

Annex 7: Data call: Data submission for ICES fisheries advisory work

Fisheries Data Call 2020

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Data call: Data submission for ICES fisheries advisory work

1 Scope of the Data call

ICES Member Countries are requested to provide the following for selected ICES fish, cephalopod, and shellfish stocks:

- landings, discards, Below Minimum Size catches (selected working groups), biological, and effort data from 2020, and other supporting information.

The list of stocks included in the data call are provided in DC_Annex_1.xlsx and Table 7.7.1. The data call spreadsheet is an indicative list based on previous catches. All countries that have catch or landings data on these stocks should submit data, **even if they are not listed** on the data call request spreadsheets.

2 Rationale

The requested data will be used by ICES expert groups involved in the development and provision of ICES advice and update stock assessments.

3 Legal framework

Generically, all the governments and intergovernmental commissions requesting and receiving advice from ICES have signed international agreements under UNCLOS 1995^{*} Fish Stocks agreement article 5 and 6 to incorporate fisheries impacts on other components of marine ecosystems and WSSD 2002 article 30 to implement an ecosystem approach in relation to oceans policy including fisheries. These agreements include an obligation to collect and share data on, inter alia, vessel position (UNCLOS FSA art 5) and to support assessment of the impacts of fisheries on non-target species and the environment (UNCLOS FSA art 6).

For EU Member States this data call is under the DCF Regulation ((EC) No 2017/1004 and Commission Decision 2016/1251/EU), and in particular, Article 17(3) of Regulation (EC) No 2017/1004 which states *"..requests made by end-users of scientific data in order to serve as a basis for advice to fisheries management, Member States shall ensure that relevant detailed and aggregated data are updated and made available to the relevant end-users of scientific data within the deadlines set in the request,.."*

For non-EU states with fisheries operating in the North Atlantic, there is a requirement to make fisheries data available to support fisheries management under OSPAR, HELCOM, and UNCLOS.

ICES is thus mandated to request all fisheries dependent and independent data including VMS and logbook information to be used in order to provide this advice. This mandate is supported by international agreements and the current EU data collection framework (DCF).

In addition, Article 15 of the NASCO Convention, with reference to obligations of Parties to provide to the Council the available catch statistics, other statistics, and any other available scientific information that the Council requires for the purposes of the Convention.

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.

^{*} United Nations (UN). 2011. Agreement related to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. Available at: <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N95/274/67/PDF/N9527467.pdf?OpenElement>

4 Deadlines

ICES requests that the data are delivered by a date specific to each Expert Group, to provide enough time for additional quality assurance prior to the meeting. Data submission deadlines for each of the Expert Groups are given in Table 4.1. **Missing the reporting deadline will compromise the indispensable data quality checking (on a stock basis), that takes place before the use of that data to update assessments.**

The deadline does not apply to the survey data. It is expected that survey data will be submitted to DATRAS (Database of Trawl Surveys) by the agreed timetable (see <http://www.ices.dk/data/data-portals/Pages/DATRAS-deadlines.aspx>) or to the ICES acoustic database, as early as possible prior to the Expert Group meeting.

Table 4.1. Data submission deadline for ICES expert groups and respective chair contact.

Working Group (WG)	Chair of the WG	Email Address	Data Submission Deadline
HAWG	Afra Egan & Cecilie Kvamme	afra.egan@marine.ie; cecilie.kvamme@hi.no	01.03.2021
WGNAS	Dennis Ensing	dennis.ensing@afbini.gov.uk	15.03.2021
WGDEEP	Ivone Figueiredo & Elvar Halldor Hallfredsson	ifigueiredo@ipma.pt elvar.hallfredsson@imr.no	22.03.2021
WGBFAS	Mikaela Bergenius	mikaela.bergenius@slu.se	16.03.2021
WGBIE	Cristina Silva & Ching Villanueva	csilva@ipma.pt Ching.Villanueva@ifremer.fr	05.04.2021
AFWG	Daniel Howell	daniel.howell@imr.no	24.03.2021
WGCEPH	Ana Moreno, Daniel Oesterwind & Graham Pierce	amoren@ipma.pt daniel.oesterwind@thuenen.de g.j.pierce@iim.csic.es	01.04.2021
WGNSSK	Raphael Girard & Tanja Miethe	raphael.girardin@ifremer.fr Tanja.Miethe@gov.scot	31.03.2021
NWWG	Teunis Jansen	tej@aqua.dtu.dk	01.04.2021
WGCSE	Mathieu Lundy & Sofie Nimmegeers	mathieu.lundy@afbini.gov.uk sofie.nimmegeers@ilvo.vlaanderen.be	14.04.2021
WGHANSA	Leire Ibaibarriaga	libaibarriaga@azti.es	01.05.2021 (and see section 7.8)
WGEF	Jurgen Batsleer & Pascal Lorange	Jurgen.Batsleer@wur.nl pascal.lorange@ifremer.fr	25.05.2021
WGWIDE	Andrew Campbell	andrew.campbell@marine.ie	04.08.2021
WGScallop	Lynda Blackadder	Lynda.Blackadder@gov.scot	16.08.2021
NIPAG	Ole Ritzau Eigaard & Katherine Sosebee	ore@aqua.dtu.dk Katherine.Sosebee@noaa.gov	18.08.2021
WGMIXFISH-Advice	Claire Moore	claire.moore@marine.ie	03.05.2021

5 Data to report

ICES Member Countries are requested to supply data as specified on the Expert Groups' data request spreadsheets (see attached annexes to this call) either to InterCatch, to ICES Secretariat via email (data.call@ices.dk), or to both. Data include:

- landings, discards, biological data, and effort data from 2020, and other supporting information;
- for stocks identified in DC_Annex_1.xlsx with 'Y' under column 'DLS proxy RP'; estimates of length compositions for landings and discards from the latest year (i.e. 2020). If length frequency data have not been reported before for a given stock, 3 years of data (2018, 2019, 2020) should be provided along with supporting information on life-history parameters (see DC_Annex_2_SupportingInformationLifeHistoryParameters.xlsx and Appendix IV).

The list of species and stocks for which data should be submitted is given in DC_Annex_1.xlsx and Table 7.7.1.

Data should be reported by the lowest subdivision possible. Aggregations should not be beyond the assessment area of individual stocks. If the format for data submission to data.call@ices.dk (see DC_Annex_1.xlsx) is not specified further through the provided templates, the format should be the same as was used in previous data calls and in previous years. If anything is unclear, please contact data.call@ices.dk.

If corrections for earlier years need to be made, please inform the Expert Group chair (see e-mail contact details in Table 4.1) and advice@ices.dk. A full and corrected set of data may need to be uploaded.

Due to the 2020 disruptions caused by the pandemic which affected national data collection programs, ICES would like to give the opportunity for data submitters to provide information/caveats on the data submitted i.e. reductions in sampling size, insufficient spatial coverage, surveys cancelled or shortened, or any other information that is thought to be relevant. This information will be passed directly to expert groups which will make use of this information when running assessments and drafting advice.

Please use this [link](#) to provide all the relevant information.

6 Data submission

6.1 Reporting to InterCatch

The InterCatch-formatted national data should be uploaded into InterCatch, which is available on this link: <https://InterCatch.ices.dk/Login.aspx>.

Please see the 'InterCatch Exchange Manuals' on the ICES website for information on the required exchange format, and the codes used, at: <http://ices.dk/data/data-portals/Pages/InterCatch.aspx> An overview of the data fields used in the InterCatch exchange format are detailed in DC_Annex_3_InterCatch Exchange format overview updated.docx. The codes for metiers/fleets and areas are listed in appendices I, II, and III.

For stocks where discard data have been submitted to InterCatch in previous years, they should also be submitted for 2020 (see DC_Annex_1.xlsx).

Area-disaggregated catch data should be submitted to InterCatch in a consistent manner between Data Calls. If area aggregations must be made, it should be clearly stated in the InfoStockCoordinator information text field (field number 23 in the import file to InterCatch).

6.1.1 Data conversion to InterCatch format

A description of the InterCatch Exchange format is found in the InterCatch User Manual[†]. An overview of the fields in the InterCatch commercial catch format is found in the InterCatch Format overview[‡], where valid codes are also listed.

To ease the process of converting the national data into the InterCatch format, Andrew Campbell from the Marine Institute (Ireland) has made the conversion tool "InterCatchFileMaker", which converts data manually entered in the 'Exchange format spreadsheet' into a file in the InterCatch format. **Be aware that the tool does not currently support the catch categories BMS Landings and Logbook Registered Discards** (see section 6.1.4.). The conversion tool "InterCatchFileMaker" can be downloaded from the ICES webpage under 'Format conversion tools' ([link](#)). The download includes a spreadsheet in which the catch and sampling data can be placed; the program then converts the data into the InterCatch format.

If the "InterCatchFilemaker" conversion program and the exchange format spreadsheet have been used to convert your data to InterCatch format, then the values in the data field "NumSamplesAge" in the InterCatch format file must be entered manually.

If in some areas and quarters there are only length samples available (if age samples are missing), then it is possible to use ALKs from neighboring areas or quarters to calculate CANUM and WECA for "Species Data" (SD) records, before importing data to InterCatch. In this case "-9" must be entered in the data fields of "NumSamplesAge" and "NumAgeMeas".

