for the attention of the Advisory Committee.

Only experts appointed by national Delegates or appointed in consultation with the national Delegates of the expert's country can attend this Expert Group.

WKEMP4 – Workshop for the Technical evaluation of EU Member States' Eel regulation Progress Reports 2024/2025

Approved in the Resolutions forum on 30 October 2024

2024/AT/FRSG28 The **Workshop for the Technical evaluation of EU Member States' Eel regulation Progress Reports 2024/2025** (WKEMP4 1 and 2), chaired by Alain Biseau, France, and Alan Walker, UK, and with XXX as external reviewer, will be established and will meet virtually on 04-08 November 2024 (WKEMP4 1) and virtually on 10-14 February 2025 (WKEMP4 2) to:

a) Prepare the data for evaluation.
b) Evaluate the overall effectiveness of EMPs in terms of changes in achieving specific target indicators (i.e. escapement target, fishing effort/catches reduction target, eel trade target, restocking target, any other target(s) established by Member States), and reductions in mortalities caused by factors outside the fishery.
c) Evaluate the effectiveness and outcome of types of measures in terms of: i) the status of implementation of planned measures; ii) where available, quantification of their effects; and iii) the likelihood that these measures need to be increased or others deployed to achieve the targets set for EMPs.
d) Provide alternative methods of monitoring, analysis and reporting in which the attainment of implementation efforts is possible, in the event that quantification under the present system is not possible.

WKEMP4 2024/2025 will report by 07 March 2025 for the attention of the Advisory Committee.

Supporting information

Priority	The EU Regulation (EC 1100/2007) and associated Guidance obliges EU Member States to report on the progress of their Eel Management Plans (EMPs) on a triennual basis. DGMARE has requested an independent external review of the 2024 progress reports.
Scientific justificatic	The Regulation and associated EMPs are the core framework within the European Union for assessing (i) the state of eel production in Member States, (ii) factors affecting that state and (iii) levels of management action implemented to recover and protect the panmictic eel stock. Triennial reviews of progress in implementing EMPs is key in determining the contributions of these towards the shared goal of eel recovery, informing (advising) Policy makers whether these efforts are moving eel production in these Eel Management Units in the right direction (towards recovery), and identifying measures that are successful in some circumstances and so could be implemented elsewhere.

Moving beyond the focus within single EMPs, the aim of the Regulation is the recovery of the panmictic stock. The task of providing solid estimates of stock parameters by Eel Management Units (EMUs) that are comparable among regions and can be summed in terms of biomass and mortality, is important to develop an overview of the eel stock and exploitation status in Europe. At present, national reports and estimated biomass and mortality indicators should be analysed to ensure that the current indicators are valid and consistent as there could be considerable differences between national approaches. At present, there is no indicator to evaluate how well management measures are implemented.

ICES is requested to advise, on the basis of the 2024 Member States progress reports as required under the Eel Regulation and any other available information:

I. In regard of the escapement target and the measures to attain this target as part of the EMP, including the transboundary EMP (Articles 2, 6, 9(1) and 9(1)(a) of the Eel Regulation):

1) The extent to which the 40% escapement target has been reached for each Member State river basin covered by each management plan.

Where possible, ICES should quantify the realised escapement level.

2) Where quantification is not possible, ICES is requested to advise based on alternative methods deemed suitable by ICES, whether the eel escapement levels in paragraph 1 are thought to be:

a. Likely to be at or above the target (40% or above)

b. Below, but close to the target (likely to be in the range 30% to 40%)

c. Well below the target (likely to be of the order of 20%)

d. Very low (likely to be of the order of 10%)

e. Negligible (little prospect of escapement being much above zero).

3) For each type of measures implemented by Member States, ICES is requested to quantify their effect in the river basin(s), covered by each management plan where feasible or at other appropriate geographical scale.

4) Where quantification is not possible, ICES is requested to advise based on alternative methods, deemed suitable by ICES, whether the effect of each type of measure implemented (or proposed to be implemented) is:

a. An appropriate and effective measure, sufficiently deployed in order to achieve the target

b. An appropriate and effective measure, but insufficiently deployed in order to achieve the target

c. A measure not likely to achieve the target even if deployed as widely as practicable.

5) In the case 4b above, ICES is requested to advise on the necessary increase in the deployment of the measure(s) needed to achieve a high likelihood of the target being reached.

6) To summarise the information provided in the MS reports or other information on whether the time schedule put forward by the Member State in its EMP has been met for the attainment of the target level of escapement in the long-term (Article 2(9) of the eel Regulation).

II. In regard of the 50% fishing effort/catches reduction target established by a Member State outside the EMP (Articles 4(2)-(3) and Article 9(1)b) of the Eel Regulation):

1) The extent to which this target has been reached, and where possible to quantify the realised level.

