### Fisheries Dependent Information data call 2021 - Annex 1

#### Time period covered by the data call

Data are requested for the years 2014 and 2020 for all the tables with the exception of Table H and Table I. For Tables H and I, for Mediterranean and Black Sea regions (GFCM GSAs), data are requested for 2020 only.

In case Member States need to complete datasets sent during 2020 FDI data call, there is the possibility to resubmit data for the years 2015-2019.

#### **Data format**

The format of the datasets requested are detailed in the following pages. Please ensure that data entries are fully consistent with coding given in the Appendixes.

Please note that Tables C, D, E, F and K are **not requested for Mediterranean and Black Sea regions** (GFCM GSAs).

Please note also that the submission of table K is not compulsory. This table must be used to provide only discards data for which no biological data are available (that is, for discards data that have not already been reported in tables C and D).

#### **Definitions**

Fleet Segment: A group of vessels with the same length class and predominant fishing gear during the year (i.e. a fleet segment is the combination of a fishing technique category and a vessel length category). Data in Tables A, H, I and J should be provided at the level of the fleet segment (year\*vessel length classes \* fishing technique) and not by clustered fleet segment.

Fishing technique: The codes used are the same codes used in the DCF fleet socio-economic data call. The fishing technique should be calculated at the *vessel\*year* level and each *vessel\*year* must then be assigned only to one fishing technique in response to the data call; therefore, if a vessel operated using more than one fishing technique, a dominance criterion must be applied. The fishing technique should be assigned to the vessel taking into account all its fishing activity during the year and should be provided in the same way in all the tables (Tables A, G, H, I and J).

Supra-region: The codes used are the same codes used in the DCF fleet socio-economic data call. Each vessel must be assigned to the supra-region where most of its activity takes place. The metric to be used should be the *number of fishing days*. The supra-region should be calculated at the *vessel\*year* level, it should be provided in the same way in all the tables (Tables A, G, H, I and J) and it must be then assigned to only one supra-region in response to the data call. It is therefore possible that for a vessel there are fishing activities taking place in a sub-region belonging to a different supra-region than the one where most of its activities take place and to which it is assigned.

Discards: In Table A, discards have to be based on scientific estimates. Discards estimates should be provided at the domain level (DOMAIN\_DISCARDS).

Landings: The field TOTWGHTLANDG includes the landings below minimum conservation reference size (MCRS). Please note that in Tables C, D, E and F, the value of the field TOTWGHTLANDG for a domain must be equal to the sum of TOTWGHTLANDG values in Table A for the same domain.

Domains: A domain refers to the group of vessels used to calculate estimates (discards, numbers at age, number at length). A domain may or may not be equivalent to a métier. The purpose of the domain is to link tables C, D, E and F with table A, so domain labels used in Tables C, D, E and F need to be present also in Table A. For Mediterranean and Black Sea regions in table A, the domains can be always set equal to 'NK'.

Domain landings: In Tables E and F, for a given DOMAIN\_LANDINGS code, there should be a unique TOTWGHTLANDG value that is repeated for all ages/lengths.

Domain discards: In Tables C and D, for a given DOMAIN\_DISCARDS code, there should be a unique TOTWGHTLANDG value and a unique DISCARDS value repeated for all ages/lengths.

Deep fishing: The DEEP variable is present in Table A, Table G, Table H and Table I. A fishing trip must be marked as a *deep fishing trip* (using the DEEP variable) when the catch of deep sea species exceeds 100 kg. The deep species to be considered are described in the following EU regulations: for data up to and including 2016 the deep-sea species to be considered are listed in the Annex I of the regulation (EC) 2347/2002 (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002R2347); for data from 2017 the deep-sea species to be considered are listed in the Annex I of the regulation (EU) 2016/2336 (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R2336).

Length measurement codification: For fish (Osteichthyes and Elasmobranches), the total length should be provided at the lower centimetre; for crustaceans, the cephalo-thoracic length should be provided at the lower millimetre; and for cephalopods, the dorsal mantle length should be provided at the lower centimetre.

Confidentiality: Tables A, G, H and I contain a field called CONFIDENTIAL. Please note that the values accepted for this variable differ in the different tables, that is 'Y' (yes) or 'N' (no) in tables G and I; 'A' (all), 'N' (none), 'W' (weight), 'V' (value) in table A and H. In general, it would be very difficult to identify an individual vessel activity as soon as there is more than one vessel contributing to the data of a given row. As a suggestion, data that relate to less than 3 vessels could be considered confidential.

PRINCIPAL\_SUB\_REGION in Table J: In order to define the principal sub-region of a vessel, where the vessel has his majority fishing activity during the year, the metric *number of fishing days* should be used. The principal sub-region has to be calculated vessel by vessel (i.e. calculated at the vessel level); consequently, the variables TOTTRIPS, TOTKW, TOTGT, TOTVES, AVGAGE, AVGLOA and MAXSEADAYS should be calculated for each combination of COUNTRY \* YEAR \* VESSEL\_LENGTH \* FISHING\_TECH \* SUPRA\_REGION \* GEO\_INDICATOR \* PRINCIPAL\_SUB\_REGION.

#### **Table A. Catch summary**

Data to be provided for all landings, both those from métiers selected for biological sampling and otherwise.