6.1.2 Age and length data in parallel in InterCatch

InterCatch can work with age and length data in parallel. Previously it was important that length data were imported last, though currently the order in which catches with sample data (age/length) are

[†]<http://ices.dk/data/Documents/Intercatch/InterCatch%20User%20Manual.pdf>

[‡]<http://dome.ices.dk/datsu/selRep.aspx?Dataset=76>

imported does not matter. In the current version it is important that, within a given stratum, a catch *with* samples is not imported before a catch *without* samples. So as an example; never import a catch with age samples followed by the same catch without samples, because this will erase the age samples already imported. This is a way that can be used to remove wrongly imported age or length data which do not belong to the strata. A simple procedure to follow would be to first import catches for all strata, together with the existing age samples. Then in a second import, include only the strata where there are catches with length samples.

6.1.3 Sample information on age and length data in InterCatch

When age or length data are imported in InterCatch, ICES requests that the following age and length sampling information fields are filled in for both landing and discard samples:

- Number samples of length, field: NumSamplesLngt
- Number length measured, field: NumLngtMeas
- Number samples of age, field: NumSamplesAge
- Number age measured, field: NumAgeMeas

Data submitters are encouraged to use the fields related to data quality within InterCatch (NumSamplesLngt, NumLngtMeas, NumSamplesAge, NumAgeMeas). This will help stock assessors make allocations in InterCatch, and identify changes in sampling levels from one year to another.

The units of the samples in the record types “NumSamplesLngt” and “NumSamplesAge” of the species data record refer to the number of primary sample units (vessel, trip, harbour day, etc.). The units should be given in the InterCatch species information field named “InfoFleet”.

If there are any questions regarding InterCatch submissions, please contact the working group chair (see Table 4.1) and ICES Secretariat at InterCatchsupport@ices.dk.

6.1.4 Catch categories in InterCatch

Landing, ‘L’

The ‘Landing’ catch category in InterCatch will cover the scientific estimates of landing.

Discard, ‘D’

The ‘Discard’ catch category in InterCatch will cover the discard fraction based on fishery observer estimations. This category is the part of the catch, which is thrown overboard into the sea.

This component should be in the CATON field, and in the OffLandings field a “-9” should be inserted (see Figure 6.2).

Data for this fraction should be reported even when discard values are low. Discard estimations for pelagic species based on demersal observer programs should also be reported. This is especially important for some small pelagic stocks.

BMS Landing, ‘B’

Relevant to stocks under landing obligations. The BMS landings consist of fish and crustaceans Below Minimum Size, as registered in the logbook or as estimated by fishery observers (see Figure 6.2).

If it is possible to separate BMS and discards fractions from e.g. at sea observer programme then the BMS estimate should be inserted into the CATON field. If it’s not possible to separate discard and BMS fractions then a zero “0” should be entered into the CATON field for BMS. Either way, the value of BMS as reported in the logbook should always be inserted in the OffLandings field (see Figure 6.2).

Logbook Registered Discard, ‘R’

This component corresponds to discards which are registered in the logbook.

ICES does not require this fraction to be provided as it is not used for the provision of ICES advice.

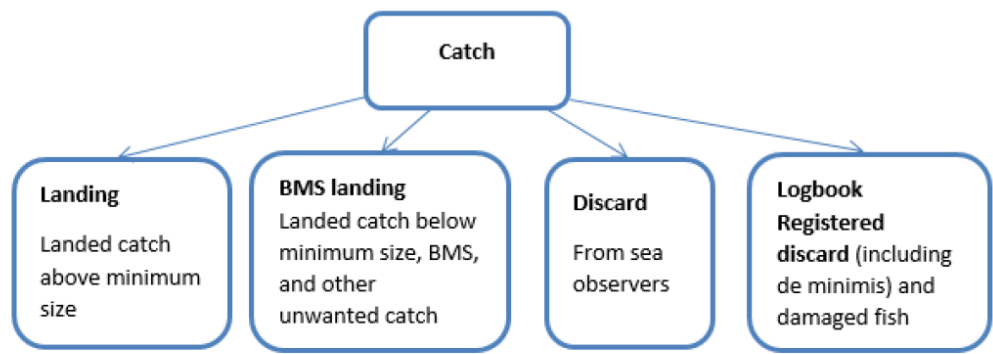


Figure 6.1. Description of the four current catch categories.

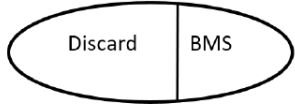
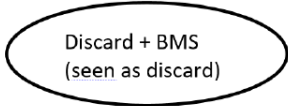
BMS landings should be submitted as specified in DC_Annex_1.xlsx for stocks to which landing obligations applies.

In InterCatch only CATON is used to derive the total catch used in stock assessment. The values for the different categories in the OffLandings fields (OfficialLanding) are only informative and will not be used in the catch estimate.

Use only the Reporting Category R (for all catch categories). In case of black landings (non-reported) please use Reporting Category N.

Reporting of discard and BMS in the SI record fields CATON and OffLandings

To clarify the values to insert into the CATON and OffLandings fields in the SI record, the following figure gives an overview of the two different discard-BMS scenarios. The overview shows how to fill in data from the at sea observer programs for two different discard-BMS scenarios.

	Scenario 1 Discard and BMS can be split 	Scenario 2 Discard and BMS cannot be split 
SI record with Catch Category=D (D for discard)	CATON = Discard weight OffLandings = -9	CATON = Discard + BMS weight OffLandings = -9
SI record with Catch Category=B (B for BMS)	CATON = BMS weight OffLandings = declared* BMS	CATON = 0 OffLandings = declared* BMS If there is no declared BMS No SI record with 'Catch Category = B' is needed

*Declared BMS from logbooks, sales notes or landing declarations.

Figure 6.2. CATON and OffLandings for two discard and BMS scenarios

6.1.5 Effort data in InterCatch

Effort is recorded in position 11 of the InterCatch header information. Different units of effort are required by different WGs as specified in Table 6.1.

Table 6.1. Units of effort requested/accepted by WGs.

	kW×day	Days at sea
WGBFAS		X
WGCEPH	X	X
WGMIXFISH-Advice	X	X
All others	X	

Please note that the effort value should be the same for all species, for a given strata. The effort in InterCatch supports WGMIXFISH, which needs effort by metier and not by species. If landing data and discard data are imported in separated files, then effort should only be imported once in the landings data. Effort for the discard data should be indicated with a '–9' (indicating no effort). If there has been fishing effort but zero landings, the effort should be also imported.

6.2 Reporting to other destinations

Files for data.call@ices.dk should be submitted in as few e-mails as possible. The file name must include expert group, stock, country, and data type references as specified below. The email subject must include expert group, stock, and country references.

"2021 DC [expert group] [stock code/stock codes] [country] [type of data]"

(example: 2021 DC WGBFAS her.27.28 LV landings)

6.3 Métiers

In response to ICES Data Calls, landings and effort data by métier should be submitted to InterCatch in a consistent manner. The following text will focus on the codes used for the field “Fleet”, which in general is referred to as “*metier*”. The *metiers* for each Expert Group are listed in DC_Annex_1.xlsx (sheet “IC Metier tags”). If a *metier* needed is not available in InterCatch, please contact the Expert Group chair (see email address in Table 4.1).

The *metier* tag entries closely follow the naming convention used for the EU Data Collection Framework (DCF). Below is an explanation of the *metier* tag elements; an underscore separates each of the elements (Figure 6.3).

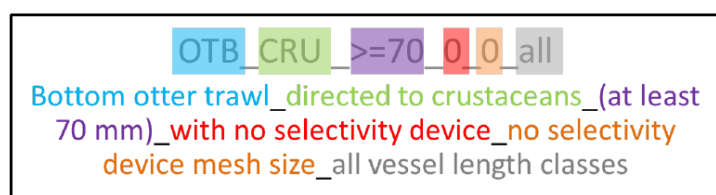


Figure 6.3. Explanation of the *metier* tag elements; an underscore separates each of the elements.

Metier tag elements

1. **GEAR TYPE** (gear types available under the DCF are shown in [2010/93/EU](#) Appendix IV). Note that WGCSE, WGNSSK, WGBIE and WGMIXFISH allow only specific *metiers* in specific areas (see appendices I-III).
2. **TARGET ASSEMBLAGE CODE** (code conforming to target assemblage under the DCF are shown in [2010/93/EU](#) Appendix IV). Data can be aggregated over more than one category but in this case the most significant *metier* code is entered.
3. **MESH SIZE RANGE** (mesh size ranges available under the DCF). If necessary data can be aggregated over more than one category but in this case the most significant mesh size range is entered. Exception to this general rules are cases where, for that gear type, data have been aggregated over all mesh size ranges used by a nation. In this case an additional entry “0” can be used (the metier should look like e.g. LHM_DEF_0_0_0. The use of “_all_” in this tag element should be avoided).
4. **SELECTIVITY DEVICE** (types of selectivity device available under the DCF: 0: No selectivity device, 1: Exit window or panel, 2: Grid, 3: Square meshes (T90)). See [2010/93/EU](#) Appendix IV.
5. **SELECTIVITY DEVICE MESH SIZE** (if the actual mesh size of any selectivity device is entered, this level is referred to as level 6). Data aggregation over several DCF level 6 categories is possible though should be avoided. In these cases the *metier* tag corresponding to the most significant category is chosen e.g. a mobile gear with mesh sizes covering 70–119 mm (combining 70–99 and 100–119) but for which 70–99 mm is most significant, the code 70–99 will apply. Exceptions to this general rule are cases where data have been aggregated over all mesh size ranges within the national fleet. In these instances the mesh size is omitted and only a *metier* with level 5 (Gear code Target assemblage) is used.
6. **VESSEL LENGTH CLASS** (Member states have been indicated by national sampling scheme designs to not take into account vessel lengths. Therefore the standard entry of “all” or omitted is currently provided for in InterCatch). The option has been left open for length category specific *metier* tags to be added in future years if nations begin to sample and raise data independently for different vessel length categories.