2) Where quantification is not possible, ICES is requested to advise on the attainment of this target based on alternative methods, deemed suitable by ICES.

3) The effects of each type of measure in quantitative terms and where not possible based on alternative methods, deemed suitable by ICES.

III. In regard of the reduction of mortality caused by factors outside the fishery (Articles 2(10) and 9(1)(c) of the Eel Regulation):

	1) The level of the reduction effected, and where a Member State has put forward a specific target in the EMP – the extent to which this target has been reached, and where possible to quantify the realised level. 2) Where quantification is not possible, to advise on the attainment of the reduction effected based on alternative methods, deemed suitable by ICES. 3) The effects of each type of measure in quantitative terms and where not possible based on alternative methods, deemed suitable by ICES. **IV.** <u>In regard of eel less than 12cm/20cm in length used for different purposes</u> (Article 9(1)(d) of the Eel Regulation, in conjunction with Article 7(4)): 1) The amount of eels less than 12cm caught by Member State and the proportions of this utilised for different purposes (such as restocking, aquaculture, consumption, leisure sport/recreational fishing, research). 2) The amount of eels less than 12 cm bought/marketed by Member State and the proportions of this utilised for different purposes (such as restocking, aquaculture, consumption, leisure sport/recreational fishing, research). 3) The amount of eels less than 20 cm in length transferred for restocking for the purpose of increasing escapement levels of silver eels. **V.** <u>In regard of the 60% restocking target</u> applicable to Member States who allow glass eel fishing (Article 7(1) of the Eel Regulation, in conjunction with Article 2(8)): 1) The extent to which this target has been reached, and where possible to quantify the realised level. 2) Where quantification is not possible, ICES is requested to advise on the attainment of this target based on alternative methods, deemed suitable by ICES. 3) The effects of each type of measure in quantitative terms and where not possible, based on alternative methods, deemed suitable by ICES. **VI.** <u>In regard of any other target(s) established by Member States</u> by themselves in their EMP(s) (e.g. restocking target set by those Member States who do not have glass eel fisheries but carry out restocking activities of eels below 12cm or 20cm in length) to provide information on 1) The extent to which the specific target has been reached, and where possible to quantify the realised level. 2) Where quantification is not possible, ICES is requested to provide information on the attainment of this target based on alternative methods, deemed suitable by ICES. 3) The effects of each type of measure in quantitative terms and where not possible based on alternative methods, deemed suitable by ICES.
Resource requirements	This work will require access to the ICES SharePoint, and potential hosting of two meetings. This work will also require access to the WGEEL database and associated shiny visualization apps.
Participants	The participation should reflect the diverse scientific competence needed to fulfil the objectives of the workshop. The initial workshop will invite a core group of experts: an experienced chair or chairs to oversee the whole process and ensure objectivity and respect of the outcomes; the WGEEL chairs, the stock coordinator and the stock assessor to ensure good linkages to relevant national experts; and data experts from the WGEELThese experts would review data and methods and make new calculations where needed. The workshop will also open to other participants that wish to participate. If the workshop(s) are oversubscribed, ICES reserves the right, in consultation with the workshop chair to select the final workshop participants based on their expertise, and equitable makeup of the workshop. Preliminary data submissions and collation of those data will be discussed with data providers and stock assessors during WGEEL in September 2024. The final workshop of the core group of experts will complete the reporting.
Secretariat facilities	ICES data call, Secretariat support, and Advisory process and Secretariat support
Financial	Covered by DG MARE special requests to ICES

Linkages to advisor committees	To ACOM through the recurring assessment of the eel stock by WGEEL and throtugh the advisory process.
Linkages to other committees or groups	WGEEL, WGDIAD, SCICOM, ACOM, FRSG.
Linkages to other organizations	The work of this workshop is primarily to support EU DGMARE in evaluating the success of the national EMPs through the progress reports. This work also has links to the ICES Scientific Advice which is used by not only EU DG MARE, but also DG ENV, the CITES Secretariat, FAO EIFAAC and GFCM.

WKBDEEP – Benchmark workshop on selected deep-sea fisheries stocks

Approved in the Resolutions forum on 02 December 2024

2024/WK/FRSG29 A **Benchmark workshop on selected deep-sea fisheries stocks** (WKBDEEP), chaired by Bjarki Elvarsson from Iceland, and Carsten Hvingel from Denmark, and attended by invited external experts Laurent Beaulaton from France, and Alfonso Pérez from Spain; will be established and meet online on 09-13 December 2024 for the data workshop, and 03-07 February 2025, in Reykjavik, Iceland for the assessment methods workshop. WKBDEEP will:

a) As part of the data workshop:
   1. Consider the quality of data proposed for use in the assessment;
   2. Consider stock identity and migration issues;
   3. Make a proposal to the benchmark on the use and treatment of data for each assessment, including discards, surveys, life history, etc.;
   4. Invite stakeholders to contribute data in advance of the data evaluation workshop (including data from non-traditional sources) and to contribute to data preparation and evaluation of data quality.