- 1. COUNTRY: According to the code list provided in Appendix 1; missing values not allowed.
- 2. YEAR: Four digits (e.g. 2019); missing values not allowed.
- 3. QUARTER: 1, 2, 3 or 4; missing values not allowed.
- 4. VESSEL LENGTH: According to the code list provided in Appendix 2; 'NK' if not known.
- 5. FISHING\_TECH: According to the code list provided in Appendix 3; missing values not allowed.
- 6. GEAR TYPE: According to the code list provided in Appendix 4; 'NK' if not known.
- 7. TARGET\_ASSEMBLAGE: According to the code list provided in Appendix 5; 'NK' if not known.
- 8. MESH SIZE RANGE: According to the code list provided in Appendix 6; 'NK' if not known.
- 9. METIER: According to Appendix 7; 'NK' if not known.
- 10. DOMAIN DISCARDS<sup>1</sup>: Text in format specified in Appendix 8; 'NK' if not known
- 11. DOMAIN LANDINGS<sup>1</sup>: Text in format specified in Appendix 8; 'NK' if not known.
- 12. SUPRA\_REGION: According to the code list in Appendix 9; missing values not allowed.
- 13. SUB\_REGION: According to the code list in Appendix 9; 'NK' if not known.
- 14. EEZ\_INDICATOR: According to the code list in Appendix 9; 'NK' can be use only when also the subregion is not known.
- 15. GEO INDICATOR: According to the code list in Appendix 10; 'NK' if not known.
- 16. NEP\_SUB\_REGION: Functional Units (FUs) according to the list in Appendix 9; 'NK' if not known or 'NA' if not applicable. This variable is asked only for *Nephrops norvegicus* catches.
- 17. SPECON\_TECH: Specific conditions related to technical measures according to Appendix 11; 'NK' if not known or 'NA' if not applicable.
- 18. DEEP: 'DEEP' or 'NA' (i.e. the trips considered as deep fishing trips, see the definition on the second page of the Annex, should be indicated with 'DEEP').
- 19. SPECIES: According to the FAO 3-alpha code list, see Appendix 12; missing values not allowed.
- 20. TOTWGHTLANDG: Estimated landings in tonnes (live weight) [precision to 3 digits after the decimal], including landings below minimum conservation reference size (MCRS); missing values not allowed.
- 21. TOTVALLANDG: Estimated total value of the landings in euro; 'NK' if not known.
- 22. DISCARDS: Estimated discards in tonnes [precision to 3 digits after the decimal]; 'NK' if not known.
- 23. CONFIDENTIAL: [1 character] Accepted values: 'A' (all), 'N' (none), 'W' (weight), 'V' (value); missing values not allowed. When the value 'W' is used, values in fields TOTWGHTLANDG and DISCARDS are considered confidential.

<sup>&</sup>lt;sup>1</sup> Domains refer to the group of vessels used to calculate estimates (discards, numbers at age, number at length) by a country. The domain may or may not be equivalent to a métier.

#### Table B. Refusal rate

Member States should only submit data to this table if their sampling design can be considered a probability based vessel selection design<sup>2</sup>.

- 1. COUNTRY: According to the code list provided in Appendix 1; missing values not allowed.
- 2. YEAR: Four digits (e.g. 2019); missing values not allowed.
- 3. SAMPLE\_FRAME: The name of the sample frame over which the refusal rate was calculated; missing values not allowed.
- 4. REFUSAL\_RATE: The raw industry refusal rate (<1, precision to 2 digits after the decimal), which is defined as the proportion of vessel skippers who, having been successfully contacted, ultimately failed to allow the observer to go on board to obtain the sample; if not known use 'NK'.
- 5. COVERAGE\_RATE: The proportion of the population that was sampled as a rate (<1, precision to 2 digits after the decimal; if not known use 'NK'.
- 6. NONRESPONSE\_RATE: The non-response rate (<1, precision to 2 digits after the decimal), which is defined as the proportion of all attempted contacts that ultimately failed to provide a sample, for whatever reason; if not known use 'NK'.
- 7. VESSELS FLEET: [integer] Total number of vessels in the fleet; if not known use 'NK'.
- 8. TRIPS\_FLEET: [integer] Total number of trips conducted by the fleet in the year; if not known use 'NK'.
- 9. TRIPS\_SAMPLED\_ONBOARD: [integer] Number of trips sampled on-board vessels; if not known use 'NK'.
- 10. UNIQUE\_VESSELS\_SAMPLED: [integer] Number of unique vessels sampled in the year; if not known use 'NK'.
- 11. UNIQUE\_VESSELS\_CONTACTED: [integer] Number of unique vessels contacted in the year; if not known use 'NK'.
- 12. NOT\_AVAILABLE<sup>3</sup>: [integer] Number of not available vessels for sampling access; if not known use 'NK'.
- 13. NO\_CONTACT\_DETAILS<sup>4</sup>: [integer] Number of missing contact details for skippers or vessel owners; if not known use 'NK'.
- 14. NO\_ANSWER<sup>4</sup>: [integer] Number of contact attempts (made by the observers) that, despite the correct contact details, were not successful (i.e. it was not possible to establish contact with skippers or vessel owners); if not known use 'NK'.
- 15. OBSERVER\_DECLINED<sup>4</sup>: [integer] Following the availability of skippers or vessel owners, number of time the observers declined to go on-board; if not known use 'NK'.
- 16. INDUSTRY\_DECLINED<sup>4</sup>: [integer] Number of times skippers or vessel owners declined to accept observers on-board; if not known use 'NK'.
- 17. TOT\_SELECTIONS: [integer] Total number of sequential selections from the randomised process (as illustrated in SGPIDS 3³); if not known use 'NK'.

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<sup>&</sup>lt;sup>2</sup> Report of the Study Group on the Practical Implementation of Discard sampling plans (SGPIDS 3). ICES CM 2013/ACOM:56.

<sup>&</sup>lt;sup>3</sup> Outcome of attempted vessel contact, one of five contact types (see Appendix 13).

#### Table C NAO OFR. Discards age data

Table to be provided only for the Atlantic Ocean and other regions (not for the Mediterranean and Black Sea regions). Discards estimates should be provided at the domain level (DOMAIN\_DISCARDS).

