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Our Ref: L.27/ACB/DM/eg

11 July 2018

Subject: Joint ICES, EIFAAC and GFCM Data Call: Data submission for advice for European eel under WGEEL – Part 2: 2018

Dear Reader,

Please find enclosed a document describing the rationale, scope and technical details of the data call for the 2018 work of the Joint EIFAAC/ICES/GFCM Working Group on Eel (WGEEL). Also, enclosed are nine annexes with additional information.

The data will be used by WGEEL to conduct an assessment of the eel stock and factors affecting the stock.

For countries which are also EU members this data call is under the Council Regulation (EC) No 2017/1004. The deadline for this data call is 15 August 2018.

For questions about the content of the data call, please contact: advice@ices.dk. For questions on data submission, please contact: accessions@ices.dk.

The data call will also available from the ICES website at: http://ices.dk/marine-data/tools/Pages/Data-calls.aspx.

Sincerely,

Anne Christine Brusendorff

Aure Ashi Broudoff

General Secretary

CC: Alan Walker (WGEEL chair), Cédric Briand (WGEEL Stock Assessor); Nathalie Florin (DG-Mare), Patrick Daniel (DG-Mare), Venetia Kostopoulou (DG-Mare, DCF);



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Joint ICES, EIFAAC and GFCM Data Call: Data submission for advice for European eel under WGEEL - Part 2: 2018

1. Rationale

This data call is intended to formalize data reporting across all countries with natural production of European eel. Therefore, this is a joint call from ICES and EIFAAC, facilitated by ICES. An associated data call from GFCM will be distributed to its membership through a dedicated Stock Assessment Form (SAF).

Much of the historic eel data are available to WGEEL already, but often in multiple versions, some with subtle differences and with limited information from which to identify the most up-to-date version. Furthermore, the descriptions of methods used to collect and process the data are often held separately in some Country Reports, and without the contact details of data stewards. These associated 'metadata' should be held alongside the 'eel data'.

Recognizing that the collection and provision of all eel and metadata is a daunting task, the data call has been split over three years (2017, 2018, 2019), giving time to clarify the process for those providing the data and for the WGEL and ICES to organize the data in the most efficient manner. In 2017, the data call focused on data directly required to achieve the annual stock assessment in support of the ICES Advice published in 2017.

The data call 2018 includes the request for the data on silver eel stock indicators, biomass production and escapement and anthropogenic mortality rates, etc., as specified by the Eel Regulation 1100/2007 and EMPs.

The Workshop to develop Tools for EEL (WKTEEL) (July 2018) has further developed the data call tables and the WGEEL Database to automate data handling, checking and reporting.

The data call 2019 will, in addition, request data on silver eel indices. The template for this is under construction and will be tested during the WGEEL 2018 meeting.

Output

The data and metadata provided for the data call 2018 will be used as the basis for the annual stock assessment in support of the advice for the eel stock. Ultimately, the output from these data calls will be an electronic database for European Eel stock, held in a single repository and complying with data quality standards. This database will be used as a basis for timely and efficient drafting of stock status reports for ICES, the European Commission including fisheries and trade matters, and the provision of regional and whole stock advice across the natural range of the European eel.

There is currently no public portal to access the submitted detail data, however combined recruitment indices used in ICES advice will be available through ICES Stock Assessment Graphs.

Legal framework

The legal framework for the data call is as follows, though noting that these don't all apply to every eel producing country:

- Council Regulation (EC) No 2017/1004 concerning the establishment of a Union framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy.
- Council Regulation (EU) No 1380/2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and E(EC) No 639/2004 and Council Decision 2004/585/EC.
- REC.DIR-GFCM/40/2016/2 on the progressive implementation of data submission in line with the GFCM Data Collection Reference Framework (DCRF).
- Council Regulation (EC) No 1100/2007 of 18 September 2007 establishing measures for the recovery of the stock of European eel.



 This data call follows the principles of personal data protection, as referred to in paragraph (9) of the preamble in Council Regulation (EC) No 2017/1004.