b) In preparation for the assessment methods workshop:
   5. Produce working documents to be reviewed during the assessment methods workshop at least 14 days prior to the meeting.

c) As part of the assessment methods workshop, agree to and thoroughly document the most appropriate, data, methods, and assumptions for:
   6. Obtaining population abundance and exploitation level estimates (conducting the stock assessment);
   7. Estimating fisheries and biomass reference points that are in line with ICES guidelines (see latest Technical guidelines on reference points);
      i. Note: If additional time is needed to conduct the work and agree to reference points, an additional reference point workshop could be scheduled.
   8. Conducting the short-term forecast.

d) As part of the assessment methods workshop, a full suite of diagnostics (regarding e.g. data, retrospective behaviour, model fit, predictive power etc.) should be examined to evaluate the appropriateness of any model developed and proposed for use in generating advice;

e) If no analytical assessment method can be agreed upon, then an alternative method (the former method or following the ICES data-limited stock approach as outlined in WKLIFE XI) should be put forward by the benchmark;

f) Update the Stock Annex; and

g) With support from the ICES Secretariat, document the stock assessments in the Transparent Assessment Framework (TAF); and

h) Develop recommendations for future improvements in the assessment methodology and data collection.

WKBDEEP will report by 31 March 2025 for the attention of ACOM.

Recurrent advice subject to benchmark	
aru.27.5a14	Greater silver smelt (*Argentina silus*) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds); WGDEEP
bli.27.5a14	Blue ling (*Molva dypterygia*) in Subarea 14 and Division 5.a (East Greenland and Iceland grounds); WGDEEP
bsf.27.nea	Black scabbardfish (*Aphanopus carbo*) in subareas 1, 2, 4-8, 10, and 14, and divisions 3.a, 9.a, and 12.b (Northeast Atlantic and Arctic Ocean); WGDEEP

WKSKATE2 – Second Workshop on the use of surveys for stock assessment for Rays, Skates & Dogfish

Approved on resolutions forum on 13 December 2024

2024/WK/FRSG30 A Second Workshop on the use of surveys for stock assessment for Rays and Skates & Dogfish (WKSKATE2), chaired by Katinka Bleeker (Netherlands) and Graham Johnston (Ireland) will meet in Dublin, Ireland and online, from **1st–4th April 2025 (indicative dates for now, may change by +/- two weeks)** to:

a. Build upon the work and methodologies agreed for North Sea and Biscay & Iberian elasmobranch stocks at WKSkate (2020);

   i. by examining surveys used or potentially used for the assessment of Celtic Seas ray & skate or demersal dogfish stocks or for,

   ii. demersal dogfish stocks from other regions.

The addition of new surveys to the assessment process is to be particularly considered.

b. Assess the use of survey data to assess elasmobranch stocks, in particular skate stocks assessed in ICES category 3 and address inter-alia the specific issues;

   i. Methods (including delta-gam and/or VAST models) for combining different surveys which convey information for the same stock when survey coverage is overlapping or is not covering parts of the stock area;

   ii. Methods for combining different surveys when the gears used are different (e.g. bottom trawl and beam trawl) and have different selectivity;

   iii. Methods to account for uncertainty in survey data and derive confidence intervals of annual indices;

   iv. Comparison of methods including the use of design-based versus model-based approaches;

as appropriate.

c. Evaluate which survey data, in addition to number and/or biomass caught, can be used for stock assessment and advice purposes, particularly length data. These data are then to be used in the appropriate assessments by WGEF.

WKSKATE2 will report by 23 May 2025 for the attention of ACOM and FRSG.

WKBSS3 – Benchmark workshop on application of Stock Synthesis (SS3) on selected stocks

2024/WK/FRSG31 A **Benchmark workshop on application of Stock Synthesis (SS3) on selected stocks** (WKBSS3), chaired by Max Cardinale, and Henning Winker, and attended by invited external experts Tanja Meithe and (tbc); will be established and meet 2-5 December, at ICES, Copenhagen, for the data workshop, and 27 – 31 January, at ICES, Copenhagen, for the assessment methods workshop. An online workshop to prepare the data call for Pollack (*Pollachius pollachius*) in subareas 6-7 (Celtic Seas and the English Channel) will be held during September 2024. WKBSS3 will:

a) As part of the data workshop:

   i. Consider the quality of data proposed for use in the assessment;

   ii. Consider stock identity and migration issues;

   iii. Make a proposal to the benchmark on the use and treatment of data for each assessment, including discards, surveys, life history, etc.;

   iv. Invite stakeholders to contribute data in advance of the data evaluation workshop (including data from non-traditional sources) and to contribute to data preparation and evaluation of data quality.