- COUNTRY: According to the code list provided in Appendix 1; missing values not allowed.
- 2. YEAR: Four digits (e.g. 2019); missing values not allowed.
- 3. DOMAIN\_DISCARDS: Text in format specified in Appendix 8; missing values not allowed.
- 4. NEP\_SUB\_REGION: Functional Units (FUs) according to the list in Appendix 9; 'NK' if not known or 'NA' if not applicable. This variable is asked only for *Nephrops norvegicus* catches.
- 5. SPECIES: According to the FAO 3-alpha code list, see Appendix 12; missing values not allowed.
- 6. TOTWGHTLANDG: Estimated landings in tonnes [precision to 3 digits after the decimal]; missing values not allowed.
- 7. DISCARDS: Estimated discards in tonnes [precision to 3 digits after the decimal]; missing values not allowed. If age based information is present, this quantity should correspond to the sum of products.
- 8. NO\_SAMPLES: The number of trips that relate to discards; a number should be given only if it relates to this domain, otherwise use 'NK'.
- 9. NO\_AGE\_MEASUREMENTS: The number of age measurements that relate to discards. If an ALK formed from a larger aggregation of vessels than the domain has been used to estimate age information for this domain, insert the total number of age measurements used to form the ALK. If age measurements are not available or the number of measurements is not known use 'NK'.
- 10. AGE\_MEASUREMENTS\_PROP: [a value between 0 and 1] If an ALK formed from a larger aggregation of vessels than the domain has been used to estimate age information for this domain, insert the proportion of age measurements coming from the domain. If not applicable (i.e. all age measurements came from within the domain) use 'NA'.
- 11. MIN\_AGE: [integer] The minimum age in the data for this species-domain combination; minimum age and maximum age must either both be 'NK' or both be not 'NK'.
- 12. MAX\_AGE: [integer] The true maximum age in the data for this species-domain combination (no plus group is allowed); minimum age and maximum age must either both be 'NK' or both be not 'NK'.
- 13. AGE: [integer] (MIN\_AGE <= AGE <= MAX\_AGE). 'NK' can be used only if both MIN\_AGE and MAX AGE are not known.
- 14. NO\_AGE: The number in thousands [precision to 3 digits after the decimal] at the specified age; if no age specific information is available use 'NK'.
- 15. MEAN\_WEIGHT: The mean weight of fish in the discards at that age; if no age specific information is available use 'NK'.
- 16. WEIGHT\_UNIT: The unit of measure used for the column MEAN\_WEIGHT [kg = kilogram, g = gram]; if weight information is not available, use 'NK'.
- 17. MEAN\_LENGTH: The mean length of fish in the discards at that age; if no age specific information is available use 'NK'.
- 18. LENGTH\_UNIT: The unit of measure used for the column MEAN\_LENGTH ['mm'=millimetre, 'cm'=centimetre]; if length information is not available use 'NK'.

#### Table D NAO OFR. Discards length data

Table to be provided only for the Atlantic Ocean and other regions (not for the Mediterranean and Black Sea regions). Discards estimates should be provided at the domain level (DOMAIN\_DISCARDS).

- 1. COUNTRY: According to the code list provided in Appendix 1; missing values not allowed.
- 2. YEAR: Four digits (e.g. 2019); missing values not allowed.
- 3. DOMAIN\_DISCARDS: Text in format specified in Appendix 8; missing values not allowed.
- 4. NEP\_SUB\_REGION: Functional Units (FUs) according to the list in Appendix 9; 'NK' if not known or 'NA' if not applicable. This variable is asked only for *Nephrops norvegicus* catches.
- 5. SPECIES: According to the FAO 3-alpha code list, see Appendix 12; missing values not allowed
- 6. TOTWGHTLANDG: Estimated landings in tonnes [precision to 3 digits after the decimal]; missing values not allowed.
- 7. DISCARDS: Estimated discards in tonnes [precision to 3 digits after the decimal]; missing values not allowed.
- 8. NO\_SAMPLES: The number of trips that relate to discards; a number should be given only if it relates to this domain, otherwise use 'NK'.
- 9. NO\_LENGTH\_MEASUREMENTS: The number of length measurements, from within the domain, that relate to discards; a number should be given only if it relates to this domain, otherwise use 'NK'.
- 10. LENGTH\_UNIT: The unit of length classes ['mm'=millimetre, 'cm'=centimetre]; if length information is not available use 'NK'.
- 11. MIN\_LENGTH: [integer] The minimum length in the data for this species-domain combination; minimum length and maximum length must either both be 'NK' or both be not 'NK'.
- 12. MAX\_LENGTH: [integer] The maximum length in the data for this species-domain combination; minimum length and maximum length must either both be 'NK' or both be not 'NK'.
- 13. LENGTH: [integer] (MIN\_LENGTH <= LENGTH <= MAX\_LENGTH); 'NK' can be used only if both MIN\_LENGTH and MAX\_LENGTH are not known.
- 14. NO\_LENGTH: The number in thousands [precision to 3 digits after the decimal] at the specified length. If length information is not available, use 'NK'.
- 15. MEAN\_WEIGHT\_AT\_LENGTH: The mean weight of fish; if no age specific information is available use 'NK'.
- 16. WEIGHT\_UNIT: The unit of measure used for the column MEAN\_WEIGHT\_AT\_LENGTH [kg = kilogram, g = gram]; if weight information is not available, use 'NK'.

#### Table E NAO OFR. Landings age data

Table to be provided only for the Atlantic Ocean and other regions (not for the Mediterranean and Black Sea regions).