Unspecified data accounting all together for less than 10% of catches and effort, can be coded into a miscellaneous group named either MIS_MIS_0_0_0_HC (Miscellaneous Human Consumption) or MIS_MIS_0_0_0_IBC (Miscellaneous Industrial By-Catch). However, this métier aggregation label hinders the ability to effectively model the fishery interactions and its use **should be minimized**.

If multiple métiers are aggregated or merged into dominant métiers, these should be clearly stated in the InfoStockCoordinator information text (field number 23 in the import file to InterCatch).

6.4 Data reporting units

Landings, discards, and biological sampling data: units descriptors as specified in InterCatch Exchange Format.

Landings, discards, and recreational catches:

- by number of fish;
- by weight in tonnes (for fish except for wild catches of Atlantic salmon, Norway lobster and Northern prawn) or in Kg (for cephalopods, scallops and wild catches of Atlantic salmon);
- Length distributions; in 1 cm length intervals (for fish and cephalopods) or 1 mm intervals (for Norway lobster and Northern prawn).

Effort (WGNSSK, WGCSE, WGBIE, WGDEEP, WGHANSA, WGEF, WGSCALLOP): kW days (in InterCatch).

Effort (WGBFAS): in days-at-sea, see further specifications in section 7.4.

Effort (WGCEPH): in days-at-sea or kW days, see further specifications in section 7.6.

Effort (WGMIXFISH-advice): in days-at-sea and kW days, see further specifications in section 7.3.

Year must be entered as four digits, e.g. "2020".

6.5 Zero catch

Zero should only be reported for discards and/or BMS from observer programs when zero is the result of an estimation.

6.6 NEAFC Areas and ICES subdivisions

For stocks with catches in areas within both ICES and NEAFC regulatory area; the areas should be reported with the correct NEAFC area code (e.g. specifying 7.k.1, 7.k.2 vs. 7.k only, or 6.b.1, 6.b.2, vs. 6.b only; see Table 6.6.1). This is particularly relevant to stocks under WGDEEP, WGWIDE, NWWG and WGEF.

Table 6.6.1. NEAFC area codes and description.

ICES Code	Description
27.1.a	Barents Sea - NEAFC Regulatory Area
27.10.a.1	Azores Grounds - Parts of the NEAFC Regulatory Area

27.12.a.1	Subdivision XIIa1 - NEAFC Regulatory Area
27.12.a.2	Subdivision XIIa2 - NEAFC Regulatory Area
27.14.b.1	Southeast Greenland - Parts of NEAFC Regulatory Area
27.2.a.1	Norwegian Sea - NEAFC Regulatory Area
27.2.b.1	Spitsbergen and Bear Island - NEAFC Regulatory Area
27.5.b.1.a	Faroe Plateau - Part of NEAFC Regulatory Area
27.7.c.1	Porcupine Bank - NEAFC Regulatory Area
27.7.j.1	Southwest of Ireland - East - Parts of the NEAFC Regulatory
27.7.k.1	Southwest of Ireland - West - Part of the NEAFC Regulatory Area
27.8.d.1	Bay of Biscay - Offshore - Parts in NEAFC Regulatory Area
27.8.e.1	West of Bay of Biscay - Parts in NEAFC Regulatory Area
27.9.b.1	Portuguese Waters - West Parts in NEAFC regulatory Area

6.7 Recreational fisheries data

Recreational fisheries catch data should not be included as commercial landings, even if this has been the case in previous years. The final version of the recreational fisheries data should be submitted separately via email to data.call@ices.dk. The respective Working Group chair (see e-mail addresses in Table 4.1) and ICES Secretariat (advice@ices.dk) should be informed accordingly.

7 Expert group specific uploading information

7.1. HAWG specifications

Herring entries marked with “AC” in DC_Annex_1.xlsx need to be sent by stock in the exchange format specified in the so-called Yellow Sheets (DC_Annex 7.1.1._Yellow sheet).

Sprat entries marked with “AC3” in DC_Annex_1.xlsx need to be sent by stock in the exchange format specified in Annex 7.1.2. (i.e. DC_Annex 7.1.2_ Template_sprat).

For the stock her.27.20-24 entries marked with “AC4” in DC_Annex_1.xlsx need to be sent in the exchange format specified in Annex 7.1.3. (i.e. DC_Annex 7.1.3_ Template_her.27.20-24).

For the stock her.27.3a47d entries marked with “AC12” in DC_Annex_1.xlsx need to be split in 4a West and 4a East (split at 2 degrees East).

7.2 WGDEEP specification

Black scabbardfish (*Aphanopus carbo*) is believed to constitute a unique stock with three migratory components located in the West of the British Islands, Portugal mainland and Canary/Madeira areas. The southernmost component lies under the Fishery Committee for the Eastern Central Atlantic (CECAF) competence and it is believed to be an important spawning area for the species. In order to strengthen the ICES advisory process and allow for a more comprehensive stock assessment of black scabbardfish, access to the southernmost component data (FAO Fishing Area 34, Division 1.2) is requested in this Data Call from all ICES countries with data available from this area.

The data requested, if available, should be provided as follows:

- Landings and discards per month in tonnes.
- Fishing effort per month (kW days).
- Length frequency distribution per month or per quarter.
- Weight length relationship.
- Proportion of mature individuals (by sex) in the last quarter of the year.

Data submitters are also requested to submit catch data for 2020 to InterCatch on Lesser silver smelt/Lesser argentines (ARY) or/and Silver smelt/Argentines (ARG) by ICES Division. This will help to identify the contribution of the different species of argentines in the current assessment.

7.3 WGMIXFISH-ADVICE specification (WGNSSK, WGCSE, WGBFAS and WGBIE)

WGMIXFISH produces fleet-based mixed fisheries forecasts for four ecoregions, the Greater North Sea, Celtic Seas, Baltic Sea, Bay of Biscay and Iberian Coast. WGMIXFISH intends to develop advice for the North Sea, Celtic Sea, and Iberian waters in 2021. This data call is structured to provide biological and economic information at the level of DCF métier level 6 and the vessel length category, disaggregated by ICES divisions and by Subdivision for the Baltic Sea.

Table 7.1 : ICES divisions and species requested by the WGMIXFISH data call

Spatial Disaggregation	Species FAO code
ICES divisions	
27.3.a.20, 27.3.a.21, 27.3.a,	ANF (<i>Lophius spp</i>)
27.3.b.23, 27.3.c.22, 27.3.d.24,	ANK (<i>Lophius budegassa</i>)
27.3.d.25, 27.3.d.26, 27.3.d.27,	BLL (<i>Scophthalmus rhombus</i>)
27.3.d.28, 27.3.d.28.1, 27.3.d.28.2,	CAA (<i>Anarhichas lupus</i>)
27.3.d.29, 27.3.d.30, 27.3.d.31,	COD (<i>Gadus morhua</i>)
27.3.d.32,	COE (<i>Conger conger</i>)
	DAB (<i>Limanda limanda</i>)
27.4.a, 27.4.b, 27.4.c,	FLE (<i>Platichthys flesus</i>)
	GUG (<i>Eutrigla gurnardus</i>)
27.6.a, 27.6.b,	GUR (<i>Aspitrigla cuculus</i>)
	HAD (<i>Melanogrammus aeglefinus</i>)
27.7.a, 27.7.b, 27.7.c, 27.7.d, 27.7.e,	HAL (<i>Hippoglossus hippoglossus</i>)
27.7.f, 27.7.g, 27.7.h, 27.7.j, 27.7.k,	

27.8.a, 27.8.b, 27.8.c, 27.8.d,	HER (<i>Clupea harengus</i>)
27.9.a,	HKE (<i>Merluccius merluccius</i>)
	HOM (<i>Trachurus trachurus</i>)
	LBD (<i>Lepidorhombus boscii</i>)
Baltic Sea subdivisions:	LEM (<i>Microstomus kitt</i>)
27.3.d.24, 27.3.d.25, 27.3.d.26,	LEZ (<i>Lepidorhombus</i> spp.)
27.3.d.27, 27.3.d.28, 27.3.d.28.1,	LIN (<i>Molva molva</i>)
27.3.d.28.2, 27.3.d.29, 27.3.d.30	MAC (<i>Scombrus scombrus</i>)
27.3.d.31, 27.3.d.32	MEG (<i>Lepidorhombus whiffiagonis</i>)
	MON (<i>Lophius piscatorius</i>)
	NEP (<i>Nephrops norvegicus</i>) *** Note: FU must be provided here, i.e. NEP.FU.16
	NOP (<i>Trisopterus esmarkii</i>)
	PLE (<i>Pleuronectes platessa</i>)
	POK (<i>Pollachius virens</i>)
	POL (<i>Pollachius pollachius</i>)
	RJU (<i>Raja undulata</i>)
	SKA (aggregated rays and skates: RJC, SKA, RAJ, RJA, RJB, RJC, RJE, RJF, RJH, RJJ, RJM, RJN, RJO, RJR, SKA, SKX, SRX)
	SDV (aggregated dogfish: DGS, DGH, DGX, DGZ, SDV)
	SOL (<i>Solea solea</i>)
	SPR (<i>Sprattus sprattus</i>)
	TUR (<i>Scophthalmus maximus</i>)
	WHB (<i>Micromesistius poutassou</i>)
	WHG (<i>Merlangius merlangus</i>)
	WIT (<i>Glyptocephalus cynoglossus</i>)
	<u>All remaining catch should be aggregated into an 'OTH' class.</u>

7.3.1 WGMIXFISH-ADVICE Data Format

This data should be submitted in the following format. Failure to do so will result in file rejection and a request for resubmission.

Files: Two comma separated (.csv) files should be provided, one reporting 'effort', and the other reporting 'catch'.