2. Scope of the Data Call

This data call is addressed to those countries within the geographic range of the European eel, though a separate data call will be made to GFCM countries. These countries are distributed across different global and regional management organisations such as those represented in WGEEL (EIFAAC, ICES, GFCM).

Table 1. List of species.

COMMON NAME		CODE	SCIENTIFIC NAME
European eel	EEL		Anguilla anguilla

In this 2018 data call, we ask for submission of all available 'eel data', including historical data and previously submitted data for European eel on:

- Biomass Indicators (Silver eel escapement)
- Anthropogenic mortality (impacts: silver eel equivalent biomass, and lifetime mortality rates)
- Habitat Wetted Area
- In addition to the annual update on:
- Recruitment
- Landings (formerly Catch, see Section 6)
- Releases (formerly Stocking)
- Aquaculture production
- Alongside each of these eel data, we request the following 'metadata':
- Data Steward: name and email address of a person who can be contacted about the dataset.
- Method used: short description of the method used to collect the data.

These metadata are further described in the data input sheets of Annexes 1 to 9. Annex 5 requests additional information pertaining to the Stock Indicators (Annexes 6–9). Annex 5 should have a separate sheet filled out for each reported Eel Management Unit, or area assessed.

3. Deadlines

ICES requests the data to be delivered to provide enough time for additional quality assurance prior to the WGEEL meeting. Therefore, data should be submitted by e-mail to the WGEEL stock coordinator (to be appointed) by 15th August, 2018. This deadline is set according to the ICES standards. Missing the reporting deadline will compromise the indispensable data quality checking (on a stock basis) before the use of that data to update assessments.

4. Data Submission

The data should be submitted using the templates supplied in Annexes 1–9 to this data call. A detailed list of data formats, instructions and codes (e.g. treatment of nil values) to be used in the database can be found in Annexes 1–9. Note that once the database is developed, we would hope to make the data reporting process more efficient using an online system. This will come in future years.



5. Recruitment (Annex 1)

- Note that pre-filled files are available for those countries previously supplying recruitment data, so that those countries will only have to provide the latest update. WGEEL will circulate those files to the relevant data providers.
- Recruitment data are defined as the quantities of eel caught at specific (index) locations as they 'recruit' to the
 local vicinity. These captures can be either by fisheries or fishery-independent studies, which include handnets,
 fykenets or trapping ladders.
- The WGEEL uses these time-series data to calculate the Recruitment Indices, relative to the reference period of 1960–1979, and the results form the basis of the annual Single Stock Advice reported to the EU Commission. These recruitment indices are also used by the EU CITES Scientific Review Group in their annual review of the Non-Detriment Finding position.
- Data should be provided as annual total values.
- The units of data are either numbers or weight (kg) of eel, or indices.
- Those recruitment data series used in the Recruitment Indices are described in detail in the <u>ICES European eel Stock Annex</u>. However, the data call also seeks new data series not listed in the Stock Annex.
- The recruitment series are categorized as glass eel, young eel, and larger yellow eel recruiting to continental habitats. The glass eel recruitment series are either comprised only of glass eel (i.e. zero age cohort) or a mixture of glass and young yellow eel. The young or larger yellow eel may consist of multiple year classes of eel but they are all 'recruiting' to the stock past the survey point in the same year.

6. Landings (Annex 2)

- Landings are defined as the quantity of eel that are removed from the water basin or management unit. This includes both regular landings from the fisheries, and those eels later released for various reasons, that will also be recorded in the Releases Annex (3). This definition corresponds to "Retained catch" as defined in the FAO Handbook of Fishery Statistics.
- The WGEEL uses these data to report trends in landings in the ICES Single Stock Advice. This information is requested by the Administrative Agreement between ICES and the EU Commission.
- Data should be provided as annual total values, according to life stage (glass, yellow, silver) and fishing activity
 type (commercial or recreational).
- The units of data are kg.
- The Stock Annex notes that there is a great heterogeneity among time-series of landings (also catches) because
 of inconsistencies in reporting by, and between, countries, as well as incomplete reporting of non-commercial
 and recreational fisheries.