- 1. COUNTRY: According to the code list provided in Appendix 1; missing values not allowed.
- 2. YEAR: Four digits (e.g. 2019); missing values not allowed.
- 3. DOMAIN\_LANDINGS: Text in format specified in Appendix 8; missing values not allowed.
- 4. NEP\_SUB\_REGION: Functional Units (FUs) according to the list in Appendix 9; 'NK' if not known or 'NA' if not applicable. This variable is asked only for *Nephrops norvegicus* catches.
- 5. SPECIES: According to the FAO 3-alpha code list, see Appendix 12; missing values not allowed
- 6. TOTWGHTLANDG: Estimated landings in tonnes [precision to 3 digits after the decimal]; missing values not allowed.
- 7. NO\_SAMPLES: The number of trips that relate to landings; a number should be given only if it relates to this domain, otherwise use 'NK'.
- 8. NO\_AGE\_MEASUREMENTS: The number of age measurements that relate to landings. If an ALK formed from a larger aggregation of vessels than the domain has been used to estimate age information for this domain insert the total number of age measurements used to form the ALK. If age measurements not available or number of measurements not known use 'NK'.
- 9. AGE\_MEASUREMENTS\_PROP: [a value between 0 and 1] If an ALK formed from a larger aggregation of vessels than the domain has been used to estimate age information for this domain insert the proportion of age measurements coming from the domain. If not applicable (i.e. all age measurements came from within the domain) use 'NA'.
- 10. MIN\_AGE: [integer] The minimum age in the data for this species-domain combination; minimum age and maximum age must either both be 'NK' or both be not 'NK'.
- 11. MAX\_AGE: [integer] The true maximum age in the data for this species-domain combination (no plus group is allowed); minimum age and maximum age must either both be 'NK' or both be not 'NK'.
- 12. AGE: [integer] The age of the fish (MIN\_AGE <= AGE <= MAX\_AGE); 'NK' can be used only if both MIN\_AGE and MAX\_AGE are not known.
- 13. NO\_AGE: The number in thousands [precision to 3 digits after the decimal] at the specified age; 'NK' if no age specific information is available.
- 14. MEAN\_WEIGHT: The mean weight of landed fish at that age; if no age specific information is available use 'NK'.
- 15. WEIGHT\_UNIT: The unit of measure used for the column MEAN\_WEIGHT [kg = kilogram, g = gram]; if weight information is not available, use 'NK'.
- 16. MEAN\_LENGTH: The mean length of landed fish at that age; if no age specific information is available use 'NK'.
- 17. LENGTH\_UNIT: The unit of measure used for the column MEAN\_LENGTH ['mm'=millimetre, 'cm'=centimetre]; if length information is not available use 'NK'.

#### Table F NAO OFR. Landings length data

Table to be provided only for the Atlantic Ocean and other regions (not for the Mediterranean and Black Sea regions).

- 1. COUNTRY: According to the code list provided in Appendix 1; missing values not allowed.
- 2. YEAR: Four digits (e.g. 2019); missing values not allowed.
- 3. DOMAIN LANDINGS: Text in format specified in Appendix 8; missing values not allowed.
- 4. NEP\_SUB\_REGION: Functional Units (FUs) according to the list in Appendix 9; 'NK' if not known or 'NA' if not applicable. This variable is asked only for *Nephrops norvegicus* catches.
- 5. SPECIES: according to the FAO 3-alpha code list, see Appendix 12; missing values not allowed.
- 6. TOTWGHTLANDG: Estimated landings in tonnes [precision to 3 digits after the decimal]; missing values not allowed.
- 7. NO\_SAMPLES: The number of trips that relate to landings; a number should be given only if it relates to this domain, otherwise 'NK'.
- 8. NO\_LENGTH\_MEASUREMENTS: The number of length measurements, from within the domain, that relate to landings; a number should be given only if it relates to this domain, otherwise 'NK'.
- 9. LENGTH\_UNIT: The unit of length classes ['mm'=millimetre, 'cm'=centimetre]; 'NK' if length information is not available.
- 10. MIN\_LENGTH: [integer] The minimum length in the data for this species-domain combination; minimum length and maximum length must either both be 'NK' or both be not 'NK'.
- 11. MAX\_LENGTH: [integer] The true maximum length in the data for this species-domain combination; minimum length and maximum length must either both be 'NK' or both be not 'NK'.
- 12. LENGTH: [integer] (MIN\_LENGTH <= LENGTH <= MAX\_LENGTH). 'NK' can be used only if both MIN\_LENGTH and MAX\_LENGTH are not known.
- 13. NO\_LENGTH: The number in thousands [precision to 3 digits after the decimal] at the specified length. If length information is not available, use 'NK'.
- 14. MEAN\_WEIGHT\_AT\_LENGTH: The mean weight of fish; if no age specific information is available use 'NK'.
- 15. WEIGHT\_UNIT: The unit of measure used for the column MEAN\_WEIGHT\_AT\_LENGTH [kg = kilogram, g = gram]; if weight information is not available, use 'NK'.

#### **Table G. Effort summary**

Data to be provided for all effort, both that from métiers selected for biological sampling and otherwise.

- 1. COUNTRY: According to the code list provided in Appendix 1; missing values not allowed.
- 2. YEAR: Four digits (e.g. 2019); missing values not allowed.
- 3. QUARTER: 1, 2, 3 or 4; missing values not allowed.
- 4. VESSEL\_LENGTH: According to the code list provided in Appendix 2; 'NK' if not known.
- 5. FISHING\_TECH: Fishing technique according to the code list provided in Appendix 3; missing values not allowed.
- 6. GEAR\_TYPE: According to the code list provided in Appendix 4; 'NK' if not known.
- 7. TARGET ASSEMBLAGE: According to the code list provided in Appendix 5; 'NK' if not known.
- 8. MESH\_SIZE\_RANGE: According to the code list provided in Appendix 6; 'NK' if not known.
- 9. METIER: According to Appendix 7; 'NK' if not known.
- 10. SUPRA REGION: According to the code list in Appendix 9; missing values not allowed.
- 11. SUB\_REGION: According to the code list in Appendix 9; 'NK' if not known.
- 12. EEZ\_INDICATOR: According to the code list in Appendix 9; 'NK' can be use only when also the subregion is not known.
- 13. GEO\_INDICATOR: According to the code list in Appendix 10; 'NK' if not known.
- 14. SPECON\_TECH: Specific conditions related to technical measures according to Appendix 11; 'NK' if not known or 'NA' if not applicable.
- 15. DEEP: 'DEEP' or 'NA' (i.e. the trips considered as deep fishing trips, see the definition on the second page of the Annex, should be indicated with 'DEEP').
- 16. TOTSEADAYS: Days at sea<sup>4</sup>; if nominal fishing activity is not available use 'NK'.
- 17. TOTKWDAYSATSEA: Fishing effort in kW-days, i.e. engine power in kW times days at sea; 'NK' if nominal effort is not available.
- 18. TOTGTDAYSATSEA: Fishing effort in gross tonnage\*days at sea; 'NK' if not available.
- 19. TOTFISHDAYS: Fishing days; 'NK' if the number of fishing days is not available.
- 20. TOTKWFISHDAYS: Fishing effort in kW-days, i.e. engine power in kW times fishing days; 'NK' if not available.
- 21. TOTGTFISHDAYS: Fishing effort in gross tonnage\*fishing days; 'NK' if not available.
- 22. HRSEA: Hours at sea; 'NK' if not available.
- 23. KWHRSEA: kW hours at sea [kW\*hours at sea]; 'NK' if not available.
- 24. GTHRSEA: GT hours at sea [Gross tonnage\*hours at sea]; 'NK' if not available.
- 25. TOTVES: [integer] Number of vessels conducting activity as defined in columns 3 to 14<sup>5</sup>; 'NK' if the number of vessels is not known.
- 26. CONFIDENTIAL: [1 character] If data are considered subject to confidentiality use 'Y', otherwise 'N'; missing values not allowed.