Format: These two files should adhere to the following format outlined in DC_Annex_1.xlsx for 'effort' (sheet "WGMIXFISH-effort") and 'catch' (sheet, "WGMIXFISH-catch").

Coding: Data entries must be fully consistent with the coding provided in the DC_Annex_1.xlsx and outlined in the table below:

Table: 7.3.1 Fields to be used in the submission spreadsheet with respective descriptor.

Fields	Descriptor
ID	Unique identifier
Country	Two letter short code as per DC_Annex_1.xlsx.
Year	Four digit format e.g. "2020"
Quarter	Abbreviated e.g. Q1
IntercatchMetierTag	Métier should match what has been submitted to InterCatch. A list of accepted metiers can be found in DC_Annex_1.xlsx (sheet "IC Metier tags").
VesselLengthCategory	Vessel length categories are should be specified using one of these exact codes: "<10m", "10<24m", "24<40m", ">=40m".
FDFVessel	Fully Documented Fisheries should be identified here using "FDF". Please leave the field blank for the non-FDF fleet.
Area	ICES divisions should match those in DC_Annex_1.xlsx (sheet "ICES area codes").
Species	Should be consistent with the three letter FAO codes outlined in Table 7.1. Except in the case of <i>Nephrops</i> , which the Functional unit must be concatenated to the species name, i.e. a catch of <i>Nephrops</i> in FU 16 should be noted as "NEP.FU.16" in the species column. In the case of <i>Nephrops</i> caught outside of an FU please provide the subarea, i.e. for <i>Nephrops</i> caught outside of an FU in ICES Subarea 27.7 as "NEP.OUT.7".
Landings	Estimated landings in tonnes (live weight). Including landings below minimum conservation reference size.
Value	Estimated total value of the landings in euro.
Discards	Only supply a discards in tonnes if none has been submitted to InterCatch. Or if specific discard information exists for each vessel length category.
KWdays.	Fishing effort in KWdays, i.e. engine power in kW times fishing days
DaysAtSea	Number of days at sea.
NoVessels	Number of vessels executing this activity at this level of aggregation.

Submission: Both files should be submitted to data.call@ices.dk. File name must follow this format "2021 WGMIXFISH-ADVICE" [country] [metier_catch/metier_effort]" (example: 2021 WGMIXFISH-ADVICE FR_metier catch).

7.4 WGBFAS specifications

Units for data submission

For landings and discards; numbers (in thousands) and mean weight (in grammes) by age or length (depending on the stock and according to DC_Annex_1.xlsx specifications) per fleet/segment, quarter, year, Subdivision and country.

The unit for commercial effort is **days-at-sea** and should be aggregated at the same level as the sampling data (i.e. effort per fleet/segment, quarter, year, Subdivision and country).

Data specification

- Discard survival rates **should not** be accounted for by countries when uploading the data.
- For **sprat**, fleet segments to be considered are; "Pelagic trawlers" for all trawl gears and "Passive" for all passive gears.

Besides landings and discards InterCatch includes the catch category BMS landings.

It is important when Member Countries are uploading data to InterCatch that the catch categories in CATON are summing up to the total catch. BMS landings can either be calculated as an estimate from the observer trips or from official registrations such as sale slips, logbooks, or landing declarations (see section 6.1.4). Both the landed BMS catch and the discard estimate will be needed for the WGBFAS.

Specifics of data requirements for eastern and western Baltic cod (see also DC_Annex_1.xlsx)

- Denmark and Germany are requested to provide stock (i.e. eastern and western Baltic cod) proportions by gear and subarea (i.e. subareas 1 and 2; see Figure 4 of Western Baltic cod stock annex; [link](#)).
- For cod in SubDivisions (SD) 22-23, age distribution data should be uploaded to IC.
- For cod in SD 22-32, length distribution data should be uploaded to IC.
- For cod in SD 24, landings should be submitted by ICES square.

For Recreational catch from Denmark, Germany, and Sweden of western Baltic cod (cod.27.22-24) the following data are requested:

- Catch in weight, separately for SD 22, 23 and 24
- Catch-at-age in numbers, separately for SD 22, 23 and 24 (only age readings originating in SD 22 or 23 should be used. i.e. not age readings from SD 24)
- Mean weight at age in the catch.

The data should be provided as *Excel* spreadsheets and submitted to data.call@ices.dk.

Data from the surveys 1 to 3 below conducted in 2020, should be uploaded to the ICES databases (DATRAS and acoustic-trawl survey) by 1st February 2021. Data from surveys 4 to 6 below should be sent to the WG chair (see contact details in Table 4.1.) by 1st February 2021.

List of surveys conducted in Kattegat-Skagerrak and the Baltic Sea:

- 1) Baltic Acoustic Spring Survey, BASS;
- 2) International Bottom Trawl Survey Quarter 3, IBTS Q3;
- 3) Baltic International Trawl Survey quarter 4, BITS Q4
- 4) Fishermen-DTU Aqua sole survey, FFS;
- 5) Cod survey in Kattegat, CODS_Q4;
- 6) Fehmarn Juvenile Cod Survey, FEJCS.

7.5. WGBIE specifications

For four-spot megrim (*Lepidorhombus boscii*) in divisions 7.b-k, 8.a-b, and 8.d (west and southwest of Ireland, Bay of Biscay) (ldb.27.7b-k8abd) data from Spain (landings, discards, and associated biological information as specified in DC_Annex_1.xlsx) **should be submitted for the years 2003 to 2016 and 2020.**

Reporting of effort should be as reported for megrim (*Lepidorhombus whiffigonus*) in divisions 7.b-k, 8.a-b, and 8.d (west and southwest of Ireland, Bay of Biscay) (meg.27.7b-k8abd).

7.6. WGCEPH specifications

Cephalopod data will be used to describe trends and status of cephalopod fisheries, and to conduct stock assessments.

Data reporting

Data for the species-specific stocks should be reported according to the following list of areas;

27.3.a, 27.4.a, 27.4.b, 27.4.c, 27.5.b, 27.6.a, 27.6.b, 27.7.a, 27.7.b, 27.7.c, 27.7.d, 27.7.e, 27.7.f, 27.7.g, 27.7.h, 27.7.j, 27.7.k, 27.8.a, 27.8.b, 27.8.c, 27.8.d, 27.9.a.n, 27.9.a.c.n, 27.a.c.s, 27.9.a.s.a, 27.9.a.s.c, 27.10. All catches should be uploaded by ICES Division (e.g. 27.4.c or 27.8.d) except for Division 27.9.a, for which catches should be split into 27.9.a.n, 27.9.a.c.n, 27.9.a.c.s, 27.9.a.s.a, 27.9.a.s.c.

Detailed anonymised data on landings and fishing activities of selected fishing fleets (OTB, TBB and OTM) from countries with significant cephalopod fisheries (i.e. landings exceeding 1000 tonnes per year), as specified in DC_Annex_1.xlsx, should be provided via email to data.call@ices.dk following the format outlined in DC_Annex_7.6.1. WGCEPH Detailed Catch and Effort data.xlsx.

For trawl surveys with accurate identification of cephalopods at species level, the abundance indices (numbers) and cpue (weights) should be provided via email to data.call@ices.dk following the format outlined in DC_Annex_7.6.2. WGCEPH Survey data. **Note** that in the case of surveys with a stratified sampling scheme average computations by strata should be also provided. Survey data should be submitted via data.call@ices.dk unless detail data have already been submitted to the ICES database DATRAS (<http://www.ices.dk/data/data-portals/Pages/DATRAS.aspx>). Submission of cephalopod survey data to the quality assured and open DATRAS database is encouraged. If the data have been already uploaded to DATRAS, WGCEPH co-chairs should be informed. Additionally, in case of missing data for one of more species, WGCEPH co-chairs should be informed about whether the species are not caught by trawl surveys or whether the species may have been caught but have not been recorded in the DATRAS database.

Data for WGCEPH (see DC_Annex_1.xlsx, 7.6.1 and 7.6.2) should only be submitted using the specific FAO 3-alpha species codes. Please note the code SQU should only be used if there is a genuine doubt as to whether the squid landed were Loliginidae or Ommastrephidae. Additionally, if cephalopod catches are being recorded under any code other than those listed, (a) please indicate this in a note to WGCEPH and (b) include those data also. Finally, if countries are aware of any current issues with coding of cephalopod landings please inform the WGCEPH chairs (see contact details in Table 4.1). This request

is prompted by recently reported issues with use of the codes SQZ and SQU. The métier codes to be used are specified in DC_Annex_1.xlsx, in the sheet “IC Metier tags”. If other level 6 métiers have catches and are not available in InterCatch, please contact the Expert Group chairs (see email address in Table 4.1).

Effort specifications

The units for fishing effort can be either "KW×fishing days" or "Total Days at sea" but should be consistent with data previously provided to WGCEPH. The fishing ‘Effort’ in InterCatch concerns all fishing effort of each métier catching cephalopods in the area of the stock. By "all fishing effort" it is meant all the activity of these métiers and not only the trips when cephalopods were caught.

WGCEPH needs all landings data, even if some landings have no associated fishing effort record; in such case enter ‘-9’ in the effort field.

7.7. WGEF specifications

Provide national landings and discards data for 2020 for all elasmobranch in Annex_7.7.1 WGEF.csv. Landings and discards should be provided via InterCatch, by metier level 4 and by ICES Division. Landings and discards should be provided in tonnes with three decimal places.