b) In preparation for the assessment methods workshop:

   i. Produce working documents to be reviewed during the assessment methods workshop at least 14 days prior to the meeting.

c) As part of the assessment methods workshop, agree to and thoroughly document the most appropriate, data, methods, and assumptions for:

   i. Obtaining population abundance and exploitation level estimates (conducting the stock assessment);

   ii. Estimating fisheries and biomass reference points that are in line with ICES guidelines (see latest Technical guidelines on reference points);

      1. Note: If additional time is needed to conduct the work and agree to reference points, an additional reference point workshop could be scheduled.

   iii. Conducting the short-term forecast.

d) As part of the assessment methods workshop, a full suite of diagnostics (regarding e.g. data, retrospective behaviour, model fit, predictive power etc.) should be examined to evaluate the appropriateness of any model developed and proposed for use in generating advice;

e) If no analytical assessment method can be agreed upon, then an alternative method (the former method or following the ICES data-limited stock approach as outlined in WKLIFE XI) should be put forward by the benchmark;

f) Update the Stock Annex; and

g) With support from the ICES Secretariat, document the stock assessments in the Transparent Assessment Framework (TAF); and

h) Develop recommendations for future improvements in the assessment methodology and data collection.

WKBSS3 will report by 28 February for the attention of ACOM.

Recurrent advice subject to benchmark	
ank.27.8c9a	Black-bellied anglerfish (*Lophius budegassa*) in divisions 8.c and 9.a (Cantabrian Sea, Atlantic Iberian waters)
mon.27.8c9a	White anglerfish (*Lophius piscatorius*) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)
pol.27.67	Pollack (*Pollachius pollachius*) in subareas 6-7 (Celtic Seas and the English Channel)
sbr.27.9	Blackspot seabream (*Pagellus bogaraveo*) in Subarea 9 (Atlantic Iberian waters)

SIMWG – Stock Identification Methods Working Group

2022/FT/HAPISG07 The **Stock Identification Methods Working Group** (SIMWG), chaired by Christoph Stransky, Germany, will work on ToRs and generate deliverables as listed in the Table below.

	Meeting dates	Venue	Reporting details	Comments (change in Chair, etc.)
Year 2023	By correspondence		Interim report by 15 August	
Year 2024	17–20 June	Online meeting	Interim report by 15 August	
Year 2025	tbc	Faro, Portugal	Final report by DATE to ACOM & SCICOM	

ToR descriptors

ToR	Description	Background	Science Plan Codes	Duration	Expected Deliverables
a	Review recent advances in stock identification methods.	a) Tracks best practices in stock ID b) Promotes new technologies relevant to all ICES species	1.4, 1.8, 5.2	3 years (and continued)	EG report, revised stock ID book chapters
b	Provide technical reviews and expert opinions on matters of stock identification, as requested by specific Working Groups and ACOM.	Ad hoc advice requests to be addressed at short notice	1.4, 1.8, 5.2	3 years (and continued)	EG report, contribution to ASC
c	Review and report on advances in mixed stock analysis, and assess their potential role in improving precision of stock assessment.		1.4, 1.8, 5.2, 5.4	3 years (and continued)	EG report

d	Review of the suggested splitting of the West Greenland inshore stock (cod) into two separate stock units, based on available biological (tagging), catch trends and survey trends.	Advisory requirement	1.4, 1.8, 5.2	1 year	Bief review report provided to NWWG and ACOM (clear response required) Chapter in EG report

Summary of the Work Plan

Year 1	Address terms of reference through work by correspondence in 2023
Year 2	Organise a physical meeting for SIMWG for summer 2024
Year 3	Address terms of reference through work by correspondence in 2025

Supporting information

Priority	Understanding stock structure is a fundamental requirement before any assessment or modelling on a stock level can be contemplated. SIMWG liaises with ICES expert groups and working groups on stock identification issues and continues to review new methods as they develop.
Resource requirements	SharePoint website and clear feedback from expert groups.
Participants	The Group is normally attended by some 15–20 members and guests.
Secretariat facilities	Standard EG support.
Financial	None
Linkages to ACOM and groups under ACOM	ACOM
Linkages to other committees or groups	SIMWG has recently worked closely with a range of ICES working groups including HAWG, WGBIE and WGHANSA; benchmark workshops including WKELASMO, workshops on cod stock structure (WKNSCodID, WK6aCodID). In previous years, SIWMG connected with many more ICES groups to fulfill requests.
Linkages to other organizations	There are no obvious direct linkages, beyond the SIMWG members' affiliation and commitment to their own employers. Depending on the request, SIMWG's scope might expand beyond the ICES area to address straddling stocks e.g. in the NAFO, NEAFC, CECAF and other RFMO areas.