<sup>&</sup>lt;sup>4</sup> For recommended calculation method of days at sea and fishing days, please refer to the following report: Castro Ribeiro, C. et al. Report of the 2nd Workshop on Transversal Variables. Nicosia, Cyprus. 22-26 February 2016. A DCF ad-hoc workshop. 109pp.EUR 27897; doi 10.2788/042271.

<sup>&</sup>lt;sup>5</sup> It is realised and accepted that if vessels use more than 1 gear and/or fish in more than 1 sub-region in a quarter the total across categories will exceed the number of vessels in the fleet segment.

#### **Table H. Landings by rectangle**

Data to be provided for all landings, both those from métiers selected for biological sampling and otherwise<sup>6</sup>. If it is not possible to submit data at a finer spatial resolution to that required for Table A please do not submit data to table H.

- 1. COUNTRY: According to the code list provided in Appendix 1; missing values not allowed.
- 2. YEAR: Four digits (e.g. 2019); missing values not allowed.
- 3. QUARTER: 1, 2, 3 or 4; missing values not allowed.
- 4. VESSEL\_LENGTH: According to the code list provided in Appendix 2; 'NK' if not known.
- 5. FISHING TECH: According to the code list provided in Appendix 3; missing values not allowed.
- 6. GEAR\_TYPE: According to the code list provided in Appendix 4; 'NK' if not known.
- 7. TARGET\_ASSEMBLAGE: According to the code list provided in Appendix 5; 'NK' if not known.
- 8. MESH SIZE RANGE: According to the code list provided in Appendix 6; 'NK' if not known.
- 9. METIER: According to Appendix 7; 'NK' if not known.
- 10. SUPRA\_REGION: According to the code list in Appendix 9; missing values not allowed.
- 11. SUB REGION: According to the code list in Appendix 9; 'NK' if not known.
- 12. EEZ\_INDICATOR: According to the code list in Appendix 9; 'NK' can be use only when also the subregion is not known.
- 13. GEO INDICATOR: According to the code list in Appendix 9; 'NK' if not known.
- 14. SPECON\_TECH: Specific conditions related to technical measures according to Appendix 11; 'NK' if not known or 'NA' if not applicable.
- 15. DEEP: 'DEEP' or 'NA' (i.e. the trips considered as deep fishing trips, see the definition on the second page of the Annex, should be indicated with 'DEEP').
- 16. RECTANGLE TYPE: 05\*05' or '05\*1' or '1\*1' or '5\*5' or 'NA'
  - '05\*05' if entries at 0.5\*0.5 degree resolution (e.g. if related to GFCM squares);
  - '05\*1' if entries at 0.5 degree latitude by 1.0 degree longitude (e.g. if related to ICES rectangles);
  - '1\*1' if entries at 1.0\*1.0 degree resolution (e.g. related to fisheries governed by the IOTC);
  - '5\*5' if entries at 5.0\*5.0 degree resolution (e.g. related to fisheries governed by the ICCAT);
  - 'NA' if a value is provided in the C\_SQUARE field.
- 17. RECTANGLE\_LAT: Latitude in decimal degrees [precision to 0.25 degrees] (see Appendix 14); if C SQUARE field provided, use 'NA'.
- 18. RECTANGLE\_LON: Longitude in decimal degrees [precision to 0.25 degrees] (see Appendix 14); if C SQUARE field provided, use 'NA'.
- 19. C\_SQUARE: [string with the format: XXXX:XXX:X] C-square notation at 0.5\*0.5 degree resolution; fill with 'NA' if all the 3 fields RECTANGLE\_TYPE, RECTANGLE\_LAT and RECTANGLE\_LON are provided.
- 20. SPECIES: According to the FAO 3-alpha code list, see Appendix 12; missing values not allowed.
- 21. TOTWGHTLANDG: Estimated landings in tonnes [precision to 3 digits after the decimal], including landings below MCRS (minimum conservation reference size); missing values not allowed.
- 22. TOTVALLANDG: Estimated total value of the landings in euro; 'NK' if not available.
- 23. CONFIDENTIAL: [1 character] Accepted values: 'A' (all), 'N' (none), 'W' (weight), 'V' (value); missing values not allowed.

<sup>6</sup> For vessels required to complete and submit a fishing logbook it is mandatory to complete geographical area of capture to ICES Division and statistical rectangle in FAO area 27 and to GFCM geographical sub-area and statistical rectangle in FAO area 37, Commission implementing regulation (EU) 2015/1962.

#### Table I. Effort by rectangle

Data to be provided for all effort, both that from métiers selected for biological sampling and otherwise<sup>7</sup>. If it is not possible to submit data at a finer spatial resolution to that required for Table G please do not submit data to table I.