Submitted data should include national catches for all elasmobranch species in FAO area 27, as well as catches outside ICES areas for selected stocks (see Table 7.1.):

Length composition for all the stocks in Table 7.1 (below) for discards and landings should be submitted via data.call@ices.dk in centimetres (cm). These data should contain the following fields per stock:

- Year,
- Country,
- Catch category (DIS or LAN),
- Sex (M, F),
- Length (cm) and,
- Number of individuals

All countries that have landings or discards data on these stocks should submit data, even if the sampling size is small, this is due to the importance of and scarcity of sampling for these stocks.

File name should follow the following format “2021 WGEF [country]”
(example: 2021 WGEF FR).

Table 7.7.1.: ICES Elasmobranchs stocks *per* FAO area.

FAO Area	Stock code	Description
27 and 34	cyo.27.nea	Portuguese dogfish (<i>Centroscymnus coelolepis</i> , <i>Centrophorus squamosus</i>) in subareas 1-10, 12 and 14 (the Northeast Atlantic and adjacent waters)

FAO Area	Stock code	Description
	guq.27.nea	Leafscale gulper shark (<i>Centrophorus squamosus</i>) in subareas 1-10, 12 and 14 (the Northeast Atlantic and adjacent waters)
27, 34 and 37	gag.27.nea	Tope (<i>Galeorhinus galeus</i>) in subareas 1-10, 12 and 14 (the Northeast Atlantic and adjacent waters)
	por.27.nea	Porbeagle (<i>Lamna nasus</i>) in subareas 1-10, 12 and 14 (the Northeast Atlantic and adjacent waters)
	sdv.27.nea	Smooth-hound (<i>Mustelus spp.</i>) in subareas 1-10, 12 and 14 (the Northeast Atlantic and adjacent waters)
21, 27, 31, 34 and 37	bsk.27.nea	Basking shark (<i>Cetorhinus maximus</i>) in subareas 1-10, 12 and 14 (Northeast Atlantic and adjacent waters)
	thr.27.nea	Thresher sharks (<i>Alopias spp.</i>) in subareas 10, 12, divisions 7.c-k, 8.d-e, and subdivisions 5.b.1, 9.b.1, 14.b.1 (Northeast Atlantic)
27	agn.27.nea	Angel shark (<i>Squatina squatina</i>) in subareas 1-10, 12 and 14 (the Northeast Atlantic and adjacent waters)
	dgs.27.nea	Spurdog (<i>Squalus acanthias</i>) in subareas 1-10, 12 and 14 (the Northeast Atlantic and adjacent waters)
	raj.27.1012	Rays and skates (Rajidae) (mainly thornback ray (<i>Raja clavata</i>)) in subareas 10 and 12 (Azores grounds and north of Azores)
	raj.27.3a47d	Rays and skates (Rajidae) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)
	raj.27.67a-ce-h	Rays and skates (Rajidae) in Subarea 6 and divisions 7.a-c and 7.e-h (Rockall and West of Scotland, southern Celtic Seas, western English Channel)
	raj.27.89a	Rays and skates (Rajidae) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters)
	rja.27.nea	White skate (<i>Rostroraja alba</i>) in subareas 1-10, 12 and 14 (the Northeast Atlantic and adjacent waters)
	rjb.27.3a4	Common skate complex (Blue skate (<i>Dipturus batis</i>) and flapper skate (<i>Dipturus intermedius</i>) in Subarea 4 and Division 3.a (North Sea, Skagerrak and Kattegat)
	rjb.27.67a-ce-k	Common skate complex (Blue skate (<i>Dipturus batis</i>) and flapper skate (<i>Dipturus intermedius</i>) in Subarea 6 and divisions 7.a-c and 7.e-k (Celtic Seas and western English Channel)
	rjb.27.89a	Common skate complex (Blue skate (<i>Dipturus batis</i>) and flapper skate (<i>Dipturus intermedius</i>) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters)
	rjc.27.3a47d	Thornback ray (<i>Raja clavata</i>) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)
	rjc.27.6	Thornback ray (<i>Raja clavata</i>) in Subarea 6 (West of Scotland)
	rjc.27.7afg	Thornback ray (<i>Raja clavata</i>) in divisions 7.a and 7.f-g (Irish Sea, Bristol Channel, Celtic Sea North)
	rjc.27.7e	Thornback ray (<i>Raja clavata</i>) in Division 7.e (western English Channel)
	rjc.27.8	Thornback ray (<i>Raja clavata</i>) in Subarea 8 (Bay of Biscay)
	rjc.27.9a	Thornback ray (<i>Raja clavata</i>) in Division 9.a (Atlantic Iberian waters)
	rje.27.7de	Small-eyed ray (<i>Raja microocellata</i>) in divisions 7.d and 7.e (English Channel)

FAO Area	Stock code	Description
	rje.27.7fg	Small-eyed ray (<i>Raja microocellata</i>) in divisions 7.f and 7.g (Bristol Channel, Celtic Sea North)
	rjf.27.67	Shagreen ray (<i>Leucoraja fullonica</i>) in subareas 6-7 (West of Scotland, southern Celtic Seas, English Channel)
	rjh.27.4a6	Blonde ray (<i>Raja brachyura</i>) in Subarea 6 and Division 4.a (North Sea and West of Scotland)
	rjh.27.4c7d	Blonde ray (<i>Raja brachyura</i>) in divisions 4.c and 7.d (southern North Sea and eastern English Channel)
	rjh.27.7afg	Blonde ray (<i>Raja brachyura</i>) in divisions 7.a and 7.f-g (Irish Sea, Bristol Channel, Celtic Sea North)
	rjh.27.7e	Blonde ray (<i>Raja brachyura</i>) in Division 7.e (western English Channel)
	rjh.27.9a	Blonde ray (<i>Raja brachyura</i>) in Division 9.a (Atlantic Iberian waters)
	rji.27.67	Sandy ray (<i>Leucoraja circularis</i>) in subareas 6-7 (West of Scotland, southern Celtic Seas, English Channel)
	rjm.27.3a47d	Spotted ray (<i>Raja montagui</i>) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)
	rjm.27.67bj	Spotted ray (<i>Raja montagui</i>) in Subarea 6 and divisions 7.b and 7.j (West of Scotland, west and southwest of Ireland)
	rjm.27.7ae-h	Spotted ray (<i>Raja montagui</i>) in divisions 7.a and 7.e-h (southern Celtic Seas and western English Channel)
	rjm.27.8	Spotted ray (<i>Raja montagui</i>) in Subarea 8 (Bay of Biscay)
	rjm.27.9a	Spotted ray (<i>Raja montagui</i>) in Division 9.a (Atlantic Iberian waters)
	rjn.27.3a4	Cuckoo ray (<i>Leucoraja naevus</i>) in Subarea 4 and Division 3.a (North Sea, Skagerrak and Kattegat)
	rjn.27.678abd	Cuckoo ray (<i>Leucoraja naevus</i>) in subareas 6-7 and divisions 8.a-b and 8.d (West of Scotland, southern Celtic Seas, and western English Channel, Bay of Biscay)
	rjn.27.8c	Cuckoo ray (<i>Leucoraja naevus</i>) in Division 8.c (Cantabrian Sea)
	rjn.27.9a	Cuckoo ray (<i>Leucoraja naevus</i>) in Division 9.a (Atlantic Iberian waters)
	rjr.27.23a4	Starry ray (<i>Amblyraja radiata</i>) in subareas 2 and 4, and Division 3.a (Norwegian Sea, North Sea, Skagerrak and Kattegat)
	rju.27.7bj	Undulate ray (<i>Raja undulata</i>) in divisions 7.b and 7.j (west and southwest of Ireland)
	rju.27.7de	Undulate ray (<i>Raja undulata</i>) in divisions 7.d and 7.e (English Channel)
	rju.27.8ab	Undulate ray (<i>Raja undulata</i>) in divisions 8.a-b (northern and central Bay of Biscay)
	rju.27.8c	Undulate ray (<i>Raja undulata</i>) in Division 8.c (Cantabrian Sea)
	rju.27.9a	Undulate ray (<i>Raja undulata</i>) in Division 9.a (Atlantic Iberian waters)
	sck.27.nea	Kitefin shark (<i>Dalatias licha</i>) in subareas 1-10, 12 and 14 (the Northeast Atlantic and adjacent waters)

FAO Area	Stock code	Description
	sho.27.67	Black-mouth dogfish (<i>Galeus melastomus</i>) in subareas 6 and 7 (West of Scotland, southern Celtic Seas, and English Channel)
	sho.27.89a	Black-mouth dogfish (<i>Galeus melastomus</i>) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters)
	syc.27.3a47d	Lesser-spotted dogfish (<i>Scyliorhinus canicula</i>) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)
	syc.27.67a-ce-j	Lesser-spotted dogfish (<i>Scyliorhinus canicula</i>) in Subarea 6 and divisions 7.a-c and 7.e-j (West of Scotland, Irish Sea, southern Celtic Seas)
	syc.27.8abd	Lesser-spotted dogfish (<i>Scyliorhinus canicula</i>) in divisions 8.a-b and 8.d (Bay of Biscay)
	syc.27.8c9a	Lesser-spotted dogfish (<i>Scyliorhinus canicula</i>) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)
	syt.27.67	Greater-spotted dogfish (<i>Scyliorhinus stellaris</i>) in subareas 6 and 7 (West of Scotland, southern Celtic Sea, and the English Channel)

7.8 WGHANSA specifications

For stocks to be assessed in November 2021 (i.e. ane.27.8, pil.27.7, pil.27.8abd, pil.27.8c9a,) countries are encouraged to submit preliminary catch data from the current year (2021) by the 1st of November of 2021.

7.10 WGCSE specifications

Data submitters are requested to provide additional data for Seabass (*Dicentrarchus labrax*) in Divisions 4.b-c, 7.a, and 7.d-h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea). The data requested is comprised of:

- Monthly landings (kg) by metier (level 5) and vessel (anonymised).
- Monthly length sampling data by metier level 5 for both landings and discards.