7. Releases (Annex 3)

- Releases data are defined as the quantity of eel that are released alive into waters of a basin or management
 unit. That is, they can include activities described as Restocking, Assisted Migration, Trap and Transport, or
 Catch and Release.
- The WGEEL uses these data to check against eel production estimates and anthropogenic mortality rates reported by countries.
- Data must be provided in annual totals both in weight (kg) and numbers, per eel management unit. If you do
 not have either one of the two values, calculate an estimate based on an average eel weight.
- The units of data are numbers <u>and</u> kg of eel when they are released, except where reporting Glass Eel Equivalents (GEE) that should be numbers only.



• Note that a potential consequence of releases could be that estimates of silver eel production for the recipient basin could be higher than those of historic production.

8. Aquaculture production (Annex 4)

- Aquaculture production data are defined as the quantity of eel produced on an annual basis from aquaculture facilities.
- The WGEEL uses these data in addressing its remit to report annually on the state of the stock, associated fisheries and other anthropogenic impacts.
- Data should be provided as annual total weights per country.
- The units of data are kg.
- Some aquaculture production data have previously been included in official landings statistics but this must be avoided.
- Some eels are grown in aquaculture for periods of time and then released alive to waters not necessarily those from where they were caught. This can be done for a variety of reasons. Such eels should be registered as stocked and not as aquaculture production.

9. Overview of Stock Indicators (Annex 5)

The WGEEL require this sheet describing the methods used for assessing the biomass and anthropogenic mortalities in each EMU. The sheet should also indicate any changes made to the data, or the assessments, over the time period and whether stocking has been taken into account in the derivation of the stock indicators. The overview also supports the initial quality review of the data supplied.

10. Biomass indicators (Annex 6)

- B₀ The amount of silver eel biomass that would have existed if no anthropogenic influences had impacted the stock;
- B_{current} The amount of silver eel biomass that currently escapes to the sea to spawn;
- B_{best} The amount of silver eel biomass that would have existed if no anthropogenic influences had impacted the current stock, included re-stocking practices, hence only natural mortality operating on stock.

11. Habitat Wetted Area (Annex 7)

- The Habitat_Wetted_Area is used for indicating the potential available area used as a habitat for the eels.
- It is used to provide data on the available areas of all possible habitat types, such as Freshwater (F), Marine open sea (MO), WFD Transitional (T), WFD Coastal (C) and an aggregate of all the above).
- This value is important for the calculation of the biomass indicators.
- The unit of area should be the hectare (ha).

12. Mortality as Silver Eel Equivalents Biomass (Annex 8)

Biomass all measured in kg.

- SEE_com Commercial fishery silver eel equivalents.
- SEE rec Recreational fishery silver eel equivalents.
- SEE hydro Silver eel equivalents relating to hydropower and water intakes, etc.



SEE_habitat
 Silver eel equivalents relating to anthropogenic influences on habitat (quantity/quality).

SEE_stocking
 Silver eel equivalents relating to stocking activity.

• SEE_other Silver eel equivalents from 'other' sources.

13. Mortality Rate Sigma (Annex 9)

- ΣF The fishing mortality rate, summed over the age-groups in the stock;
- ΣH The anthropogenic mortality rate outside the fishery, summed over the age groups in the stock; sum of ∑F, ∑Hydro, ∑Restock, ∑Habitat, ∑Other;
- ΣA The sum of anthropogenic mortalities, i.e. $\Sigma A = \Sigma F + \Sigma H$. It refers to mortalities summed over the age groups in the stock.

14. Contacts

The national response to the data call should be sent to:

Cedric Briand. WGEEL Stock Coordinator. Email: <u>Cedric.Briand@eptb-vilaine.fr</u>

For support concerning issues about the data call please contact:

• Cédric Briand. WGEEL Stock Assessor. Email: <u>Cedric.Briand@eptb-vilaine.fr</u>

For support concerning other data issues, please contact:

Alan Walker, chair of WGEEL. Email: <u>Alan.walker@cefas.co.uk</u>

For questions about the content of the data call, please contact: advice@ices.dk

For questions on data submission, please contact: accessions@ices.dk