- 1. COUNTRY: According to the code list provided in Appendix 1; missing values not allowed.
- 2. YEAR: Four digits (e.g. 2019); missing values not allowed.
- 3. QUARTER: 1, 2, 3 or 4; missing values not allowed.
- 4. VESSEL\_LENGTH: According to the code list provided in Appendix 2; 'NK' if not known.
- 5. FISHING\_TECH: According to the code list provided in Appendix 3; missing values not allowed.
- 6. GEAR\_TYPE: According to the code list provided in Appendix 4; 'NK' if not known.
- 7. TARGET\_ASSEMBLAGE: According to the code list provided in Appendix 5; 'NK' if not known.
- 8. MESH SIZE RANGE: According to the code list provided in Appendix 6; 'NK' if not known.
- 9. METIER: According to Appendix 7; 'NK' if not known.
- 10. SUPRA\_REGION: According to the code list in Appendix 9; missing values not allowed.
- 11. SUB REGION: According to the code list in Appendix 9; 'NK' if not known.
- 12. EEZ\_INDICATOR: According to the code list in Appendix 9; 'NK' can be use only when also the subregion is not known.
- 13. GEO\_INDICATOR: According to the code list in Appendix 10; 'NK' if not known.
- 14. SPECON\_TECH: Specific conditions related to technical measures according to Appendix 11; 'NK' if not known or 'NA' if not applicable.
- 15. DEEP: 'DEEP' or 'NA' (i.e. the trips considered as deep fishing trips, see the definition on the second page of the Annex, should be indicated with 'DEEP').
- 16. RECTANGLE TYPE: One of the following values: '05\*05' or '05\*1' or '1\*1' or '5\*5' or 'NA'
  - '05\*05' if entries at 0.5\*0.5 degree resolution (e.g. if related to GFCM squares);
  - '05\*1' if entries at 0.5 degree latitude by 1.0 degree longitude (e.g. if related to ICES rectangles);
  - '1\*1' if entries at 1.0\*1.0 degree resolution (e.g. related to fisheries governed by the IOTC);
  - '5\*5' if entries at 5.0\*5.0 degree resolution (e.g. related to fisheries governed by the ICCAT);
  - 'NA' if a value is provided in the C\_SQUARE field.
- 17. RECTANGLE\_LAT: Latitude in decimal degrees [precision to 0.25 degrees] (see Appendix 14); if C\_SQUARE field provided, use 'NA'.
- 18. RECTANGLE\_LON: Longitude in decimal degrees [precision to 0.25 degrees] (see Appendix 14); if C SQUARE field provided, use 'NA'.
- 19. C\_SQUARE: [string with the format: XXXX:XXX:X] C-square notation at 0.5\*0.5 degree resolution; fill with 'NA' if all the 3 fields RECTANGLE\_TYPE, RECTANGLE\_LAT and RECTANGLE\_LON are provided.
- 20. TOTFISHDAYS: Fishing days; missing values not allowed.
- 21. CONFIDENTIAL: [1 character] If data are considered subject to confidentiality use 'Y', otherwise 'N'; missing values not allowed.

<sup>&</sup>lt;sup>7</sup> For vessels required to complete and submit a fishing logbook it is mandatory to complete geographical area of capture to ICES Division and statistical rectangle in FAO area 27 and to GFCM geographical sub-area and statistical rectangle in FAO area 37, Commission implementing regulation (EU) 2015/1962.

#### Table J. Capacity and fleet segment effort

- 1. COUNTRY: According to the code list provided in Appendix 1; missing values not allowed.
- 2. YEAR: Four digits (e.g. 2019); missing values not allowed.
- 3. VESSEL\_LENGTH: According to the code list provided in Appendix 2; 'NK' if not known.
- 4. FISHING\_TECH: According to the code list provided in Appendix 3; missing values not allowed.
- 5. SUPRA REGION: According to the code list in Appendix 9; missing values not allowed.
- 6. GEO\_INDICATOR: According to the code list in Appendix 10; 'NK' if not known.
- 7. PRINCIPAL\_SUB\_REGION: Sub-region where the vessel has his majority fishing activity during the year. Principal sub-region has to be calculated vessel by vessel (i.e. calculated at the vessel level) and, in order to define the principal sub-region of a vessel, the metric *number of fishing days* should be used. According to the code list in Appendix 9; 'NK' if not known.
- 8. TOTTRIPS: [integer] Number of trips by a fishing vessel from a land location to a landing place, excluding non-fishing trips; 'NK' if not known.
- 9. TOTKW: Fishing capacity in kW; if not available use 'NK'.
- 10. TOTGT: Fishing capacity in gross tonnage; if not available use 'NK'.
- 11. TOTVES: [integer] Number of vessels in the fleet segment<sup>8</sup>; if not available use 'NK'.
- 12. AVGAGE: Average age of the vessels in the fleet segment; if not available use 'NK'.
- 13. AVGLOA: Average length over all [in metres] of the vessels in the fleet segment; if not available use 'NK'.
- 14. MAXSEADAYS: Average number of days at sea of the top 10 most active vessels in the fleet segment; if not available use 'NK'.

<sup>&</sup>lt;sup>8</sup> Fleet segment is a combination of fishing technique category and vessel length category.

#### Table K NAO OFR. Discards estimated by domain

Table to be provided only for the Atlantic Ocean and other regions (not for the Mediterranean and Black Sea regions).

Discards estimates should be provided at the domain level (DOMAIN\_DISCARDS).

This table must be used to provide only discards data for which no biological data are available (that is, for discards data that have not already been reported in tables C and D).

- 1. COUNTRY: According to the code list provided in Appendix 1; missing values not allowed.
- 2. YEAR: Four digits (e.g. 2019); missing values not allowed.
- 3. DOMAIN DISCARDS: Text in format specified in Appendix 8; missing values not allowed.
- 4. SPECIES: According to the FAO 3-alpha code list, see Appendix 12; missing values not allowed.
- 5. DISCARDS: Estimated discards in tonnes [precision to 3 digits after the decimal]; missing values not allowed.
- 6. NO\_TRIPS\_SAMPLED\_WITH\_SPECIES: [integer] Number of trips in which the species was sampled/observed; if not known use 'NK'.
- 7. NO\_TRIPS\_SAMPLED: [integer] Number of trips sampled for the specified domain discards; if not known use 'NK'.