WKCODSCOPE - Workshop on Scoping Data collection for Northern Shelf cod sub-stocks

A Workshop on Scoping Data collection for Northern Shelf cod sub-stocks (WKCODSCOPE), chaired by Nicola Walker (UK) and Liz Clarke (UK) will work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	VENUE	REPORTING DETAILS
Year 2025	18-21 March	Copenhagen, Denmark & online	Interim report by 25 April 2025 to FRSG

ToR descriptors[2]

TOR	DESCRIPTION	BACKGROUND	SCIENCE PLAN CODES	YEAR	EXPECTED DELIVERABLES
	This should capture the objectives of the ToR	Provide very brief justification, e.g. advisory need, links to Science Plan and other WGs	Use codes *(max 3 per ToR)*		Specify what is to be provided, when and to whom
a	Summarize the sub-stock definition for the Northern Shelf cod complex and review the progress of the project GenDC	ToR [a] will summarize discussions captured in previous cod stock ID workshops. GenDC, that aims to improve stock assessment and sustainable management through integrated genetic data collection, have created a sampling protocol and format for the underlying data (based on DATRAS) that has been distributed to the surveys in Q1 for immediate use. Results from current sampling have not been analyzed yet. WKCODSCOPE will collect feedback on the sampling strategy with a view to improve the collection of genetic data for the Northern Shelf cod stock complex and prepare a summary of the data collected in Q1 2025.	Codes 3.3, 3.4, 5.2	2025	Report to be shared with WGAGFA, SIMWG, WGNSSK, EOSG among others
b	Outline which (additional) genetic data could be used to further understanding of sub-stock mixing throughout the year to facilitate the provision of advice which can guide area-specific management	ToR [b] will outline which additional genetic data could be used to further understanding of sub-stock mixing throughout the year and the spatio-temporal dynamics.. This will con-sider the current stock assessment model assumptions and identify future data needs to facilitate provision of advice that can guide area-specific management	Codes 5.2, 5.3,	2025	Report to be shared with WGAGFA, SIMWG, WGNSSK, EOSG among others

[2] Avoid generic terms such as "Discuss" or "Consider". Aim at drafting specific and clear ToR, the delivery of which can be assessed

c	Draft different sampling strategies according to a partial or complete separation of northwestern and southern components of the Northern Shelf cod complex.	ToR [c] will develop sampling strategies based on 2 scenarios of genetic separation within the Northern Shelf cod complex. The baseline analysis results from GenDC will provide insights into the feasibility of separating the northwestern and southern components, thereby guiding the sampling strategy. As these results will only be available by Q4 2025, WKCODSCOPE will outline the necessary sampling requirements (e.g., time, area coverage of the 2 possible scenarios (i.e. partial or complete separation of sub-stocks)	Codes 3.3, 3.4	2025	Report to be shared with WGAGFA, SIMWG, WGNSSK, EOSG among others
d	Identify what other types of data could be potentially collected to understand the sub-stock spatial dynamics throughout the year.	ToR [d] will discuss alternative stock discrimination techniques (otolith shape and microchemistry, tagging, drift-based, morphological or phenotypical data) that could be used to quantify the stock-mixing throughout the year and broadly discuss the potential to use those to improve data input to the stock assessment.	Codes 3.3, 5.2	2025	Report to be shared with WGAGFA, SIMWG, WGNSSK, EOSG among others

Supporting information

Priority	High, in response to a joint request from EU, Norway and UK.
Resource requirements	Negligible beyond standard Secretariat support
Linkages to ICES committees or groups	There is a very close working relationship with all the groups under FRSG. It is also very relevant to WGNSSK, IBTS, BITS, ISSG, WGBFAS, WGAGFA, SIMWG
Linkages to other organizations	EC, OSPAR, HELCOM, NEAFC, FAO.

WKEELDATA6 – The Sixth Workshop on Designing an Eel Data Call

2024/WK/FRSG34 A **Workshop on Designing an Eel Data Call** (WKEELDATA6), chaired by Jani Helminen (Finland) and Laurent Beaulaton (France), will meet, in a split meeting, from 31 March 2025 – 01 April 2025 and 02-06 June 2025, virtually, to design a data call to all ICES/EIFAAC/GFCM countries having natural production of European eel and prepare their integration in the eel database supporting WGEEL work. The data call 2025 will request data to support WGEEL work and data relevant to the proposed benchmark. To achieve this aim, the WK will:

a) Update templates that will be used to report data (usual data supporting WGEEL work) to the ICES and text for the 2025 Eel Data Call, following WGEEL recommendations;
b) Develop/Update the tools in the WGEEL shiny application and possibly in the database, required to automate the generation of data call sheets and to manage data integration;
c) Prepare data call to address data needs for the benchmark stock rolling issue;
d) Prepare for the development of data base referentials for DATSU/TAF framework together with ICES Data Centre;
e) Develop, with the ICES Data Centre, the roadmap to achieve the data call publication beginning of April and the data integration during the WGEEL meeting (part one):
- List the necessary tasks to finalise the data call preparation
- List and prioritise the developments needed in the shiny application.
-

WGEELDATA6 will report by the 27 June 2025 for the attention of FRSG, WGEEL, WGDIAD, ACOM, SCICOM, EIFAAC, GFCM. The WK will require post-meeting work of estimated 15 man-days to run beta tests to validate the developments, which will be distributed among WK members.