The temporal range for the data requested above is from 2010 to 2020

This information should be submitted separately as .csv files via email to data.call@ices.dk. The subject of the email and the file name should be clearly labelled as "2021 WGCSE-bss [country]" (example: 2021 WGCSE-bss France).

7.11 NWWG specifications

For the stock reb.2127.dp data should be submitted for catches harvested below 500m depth only as specified in DC_Annex_1.xlsx as “AC13”.

For the stock reb.2127.sp data should be submitted for catches harvested above 500m depth only as specified in DC_Annex_1.xlsx as “AC14”.

7.12 WGNAS specifications

Data on all 2020 Atlantic salmon catches and landings by stock, as specified in DC_Annex_1.xlsx, should be provided via email to data.call@ices.dk following the format outlined in DC_Annex_7.12.1 WGNAS_Template.xlsx. North Atlantic salmon ICES stock definitions align with the NASCO Commission area §. Additional data types for Atlantic salmon requested and outlined in DC_Annex_7.12.1 WGNAS_Template.xlsx. include;

- Data on the production of farmed and sea-ranched Atlantic salmon in 2020 (in number of individuals and by weight (tonnes));
- Numbers of fish released back alive from commercial and recreational fisheries;
- Estimates for both reported and unreported catches.

Data should be marked as provisional, where necessary.

When reporting data on salmon caught in rivers, provide the name of the river. This information will be used to develop an accepted list of salmon rivers to be used in future data calls.

Special terminology and codes used in this data call are described in the glossary in Appendix V and DC_Annex_7.12.1 WGNAS_Template.xlsx.

7.13 WGScallop specifications

Data on all 2020 landings by stock, as specified in DC_Annex_1.xlsx, should be provided via email to data.call@ices.dk following the format outlined in DC_Annex_7.13.1 WGSCALLOP_Template.xlsx.

Data submitters are requested to contact their national expert to provide further quality assurance prior to the data being submitted.

Table 7.13.1: List of relevant national experts.

§ For a description of the Commission Areas See Figure in page 3 of the sal.27.neac stock annex; https://www.ices.dk/sites/pub/Publication%20Reports/Stock%20Annexes/2019/sal.27.neac_SA.pdf

Member	Dept/Institute	Email	Country
Lynda Blackadder	Marine Scotland Science	Lynda.Blackadder@gov.scot	United Kingdom-Scotland
Adam DeLargy	Bangor University	Adam.delargy@bangor.ac.uk	United Kingdom-Wales
Carrie McMinn	Agri-food and Biosciences Institute	Carrie.McMinn@afbini.gov.uk	United Kingdom-Northern Ireland
Fabian Zimmermann	Institute Marine Research	fabian.zimmermann@hi.no	Norway
Luis Ridao Cruz	Faroe Marine Research Institute	luisr@hav.fo	Faroe Islands
Andy Lawler	Centre for Environment, Fisheries and Aquaculture Science	andy.lawler@cefas.co.uk	United Kingdom-England
Eric Foucher	Ifremer	eric.foucher@ifremer.fr	France
Isobel Bloor	Bangor University	i.bloor@bangor.ac.uk	United Kingdom-Isle of Man
Jónas Jónasson	Marine and Freshwater Research Institute	jonas.jonasson@hafogvatn.is	Iceland
Oliver Tully	Marine Institute	oliver.tully@marine.ie	Ireland

The species listed in table 7.13.2 are non-exclusive. If a scallop species has been omitted then please submit data using the generic code name (SCX) and notify ICES of any species that should possibly be included in future data calls ([link](#) to the SpecASFIS vocabulary).

Table 7.13.2: Species list and respective FAO codes.

Common name	Scientific name	FAO code
Great Atlantic scallop (King scallop)	<i>Pecten maximus</i>	SCE
Queen scallop	<i>Aequipecten opercularis</i>	QSC
Iceland scallop	<i>Chlamys islandica</i>	ISC
American sea scallop	<i>Placopecten magellanicus</i>	SCA
Scallops nei	<i>Pectinidae</i>	SCX

Data types

Table 7.13.3: Aggregation levels by data type.

Type of data	Temporal aggregation level	Metier level 5	Geographical Reporting Level
Landings Quantity	Monthly	see table 7.13.5	ICES Statistical Rectangle
Effort	Monthly	see table 7.13.5	ICES Statistical Rectangle

The template provided (DC_Annex_7.13.1. WGSCALLOP Template) should be used to reply to this data call. All the fields needed are included in the template.

Please rename the file in order to include; WGSCALLOP and country as specified below. The email subject must include WGSCALLOP and country references.

"2021 DC [expert group] [country]"

example: 2021 DC WGSCALLOP FR

The file should be submitted via e-mail to datacall@ices.dk in as few e-mails as possible.

Table 7.13.4: Reporting format

Variable	Unit	Type	Comments
Country		String	ISO country label
Year		Integer	Year (e.g. "2020")
Month		Integer	Month (1 to 12)
ICES area		String	Up to division level
ICES Statistical rectangle		String	StatRec
Metier level 5		String	Table 7.13.5 Metier5 FishingActivity
Landings	kg	Decimal numeral	
Effort	kWday	Decimal numeral	kW × fishing days

Fishing effort should be calculated following the fecR STECF method which applies the principles of the 2nd Workshop on Transversal Variables and calculates days at sea and fishing days ([lb-na-27897-en-n.pdf \(europa.eu\)](#)). The WG request that effort is reported as **kW fishing days**.

Table 7.13.5: Reporting format

Gear Type	Metier level 5 to be reported
Boat dredge	DRB_MOL
Dive caught or scallops by hand	MDV_MOL
Beam trawl targeting scallops	TBB_MOL
Beam trawl targeting demersal fish	TBB_DEF
Bottom trawl targeting demersal fish	OTB_DEF
Bottom trawl targeting scallops	OTB_MOL
Hand mechanised dredge targeting scallops	HMD_MOL
Miscellaneous gear not included above	MIS_MIS

8. Contact information

For support concerning any data call issues please contact the Advisory Department (advice@ices.dk).

For support concerning InterCatch submissions please contact: InterCatchSupport@ices.dk.

For support concerning other data-submission issues, please contact: data.call@ices.dk.

Appendix I.

Gear coding (as defined under the DCF), allowed for WGNSSK and WGMIXFISH-ADVICE. Based on information from countries fishing in areas 27.3.a.20, 27.4 and 27.7.d and significant fishing gears. Note that the vessel length category (currently ‘_all’) must appear at the end of every *métier* tag except the MIS_MIS *métier* tags.

AREA	GEAR TYPE	AVAILABLE METIER TAGS FOR FULLY DOCUMENTED FISHERIES ADD “_FDF” AFTER LENGTH CLASS
27.3.a.20 (Skagerrak) and 27.3.a.21 (Kattegat) Area Type = SubDiv	Beam trawl	TBB_CRU_16-31_0_0_all
		TBB_DEF_90-99_0_0_all
		TBB_DEF_>=120_0_0_all
	Otter trawl	OTB_CRU_16-31_0_0_all
		OTB_CRU_32-69_0_0_all
		OTB_CRU_32-69_2_22_all
		OTB_CRU_70-89_2_35_all
		OTB_CRU_90-119_0_0_all
		OTB_CRU_90-119_0_0_all_FDF
		OTB_DEF_>=120_0_0_all
		OTB_DEF_>=120_0_0_all_FDF
	Seines	SDN_DEF_>=120_0_0_all
		SDN_DEF_>=120_0_0_all_FDF
		SSC_DEF_>=120_0_0_all
		SSC_DEF_>=120_0_0_all_FDF
	Gill, trammel, drift nets	GNS_DEF_100-119_0_0_all
		GNS_DEF_120-219_0_0_all
		GNS_DEF_120-219_0_0_all_FDF
		GNS_DEF_>=220_0_0_all
		GNS_DEF_all_0_0_all
	Lines	LLS_FIF_0_0_0_all
		LLS_FIF_0_0_0_all_FDF
	Others (Human consumption)*	MIS_MIS_0_0_0_HC
	Others (Industrial bycatch)*	MIS_MIS_0_0_0_IBC
27.4 – (North Sea) Area type = SubArea & 27.7.d (Eastern Channel) Area Type = Div & 27.6.a (for saithe and haddock only) Area Type = Div	Beam trawl	TBB_CRU_16-31_0_0_all
		TBB_DEF_70-99_0_0_all
		TBB_DEF_>=120_0_0_all
	Otter trawl	OTB_CRU_16-31_0_0_all
		OTB_CRU_32-69_0_0_all
		OTB_SPF_32-69_0_0_all
		OTB_CRU_70-99_0_0_all
		OTB_CRU_70-99_0_0_all_FDF
		OTB_DEF_>=120_0_0_all
		OTB_DEF_>=120_0_0_all_FDF
		OTB_DEF_70-99_0_0_all
	Seines	SDN_DEF_>=120_0_0_all
		SDN_DEF_>=120_0_0_all_FDF
		SSC_DEF_>=120_0_0_all

AREA	GEAR TYPE	AVAILABLE METIER TAGS FOR FULLY DOCUMENTED FISHERIES ADD “_FDF” AFTER LENGTH CLASS
		SSC_DEF_>=120_0_0_all_FDF
	Gill, trammel, drift nets	GNS_DEF_100-119_0_0_all
		GNS_DEF_120-219_0_0_all
		GNS_DEF_120-219_0_0_all_FDF
		GNS_DEF_>=220_0_0_all
		GNS_DEF_all_0_0_all
		GTR_DEF_all_0_0_all
	Lines	LLS_FIF_0_0_0_all
		LLS_FIF_0_0_0_all_FDF
	Pots and Traps	FPO_CRU_0_0_0_all
	Others (Human consumption)*	MIS_MIS_0_0_0_HC
	Others (Industrial bycatch)*	MIS_MIS_0_0_0_IBC

* The use of metiers under the MIS_MIS category should be minimized.