# **Appendix 1: Country codes**

Country name <sup>9</sup>	Country code
Belgium	BEL
Bulgaria	BGR
Denmark	DNK
Germany	DEU
Estonia	EST
Ireland	IRL
Greece	GRC
Spain	ESP
France	FRA
Croatia	HRV
Italy	ITA
Cyprus	СҮР
Latvia	LVA
Lithuania	LTU
Malta	MLT
Netherlands	NLD
Poland	POL
Portugal	PRT
Romania	ROU
Slovenia	SVN
Finland	FIN
Sweden	SWE
United Kingdom	GBR (for table J only)
United Kingdom (England and Wales)	ENG
United Kingdom (Alderny/Sark/Herm)	GBC
United Kingdom (Guernsey)	GBG
United Kingdom (Jersey)	GBJ
United Kingdom (Isle of Man)	IOM
United Kingdom (Northern Ireland)	NIR
United Kingdom (Scotland)	SCO

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 $<sup>^{\</sup>rm 9}$  Listed in the official protocol order: alphabetical order in Member States' own languages.

# Appendix 2: Vessel length coding

Member States are requested to submit data according to the following segmentation.

# Fishing in the Mediterranean and Black Sea

Vessel length classes (length over all)	Code
Length over all shorter than 6 m.	VL0006
Length over all of 6 m. to shorter than 12 m.	VL0612
Length over all of 12 m. to shorter than 18 m.	VL1218
Length over all of 18 m. to shorter than 24 m.	VL1824
Length over all of 24 m. to shorter than 40 m	VL2440
Length over all of 40 m. or longer	VL40XX

# Fishing in all other waters

Vessel length classes (length over all)	Code
Length over all shorter than 10 m.	VL0010
Length over all of 10 m. to shorter than 12 m.	VL1012
Length over all of 12 m. to shorter than 18 m.	VL1218
Length over all of 18 m. to shorter than 24 m.	VL1824
Length over all of 24 m. to shorter than 40 m	VL2440
Length over all of 40 m. or longer	VL40XX

# Appendix 3: Fishing technique coding

Fishing technique description	Code
Drift and/or fixed netters	DFN
Dredgers	DRB
Demersal trawlers and/or demersal seiners	DTS
Vessels using pots and/or traps	FPO
Vessels using hooks	нок
Vessel using other active gears	MGO
Vessels using polyvalent active gears only	MGP
Vessels using passive gears only for vessels < 12m	PG
Vessels using other passive gears	PGO
Vessels using polyvalent passive gears only	PGP
Vessels using active and passive gears	PMP
Purse seiners	PS
Pelagic trawlers	TM
Beam trawlers	ТВВ
Inactive vessels (only for table J)	INACTIVE
No fishing technique (e.g. divers without fishing vessel)	NO

# Appendix 4: Gear type coding

Gear classes	Gear type description	Gear code
Dredges	Boat dredges	DRB
Dredges	Mechanised dredges including suction dredges	HMD
Dredges	Hand dredges	DRH
Gillnets and entangling nets	Driftnets	GND
Gillnets and entangling nets	Set gillnets (anchored)	GNS
Gillnets and entangling nets	Encircling gillnets	GNC
Gillnets and entangling nets	Trammel nets	GTR
Gillnets and entangling nets	Combined gillnets-trammel nets	GTN
Lift nets	Boat-operated lift nets	LNB
Lift nets	Shore-operated stationary lift nets	LNS
Hooks and lines	Handlines and pole-lines (mechanised)	LHM
Hooks and lines	Handlines and pole-lines (hand-operated)	LHP
Hooks and lines	Drifting longlines	LLD
Hooks and lines	Set longlines	LLS
Hooks and lines	Troll lines	LTL
Seine nets	Danish seines (Anchored seine)	SDN
Seine nets	Pair seines	SPR
Seine nets	Scottish seines (Fly shooting seine)	SSC
Seine nets	Beach seines	SB
Seine nets	Boat seines	SV
Surrounding nets	Purse seines	PS
Surrounding nets	Lampara nets	LA
Traps	Pots and Traps	FPO
Traps	Stationary uncovered pound nets	FPN
Traps	Fyke nets	FYK
Trawls	Bottom otter trawl	ОТВ
Trawls	Otter twin trawl	ОТТ
Trawls	Bottom pair trawl	PTB
Trawls	Midwater otter trawl	OTM
Trawls	Pelagic pair trawl	PTM
Trawls	Beam trawl	ТВВ
Other gear	Glass eel fishing	GEF
No gear	e.g. shell fishing by hand	NO

# Appendix 5. Target assemblage coding

Code	Target assemblage description
ANA	Anadromous
CAT	Catadromous
CEP	Cephalopods
CRU	Crustaceans
DEF	Demersal fish
DES	Demersal species
DWS	Deep-water species
FIF	Finfish
FWS	Freshwater species
GLE	Glass eel
LPF	Large pelagic fish
MCD	Mixed crustaceans and demersal fish
MCF	Mixed cephalopods and demersal fish
MDD	Mixed demersal and deep water species
MIS	Miscellany
MOL	Molluscs
MPD	Mixed pelagic and demersal fish
SLP	Small and large pelagic fish
SPF	Small pelagic fish

## Appendix 6: Mesh size coding

Specifies recorded mesh size and whether cod end contains diamond mesh or square mesh.

If there is no lower limit to the mesh size range the first 2 digits are '00'; if there is no upper limit to the mesh size range the last 2 digits are replaced by 'XX'.