Supporting information

Priority	This topic is a high priority for ICES and the countries/institutions supporting the work of the WGEEL because the present data collection procedures of WGEEL are complex and require a large resource in staff time before and during the WGEEL meetings. The refinement of data provision will save time and money, and it will facilitate the future benchmarking of the stock assessment process to support the ICES Advice.
Scientific justification	The WGEEL annually collates data on recruitment, landings from commercial and recreational fisheries, restocking, aquaculture production, biological characteristics of eels, in every annual data call. Every three years, following the reporting obligations from the Regulation, it collates data on stock indicators (Biomass and Mortalities). The development of various tools (database, standardised templates, shiny application for data integration and analysis) have allowed to greatly improve consistency in the data collection and to facilitate their use in the stock assessment process. Since the data collection is continuously improved, the tools must be regularly adapted to these changes.
Resource requirements	The workshop will be run virtually. Videoconferencing system and SharePoint will be required.
Participants	WGEEL members in charge of the data collection and management. One or two persons in charge of answering to the data call. The presence of a GFCM representatives would be required to ensure the consistency between ICES and GFCM data calls.
Secretariat facilities	The standard support for arranging the meeting, providing access to SharePoint, videoconferencing system and for formatting the report.
Financial	No financial implications.
Linkages to advisory committees	Links to ACOM as the data collection and related procedures are crucial for the work of WGEEL, providing the scientific basis for the ICES advice on fishing opportunities published by ACOM.
Linkages to other committees or groups	The results will be of direct benefit to the WGEEL and wider to WGDIAD.
Linkages to other organizations	The results will be of direct interest to DG MARE of the European Commission, in relation to the obligations of the Eel Regulation (EC1100/2007) and the EU MAP, and to GFCM in relation to planned eel Data Collection Framework Reference.

WKBMACNSSH – Benchmark workshop on Mackerel and Norwegian spring-spawning herring

Approved on the resolutions forum on 9 December 2024

2024/WK/FRSG35 A **Benchmark workshop on Mackerel and Norwegian spring-spawning herring** (WKBMACNSSH), chaired by Katja Enberg (Norway), and attended by invited external experts Jon Deroba (US); Allan Hicks and Daniel Howell (Norway); will be established and meet 9-13 December 2024 at ICES HQ, Copenhagen, Denmark, and online for the data workshop, and 24-28 March 2025, ICES HQ, Copenhagen, Denmark for the assessment methods workshop. WKBMACNSSH will:

i) As part of the data workshop:
   9. Consider the quality of data proposed for use in the assessment;
   10. Consider stock identity and migration issues;
   11. Make a proposal to the benchmark on the use and treatment of data for each assessment, including discards, surveys, life history, etc.;

12. Invite stakeholders to contribute data in advance of the data evaluation workshop (including data from non-traditional sources) and to contribute to data preparation and evaluation of data quality.

j) In preparation for the assessment methods workshop:

13. Produce working documents to be reviewed during the assessment methods workshop at least 14 days prior to the meeting.

k) As part of the assessment methods workshop, agree to and thoroughly document the most appropriate, data, methods, and assumptions for:

14. Obtaining population abundance and exploitation level estimates (conducting the stock assessment);

15. Estimating fisheries and biomass reference points that are in line with ICES guidelines (see latest Technical guidelines on reference points);

    i. Note: If additional time is needed to conduct the work and agree to reference points, an additional reference point workshop could be scheduled.

16. Conducting the short-term forecast.

l) As part of the assessment methods workshop, a full suite of diagnostics (regarding e.g. data, retrospective behaviour, model fit, predictive power etc.) should be examined to evaluate the appropriateness of any model developed and proposed for use in generating advice;

m) If no analytical assessment method can be agreed upon, then an alternative method (the former method or following the ICES data-limited stock approach as outlined in WKLIFE XI) should be put forward by the benchmark;

n) Update the Stock Annex; and

o) With support from the ICES Secretariat, document the stock assessments in the Transparent Assessment Framework (TAF); and

p) Develop recommendations for future improvements in the assessment methodology and data collection.

WKBMACNSSH will report by **18 April 2025** for the attention of ACOM.