Appendix II.

Gear coding (as defined under the DCF), allowed for WGCSE and WGMIXFISH-ADVICE in specific areas. Note that the vessel length category (currently ‘_all’) must appear at the end of every *métier* tag except the MIS_MIS *métier* tags.

AREA	GEAR TYPE	AVAILABLE METIER TAGS
West of Scotland (27.6.a) and Rockall (27.6.b)	Pots and traps	FPO_CRU_0_0_0_all
	Gillnets	GNS_DEF_>=220_0_0_all
	Longline	LLS_FIF_0_0_0_all
	Otter trawl	OTB_CRU_70-99_0_0_all
		OTB_DEF_>=120_0_0_all
		OTB_DEF_100-119_0_0_all
		OTB_DWS_>=120_0_0_all
		OTB_DWS_100-119_0_0_all
		OTB_MOL_>=120_0_0_all
		OTB_MOL_100-119_0_0_all
	Midwater trawl	OTM_DEF_32-69_0_0_all
		OTM_SPF_32-69_0_0_all
	Seines	SSC_SPF_0_0_0_all
	Others (Human consumption)*	MIS_MIS_0_0_0_HC
	Others (Industrial bycatch)*	MIS_MIS_0_0_0_IBC
Irish Sea (27.7.a)	Pots and traps	FPO_CRU_0_0_0_all
		FPO_MOL_0_0_0_all
	Gillnets	GNS_DEF_120-219_0_0_all
		GNS_DEF_90-99_0_0_all
	Otter trawl	OTB_CRU_70-99_0_0_all
		OTB_DEF_70-99_0_0_all
		OTB_MOL_70-99_0_0_all
	Beam trawl	TBB_DEF_70-99_0_0_all
West of Ireland (27.7.b-c) and Celtic Sea slope (27.7.k-j)	Gillnets	MIS_MIS_0_0_0_HC
		MIS_MIS_0_0_0_IBC
	Otter trawl	GNS_DEF_>=220_0_0_all
		GNS_DEF_100-119_0_0_all
		GNS_DEF_120-219_0_0_all
		GNS_DWS_100-119_0_0_all
		OTB_DEF_100-119_0_0_all
		OTB_DEF_70-99_0_0_all
		OTB_DWS_100-119_0_0_all
	Midwater trawl	OTB_MOL_100-119_0_0_all
		OTB_MOL_70-99_0_0_all
		OTB_SPF_100-119_0_0_all
		OTB_CRU_100-119_0_0_all
		OTM_SPF_16-31_0_0
		OTM_SPF_32-69_0_0_all
		OTM_DEF_100-119_0_0_all
		OTM_LPF_70-99_0_0_all

		OTM_LPF_100-119_0_0_all
	Others (Human consumption)*	MIS_MIS_0_0_0_HC
	Others (Industrial bycatch)*	MIS_MIS_0_0_0_IBC
Celtic Sea Shelf (27.7.f-h)	Pots and traps	FPO_CRU_0_0_0_all
		FPO_MOL_0_0_0_all
	Gillnets	GNS_DEF_>=220_0_0_all
		GNS_DEF_120-219_0_0_all
		GNS_SPF_10-30_0_0_all
		GTR_DEF_>=220_0_0_all
	Lines	LLS_FIF_0_0_0_all
	Otter trawl	OTB_CRU_100-119_0_0_all
		OTB_CRU_70-99_0_0_all
		OTB_DEF_100-119_0_0_all
		OTB_DEF_70-99_0_0_all
		OTB_DWS_100-119_0_0_all
		OTB_MCD_70-99_0_0_all
		OTB_MOL_100-119_0_0_all
		OTB_MOL_70-99_0_0_all
	Midwater trawl	OTM_DEF_32-69_0_0_all
		OTM_SPF_32-69_0_0_all
	Seines	SSC_SPF_0_0_0_all
		SSC_DEF_100-119_0_0_all
		SSC_DEF_70-99_0_0_all
	Beam trawl	TBB_DEF_70-99_0_0_all
	Others (Human consumption)*	MIS_MIS_0_0_0_HC
	Others (Industrial bycatch)*	MIS_MIS_0_0_0_IBC
Western Channel (27.7.e)	Pots and traps	FPO_CRU_0_0_0_all
		FPO_MOL_0_0_0_all
	Gillnets	GNS_CRU_0_0_0_all
		GNS_DEF_>=220_0_0_all
		GNS_DEF_100-119_0_0_all
		GNS_DEF_120-219_0_0_all
		GTR_CRU_0_0_0_all
		GTR_DEF_>=220_0_0_all
		GTR_DEF_120-219_0_0_all
	Lines	LLS_DEF_0_0_0_all
		LLS_FIF_0_0_0_all
	Otter trawl	OTB_CRU_100-119_0_0_all
		OTB_CRU_70-99_0_0_all
		OTB_DEF_100-119_0_0_all
		OTB_DEF_70-99_0_0_all
		OTB_DWS_100-119_0_0_all
		OTB_MOL_100-119_0_0_all
		OTB_MOL_70-99_0_0_all
		OTB_SPF_70-99_0_0_all
	Midwater trawl	OTM_SPF_16-31_0_0
		OTM_SPF_32-69_0_0_all

		OTM_DEF_70-99_0_0_all
		OTM_DEF_100-119_0_0_all
	Seines	SSC_SPF_0_0_0_all
		SSC_DEF_70-99_0_0_all
	Beam trawl	TBB_DEF_70-99_0_0_all
	Others (Human consumption)*	MIS_MIS_0_0_0_HC
	Others (Industrial bycatch)*	MIS_MIS_0_0_0_IBC

* The use of metiers under the MIS_MIS category should be minimized.

Appendix III.

Gear coding (as defined under the DCF), allowed for WGBIE and WGMIXFISH-ADVICE.

GEAR TYPE	AVAILABLE METIER TAGS
Boat dredge, molluscs, no selectivity devise, all vessels	DRB_MOL_0_0_0_all
Pots and Traps, Crustaceans, no selectivity device, all vessels	FPO_CRU_0_0_0_all
Gill nets, demersal fish, mesh size 100-109mm, no selectivity device, all vessels	GN_DEF_100-109_0_0_all
Set gillnet, Demersal fish, mesh size more than 100mm, no selectivity device	GNS_DEF_>=100_0_0
Set gillnet, Demersal fish, mesh size more than 220mm, no selectivity device, all vessels	GNS_DEF_>=220_0_0_all
Set gillnet, Demersal fish, mesh size >=220mm, no selectivity device, all vessels, Fully Documented Fisheries	GNS_DEF_>=220_0_0_all_FDF
Set gillnet, Demersal fish, mesh size 100-119mm, no selectivity device, all vessels	GNS_DEF_100-119_0_0_all
Set gillnet directed to demersal fish (100-219 mm)	GNS_DEF_100-219_0_0
Set gillnet, Demersal fish, mesh size 10-30mm, no selectivity device, all vessels	GNS_DEF_10-30_0_0_all
Set gillnet, Demersal fish, mesh size 120-219mm, no selectivity device, all vessels	GNS_DEF_120-219_0_0_all
Set Gillnet, Demersal Fish, Mesh size 120-219, All Vessels, No grid selectivity, Fully Documented Fisheries	GNS_DEF_120-219_0_0_all_FDF
Set gillnet directed to demersal fish (45-59 mm)	GNS_DEF_45-59_0_0
Set gillnet, Demersal fish, mesh size 60-79 mm, no selectivity device	GNS_DEF_60-79_0_0
Set gillnet directed to demersal fish (80-99 mm)	GNS_DEF_80-99_0_0
Set gillnet, Demersal fish, all mesh sizes, no selectivity device, all vessels	GNS_DEF_all_0_0_all
Trammel nets, Demersal fish, mesh size 60-79mm, no selectivity device	GTR_DEF_60-79_0_0
Trammel nets, Demersal fish, all mesh sizes, no selectivity device, all vessels	GTR_DEF_all_0_0_all
Hand lines directed to demersal fish	LHM_DEF_0_0_0
Set longline directed to demersal fish	LLS_DEF_0_0_0
Set longlines, Demersal fish, mesh size not specified, no selectivity device, all vessels.	LLS_DEF_0_0_0_all
Set longlines, Finfish, no selectivity device, all vessels	LLS_FIF_0_0_0_all
Demersal fisheries, Demersal fish, mesh size any, no selectivity device, all vessels	MIS_DEF_all_0_0_all*
Demersal fisheries - Miscellaneous Industrial bycatch	MIS_MIS_0_0_0_IBC*
Demersal fisheries - Miscellaneous	MIS_MIS_All_0_0_All*
Bottom otter trawl directed to crustaceans (at least 70 mm)	OTB_CRU_>=70_0_0
Otter trawl, Crustaceans, mesh size 100-119, no selectivity device, all vessels	OTB_CRU_100-119_0_0_all
Otter trawl, Crustaceans and Demersal fish, mesh size 32-69, no selectivity device, all vessels	OTB_CRU_32-69_0_0_all
Otter trawl, Crustaceans, mesh size 32-69, selectivity device - grid 22mm, all vessels	OTB_CRU_32-69_2_22_all
Otter trawl, Crustaceans, mesh size 70-89, selectivity device - grid 35mm, all vessels	OTB_CRU_70-89_2_35_all
Bottom otter trawl directed to crustaceans (70-99 mm)	OTB_CRU_70-99_0_0
Otter trawl, Crustaceans and Demersal fish, mesh size 70-99, no selectivity device, all vessels	OTB_CRU_70-99_0_0_all
Otter trawl, Crustaceans and Demersal fish, mesh size 90-119, no selectivity device, all vessels	OTB_CRU_90-119_0_0_all
Bottom otter trawl, Crustaceans, mesh Size 90-119, Selectivity Device - none, All vessel types, Fully Documented Fisheries	OTB_CRU_90-119_0_0_all_FDF
Bottom otter trawl, Crustaceans, all mesh sizes, no selectivity devise, all vessel types	OTB_CRU_All_0_0_All
Bottom otter trawl directed to demersal fish (100-119 mm)	OTB_DEF_100-119_0_0