Recurrent advice subject to benchmark	
her.27.1-24a514a	Herring (*Clupea harengus*) in subareas 1, 2, 5 and divisions 4.a and 14.a, Norwegian spring-spawning herring (the Northeast Atlantic and Arctic Ocean); WGWIDE
mac.27.nea	Mackerel (*Scomber scombrus*) in subareas 1-8 and 14 and division 9.a (the Northeast Atlantic and adjacent waters); WGWIDE

WKLIFE XIV – The Workshop on the Development of Quantitative Assessment Methodologies based on Life-history traits, exploitation characteristics, and other relevant parameters for data-limited stocks (WKLIFE XIV)

Approved on the resolutions forum on 14 February 2025

2024/WK/FRSG36 A **Workshop on the Development of Quantitative Assessment Methodologies based on Life-history traits, exploitation characteristics, and other relevant parameters for data-limited stocks (WKLIFE XIV),** chaired by Tobias Mildenberger (Denmark) and Simon Fischer (UK) will meet online on 18 August and in Horta, Faial Island, Azores, Portugal, 1–5 September 2025. The workshop should address the following Terms of Reference:

1. Further evaluate and develop quantitative assessment methodologies for data-limited stocks in stock category 2-6, with specific emphasis on stock categories 4, 5, and 6, stock status indicators, and length information.
2. Develop data-limited stock assessment tools, harvest control rules, and simulation approaches for specific life-history strategies, specifically shellfish and *Nephrops*, deep-sea species and pelagics, and for species with different roles in the ecosystem.
3. Explore methods to estimate and improve management reference points for data-limited stocks and to provide stock status for these.
4. Explore the incorporation of ecosystem considerations in current data-limited methods and/or their testing (in MSE frameworks).
5. Further explore and develop assessment and advice methods with focus on data- and/or resource-limited fisheries together with exploring approaches of moving towards an ecosystem perspective, from both within and outside the ICES community.
6. Outline the framework and best practices for an open-access GitHub repository on data-limited methods to increase the accessibility and transparency of methods to provide guidance on the use of methods.

WKLIFE XIV will report to ACOM no later than **19 October** 2025.

Supporting Information

Priority:	High. ICES provides advice on more than 260 stocks on an annual basis and more than 60% of these stocks are in categories 2-6. The development and testing of operational advice rules for stocks in categories 4, 5 and 6 is urgently needed, both within the ICES area and throughout the world's oceans. WKLIFE is the premier venue for method development and discussion of stock assessments and advice approach for stocks in categories 2-6.
Scientific justification and relation to action plan:	ICES is working to provide catch advice for all stocks that is in line with the Precautionary approach. The methods developed and tested by WKLIFE aim to maintain risk equivalence among all ICES stock categories and are key to ICES advancements in this area. As a workshop, WKLIFE routinely attracts and benefits from participation of experts from within the ICES expert community and beyond—participation from the global community of experts in WKLIFE has enabled ICES to play a unique position to advance data-limited methodologies worldwide using best practices. The inclusion of ecosystem considerations could for example include evaluating the performance of current methods under time-varying natural mortality or recruitment failures/regimes as well as the suitability of ecosystem indicators for data-limited stocks.
Resource requirements:	-
Participants:	Stock assessment experts, modellers, and individuals working with data-limited stocks, with a focus on simulation-testing methods.
Secretariat facilities:	SharePoint site and report formatting
Financial:	-
Linkages to advisory committees	WKLIFE develops methods that are considered by ACOM and used to develop advice rules for stocks in categories 2-6.
Linkages to other committees or groups	There is a very close working relationship with all FRSG groups
Linkages to other organizations	The work of this group is closely aligned with data-limited methods and tool development at other national and international institutions and RFMOs, such as the UN FAO. There is a direct link of WKLIFE experts to the FAO DSF project (2022-2027) on deep-sea stocks in areas beyond national jurisdiction including NEAFC, NAFO, NPFC, SPRFMO, SEAFO, SIOFA, GFCM, CAMLAR.

WKBHERSPR – Benchmark workshop on Herring and Sprat stocks

Approved on the resolutions forum on 04 April 2025

2025/WK/FRSG37 A **Benchmark workshop on Herring and Sprat stocks (**WKBHERSPR**),** chaired by Daniel Howell, Norway, and Benoit Berges, Netherlands, and attended by reviewers Afra Egan, Ireland, and TBD, will be established and meet online on 2-4 September 2025 for a data evaluation workshop, and on 1-5 December 2025 at ICES Headquarters, Copenhagen, for an assessment methods workshop. WKBHERSPR will:

a) As part of the data workshop:
   1. Consider the quality of data proposed for use in the assessment;
   2. Consider stock identity and migration issues, if appropriate;
   3. Make a proposal to the benchmark on the use and treatment of data for each assessment, including discards, surveys, life history, etc.
      i. Note: stakeholders are also invited to contribute data in advance of the data evaluation workshop (including data from non-traditional sources) and to contribute to data preparation and evaluation of data quality.

b) In preparation for the assessment methods workshop:
   1. Produce working documents to be reviewed during the assessment methods workshop at least 14 days prior to the meeting.