GEAR TYPE	AVAILABLE METIER TAGS
Otter trawl, Demersal fish and Crustaceans, mesh size more than 120mm, no selectivity device, all vessels	OTB_DEF_>=120_0_0_all
Bottom otter trawl, Demersal fish, Mesh Size 120 or greater, Selectivity Device - none, All vessel types, Fully Documented Fisheries	OTB_DEF_>=120_0_0_all_FDF
Bottom otter trawl directed to demersal fish (at least 55 mm)	OTB_DEF_>=55_0_0
Bottom otter trawler targeting demersal fish with a mesh size > 70 mm	OTB_DEF_>=70_0_0
Bottom otter trawler targeting demersal fish with a mesh size 100-119 mm	OTB_DEF_100-119_0_0_all
Bottom otter trawl directed to demersal fish (70-99 mm)	OTB_DEF_70-99_0_0
Bottom otter trawl directed to demersal fish, all mesh sizes, no selectivity device	OTB_DEF_All_0_0_All
Otter trawl, Mixed crustaceans and demersal fish, mesh size more than 55mm, no selectivity device.	OTB_MCD_>=55_0_0
Otter trawler targeting cephalopods and fish	OTB_MCF_>=70_0_0
Otter trawl, Molluscs, mesh size 70-99mm, no selectivity device, all vessels	OTB_MOL_70-99_0_0_all
Bottom otter trawl directed to mixed pelagic and demersal fish (at least 70 mm)	OTB_MPD_>=70_0_0
Bottom otter trawl directed to pelagic and demersal fish (at least 55 mm)	OTB_MPD_>=55_0_0
Otter Bottom trawl, Small pelagic fish, 32-69 mm, no selectivity device, all vessels	OTB_SPF_32-69_0_0_all
Midwater otter trawl, Demersal species, mesh size 100-119mm, no selectivity device, all vessels	OTM_DEF_100-119_0_0_all
Midwater otter trawl, Demersal species, mesh size 32-54mm, no selectivity device, all vessels	OTM_DEF_32-54_0_0_all
Midwater otter trawl, Demersal species, mesh size 55-69mm, no selectivity device, all vessels	OTM_DEF_55-69_0_0_all
Midwater otter trawl, Demersal species, mesh size 70-99mm, no selectivity device, all vessels	OTM_DEF_70-99_0_0_all
Midwater otter trawl, Demersal species, mesh size 80-89mm, no selectivity device, all vessels	OTM_DEF_80-89_0_0_all
Multi-rig otter trawl directed to crustaceans (at least 70 mm)	OTT_CRU_>=70_0_0
Multi-rig otter trawl directed to demersal fish (at least 70 mm)	OTT_DEF_>=70_0_0
Multi-rig otter trawl, demersal fish, mesh size more than 120mm, no selectivity device, all vessels	OTT_DEF_>=120_0_0_all
Multi-rig otter trawl, demersal fish, mesh size 100-119mm, no selectivity device, all vessels	OTT_DEF_100-119_0_0_all
Multi-rig otter trawl, demersal fish, mesh size 16-31mm, no selectivity device, all vessels	OTT_DEF_16-31_0_0_all
Multi-rig otter trawl, demersal fish, mesh size 80-89mm, no selectivity device, all vessels	OTT_DEF_80-89_0_0_all
Multi-rig otter trawl, demersal fish, mesh size 90-99mm, no selectivity device, all vessels	OTT_DEF_90-99_0_0_all
Purse seine, Small pelagic fish, no selectivity device.	PS_SPF_0_0_0
Bottom pair trawl directed to demersal fish (at least 70 mm)	PTB_DEF_>=70_0_0
Pair bottom trawl, demersal fish, mesh size more than 120mm, no selectivity device, all vessels	PTB_DEF_>=120_0_0_all
Pair bottom trawler targeting demersal fish	PTB_DEF_>=70_0_0
Pair bottom trawl, demersal fish, mesh size 80-89mm, no selectivity device, all vessels	PTB_DEF_80-89_0_0_all
Bottom pair trawl directed to mixed pelagic and demersal fish (at least 55 mm)	PTB_MPD_>=55_0_0
Midwater pair trawl, demersal fish, mesh size 90-104 mm, no selectivity device	PTM_DEF_90-104_0_0
Anchored seine, Demersal fish, mesh size more than 120mm, no selectivity device, all vessels	SDN_DEF_>=120_0_0_all

GEAR TYPE	AVAILABLE METIER TAGS
Anchored Seine, Demersal Fish, Mesh Size 120 or above, Selectivity Device - none, All vessels, Fully Documented Fisheries	SDN_DEF_>=120_0_0_all_FDF
Fly shooting seine, Demersal fish, mesh size more than 120mm, no selectivity device, all vessels	SSC_DEF_>=120_0_0_all
Fly shooting seine, Demersal Fish, Mesh Size 120 or greater, Selectivity Device - none, All vessels, Fully Documented Fisheries	SSC_DEF_>=120_0_0_all_FDF
Fly shooting seine, Demersal fish, mesh size 100-119mm, no selectivity device, all vessels.	SSC_DEF_100-119_0_0_all
Fly shooting seine, Demersal fish, mesh size 80-89mm, no selectivity device, all vessels.	SSC_DEF_80-89_0_0_all
Fly shooting seine, , Demersal fish, all mesh sizes, no selectivity, all vessels	SSC_DEF_All_0_0_All
Beam trawl, Crustaceans, mesh size 16-31mm, no selectivity device, all vessels	TBB_CRU_16-31_0_0_all
Beam trawl, Demersal fish, mesh size 16mm or less, no selectivity device, all vessels	TBB_DEF_<16_0_0_all
Beam trawl, Demersal fish, mesh size more than 120, no selectivity device, all vessels	TBB_DEF_>=120_0_0_all
Beam Trawl, mesh size 100-119mm	TBB_DEF_100-119_0_0_all
Beam trawl, Demersal fish, mesh size 70-99, no selectivity device, all vessels	TBB_DEF_70-99_0_0_all
Beam trawl, Demersal fish, mesh size 90-99, no selectivity device, all vessels	TBB_DEF_90-99_0_0_all
Beam trawl, Demersal fish, all mesh sizes, no selectivity, all vessels	TBB_DEF_all_0_0_all

* The use of metiers under the MIS_MIS category should be minimized.

Appendix IV.

The information requested in this Appendix is required for stocks identified in DC_Annex_1.xlsx with “Y” under column “DLS proxy RP” and for which such information has not been reported in previous data calls.

“Supporting life history information” (See DC_Annex_2_SupportingInformationLifeHistoryParameters.xlsx) should include information on life history traits for the last three years (2018, 2019, 2010), if available, noting that some candidate reference points may require input on L_{mat} (length at first maturity), growth parameters (e.g., L_{inf} , K), and M (natural mortality). Please note that article 17(3) of Regulation (EC) No 2017/1004 states “..requests made by end-users of scientific data in order to serve as a basis for advice to fisheries management, Member States shall ensure that relevant detailed and aggregated data are updated and made available to the relevant end-users of scientific data within the deadlines set in the request,..”

^ If information is provided on traits not listed in the template, include them in these rows with the parameter name in the comments column.						
	Value	Reference	Country code	Stock code	Species code	Comments
Lmat						
Linf						
K						
M						
Unspecified parameter^						
Unspecified parameter^						

Figure IV. Supporting life history information.

Appendix V.

WGNAS glossary

1SW (*One-Sea-Winter*). Maiden adult salmon that has spent one winter at sea.

2SW (*Two-Sea-Winter*). Maiden adult salmon that has spent two winters at sea.

MSW (*Multi-Sea-Winter*). A MSW salmon is an adult salmon that has spent two or more winters at sea and may be a repeat spawner.

Catch-and-release fisheries Catch and release is a practice within recreational fishing intended as a technique of conservation. After capture, the fish are unhooked and returned to the water before experiencing serious exhaustion or injury.

NAC (*North American Commission*). The North American Atlantic Commission of NASCO or the North American Commission area of NASCO.

WGC (*West Greenland Commission*). The West Greenland Commission of NASCO or the West Greenland Commission area of NASCO.

NEAC (*North Eastern Atlantic Commission*). North-East Atlantic Commission of NASCO or the North-East Atlantic Commission area of NASCO.

NEAC – N (*North Eastern Atlantic Commission- northern area*). The northern portion of the North-East Atlantic Commission area of NASCO.

NEAC – S (*North Eastern Atlantic Commission – southern area*). The southern portion of the North-East Atlantic Commission area of NASCO.

NASCO (*North Atlantic Salmon Conservation Organisation*). An international organisation, established by an inter-governmental convention in 1984. The objective of NASCO is to conserve, re-store, enhance and rationally manage Atlantic salmon through international cooperation taking account of the best available scientific information.