c) As part of the assessment methods workshop, agree to and thoroughly document the most appropriate, data, methods, and assumptions for:
   1. Obtaining population abundance and exploitation level estimates (conducting the stock assessment);
   2. Estimating fisheries and biomass reference points that are in line with ICES guidelines (see latest technical guidelines on reference points);
      i. Note: If additional time is needed to conduct the work and agree to reference points, an additional reference point workshop could be scheduled.
   3. Conducting the short-term forecast.

d) As part of the assessment methods workshop, a full suite of diagnostics (regarding e.g. data, retrospective behaviour, model fit, predictive power etc.) should be examined to evaluate the appropriateness of any model developed and proposed for use in generating advice.

e) If no analytical assessment method can be agreed upon, then an alternative method (the former method, or following the ICES data-limited stock approach see WKLIFE X[3], including considerations of stock-specific tuning with a management strategy evaluation, if possible) should be put forward by the benchmark;

f) Update the stock annex;

g) With support from the ICES Secretariat, document the stock assessments in the Transparent Assessment Framework (TAF)[4]; and

h) Develop recommendations for future improvements in the assessment methodology and data collection.

[3] ICES. 2020. Tenth Workshop on the Development of Quantitative Assessment Methodologies based on LIFE-history traits, exploitation characteristics, and other relevant parameters for data-limited stocks (WKLIFE XI). ICES Scientific Reports. 2:98. 72 pp. http://doi.org/10.17895/ices.pub.5985

[4] https://taf.ices.dk/app/procedure

WKHERSPR will report by 09 January 2026 for the attention of ACOM.

Recurrent advice subject to benchmark				
Stock name	**Stock code**	**Current assessment**	**Aims at the benchmark**	**Link to latest ICES advice**
Herring (Clupea harengus) in subdivisions 20–24; spring spawners (Skagerrak, Kattegat, western Baltic)	Her.27.20-24	SAM		HERE
Sprat (Sprattus sprattus) in Division 3.a and Subarea 4 (Skagerrak, Kattegat, North Sea)	Spr.27.3a4	SMS		HERE

WKICEGAD – Workshop on the assessment and management plan evaluation for Icelandic haddock and saithe.

[2024/WK/FRSG38]. The Workshop on the assessment and management plan evaluation for Icelandic haddock and saithe (WKICEGAD) will meet online, during 10 February 2025 for a data evaluation workshop (DEWK), and then at MRFI, Hafnarfjörður, Iceland on 24 – 28 February 2025. The workshop will be chaired by Bjarte Bogstad (Norway) and attended by two invited external experts, Harriet Cole (UK) and Yves Reecht (Norway), and will evaluate the assessment and management plan evaluations for haddock (*Melanogrammus aeglefinus*) in Division 5.a (had.27.5a), and for saithe (*Pollachius virens*) in Division 5a (pok.27.5a). The work will be to:

1) Evaluate the Icelandic management plans for the Icelandic haddock and saithe stocks against precautionary and MSY criteria.
2) This will include a data evaluation workshop (DEWK) which will:
    a. Consider the quality of data proposed for use in the assessment;
    b. Consider stock identity and migration issues;
    c. Make a proposal on the use and treatment of data for each assessment, including discards, surveys, life history, etc;
    d. Stakeholders are invited to contribute data in advance of the data evaluation workshop (including data from non-traditional sources) and to contribute to data preparation and evaluation of data quality.

2) In preparation for the assessment methods workshop:
    a) Following the DEWK, produce working documents to be reviewed during the WKICEGAD meeting at least 14 days prior to the meeting.
3) As part of the assessment methods workshop, agree to and thoroughly document the most appropriate, data, methods and assumptions for:

a) Obtaining population abundance and exploitation level estimates (conducting the stock assessment);

b) Estimating fisheries and biomass reference points that are in line with ICES guidelines (see Technical document on reference points);

c) Conducting the short-term forecast.

4) As part of the assessment methods workshop, a full suite of diagnostics (e.g. data, retrospective behaviour, model fit, predictive power etc.) should be examined as a whole to evaluate the appropriateness of any model developed and proposed for use in generating advice.

5) If no analytical assessment method can be agreed, then an alternative method (the former method, or following the ICES data-limited stock approach

6) Implement the final assessment methodology and associated data handling procedures in the ICES Transparent Assessment Framework (TAF), including all steps from raw data to assessment outputs, following ICES TAF standards and ensuring reproducibility of the annual assessment process.

7) Update the stock annexes as appropriate

Stock	**Stock leader**
had.27.5a	Pamela Woods <pamela.woods@hafogvatn.is>
pok.27.5a	Sandra Rybicki <sandra.rybicki@hafogvatn.is>

WKICEGAD will report by 21 March 2025 for the attention of the Advisory Committee.