Gear type	Code
Diamond mesh	<integer>D<integer></integer></integer>
Square mesh	<integer>S<integer></integer></integer>
Not applicable	NA <sup>1</sup>

 $<sup>^{\</sup>mathrm{1}}$  Valid only for the following gear codes: DRB, HMD, DRH, LHM, LHP, LLD, LLS, LTL, FPO, NO

#### Mediterranean and Black Sea

#### **All GFCM GSAs**

Mesh size range	Code
Diamond mesh <14 mm	00D14
Diamond mesh >=14 mm and <16 mm	14D16
Diamond mesh >=16 mm and <20 mm	16D20
Diamond mesh >=20 mm and <40 mm	20D40
Diamond mesh >=40 mm and <50 mm	40D50
Diamond mesh >=50 mm and <100 mm	50D100
Diamond mesh >=100 mm and <400 mm	100D400
Diamond mesh >=400 mm	400DXX
Square mesh <40 mm	00S40
Square mesh >=40 mm	40SXX

# Baltic Sea ICES subdivisions 22 to 32

Mesh size range	Code
MOBILE gears	
Diamond mesh <16 mm	00D16
Diamond mesh >=16 mm and <32 mm	16D32
Diamond mesh >=32 mm and <90 mm	32D90
Diamond mesh >=90 mm and <105 mm	90D105
Diamond mesh >=105 mm and <110 mm	105D110
Diamond mesh >=110 mm	110DXX
PASSIVE gears	
Diamond mesh <16 mm	00D16
Diamond mesh >=16 mm and <32 mm	16D32
Diamond mesh >=32 mm and <90 mm	32D90
Diamond mesh >=90 mm and <110 mm	90D110
Diamond mesh >=110 mm and <157 mm	110D157
Diamond mesh >=157 mm	157DXX

# North Sea and Eastern Arctic ICES sub-area IV and divisions IIa (EU) and IIIa

Mesh size range	Code
MOBILE gears	
Diamond mesh <16 mm	00D16
Diamond mesh >=16 mm and <32 mm	16D32
Diamond mesh >=32 mm and <80 mm	32D80
Diamond mesh >=80 mm and <100 mm	80D100
Diamond mesh >=100 mm and <110 mm	100D110
Diamond mesh >=110 mm and <120 mm	110D120
Diamond mesh >=120 mm	120DXX
Square mesh >=70 mm and <90 mm	70S90
PASSIVE gears	_
Diamond mesh <10 mm	00D10
Diamond mesh >=10 mm and <31 mm	10D31
Diamond mesh >=31 mm and <50 mm	31D50
Diamond mesh >=50 mm and <71 mm	50D71
Diamond mesh >=71 mm and <100 mm	71D100
Diamond mesh >=100 mm and <120 mm	100D120
Diamond mesh >=120 mm and <220 mm	120D220
Diamond mesh >=220 mm and <250 mm	220D250
Diamond mesh >=250 mm	250DXX

# North Western Waters, Eastern Arctic, North of Azores and East Greenland

# ICES sub-areas I, V, VI, VII, XII and XIV; and divisions IIa (COAST & RFMO) and IIb

Mesh size range	Code
MOBILE gears	
Diamond mesh <16 mm	00D16
Diamond mesh >=16 mm and <32 mm	16D32
Diamond mesh >=32 mm and <70 mm	32D70
Diamond mesh >=70 mm and <80 mm	70D80
Diamond mesh >=80 mm and <100 mm	80D100
Diamond mesh >=100 mm and <110 mm	100D110
Diamond mesh >=110 mm and <120 mm	110D120
Diamond mesh >=120 mm	120DXX
PASSIVE gears	
Diamond mesh <50	00D50
Diamond mesh mm >=50 mm and <90 mm	50D90
Diamond mesh >=90 mm and <100 mm	90D100
Diamond mesh >=100 mm and <120 mm	100D120
Diamond mesh >=120 mm and <130 mm	120D130
Diamond mesh >=130 mm and <150 mm	130D150
Diamond mesh >=150 mm and <220 mm	150D220
Diamond mesh >=220 mm and <250 mm	220D250
Diamond mesh >=250 mm	250DXX

#### **South Western Waters**

#### ICES sub-areas VIII, IX and X and all CECAF areas

#### All gears

Mesh size range	Code
Diamond mesh <16 mm	00D16
Diamond mesh >=16 mm and <20 mm	16D20
Diamond mesh >=20 mm and <40 mm	20D40
Diamond mesh >=40 mm and <55 mm	40D55
Diamond mesh >=55 mm and <60 mm	55D60
Diamond mesh >=60 mm and <65 mm	60D65
Diamond mesh >=65 mm and <70 mm	65D70
Diamond mesh >=70 mm and <100 mm	70D100
Diamond mesh >=100 mm	100DXX

#### **Outermost Regions**

#### All areas not covered in above tables

#### All gears

Mesh size range	Code
Diamond mesh <14 mm	00D14
Diamond mesh >=14 mm and <20 mm	14D20
Diamond mesh >= 20 mm and <40 mm	20D40
Diamond mesh >= 40 mm and <45 mm	40D45
Diamond mesh >= 45 mm and <50 mm	45D50
Diamond mesh >= 50 mm and <65 mm	50D65
Diamond mesh >= 65mm and <100 mm	65D100
Diamond mesh >=100 mm	100DXX

#### **Appendix 7: Métier definition**

Métier definitions to conform to those agreed by the relevant RCMs. A list of currently accepted codes is provided on the data submission website. The following is for reference only.

Métier definitions follow the recommendation of STECF (report JRC 49816) on definitions consistent with level 6 of the Commission Decision 2010/93. The labels should follow the format:

gear type_target assemblage_mesh size range_selective device_
mesh size range of the selective device

Each field (e.g. gear type, target assemblage, etc.) within the label is connected by an underscore.

Note: Target assemblage is used both as part of the métier definition and as a stand-alone entry in several tables. If the métier definition is known, then the same target assemblage code (used in the métier definition) must be provided in the target assemblage field.

Selective device codes:

Code	Description
0	Not mounted
1	Exit window / Selection panel
2	Grid

#### **Appendix 8: Domain definition**

A domain refers to the group of vessels used to calculate estimates (discards, numbers at age, and numbers at length). The domain may or may not be equivalent to a métier.

Domain definitions are likely to be very country specific, but the following format for their presentation to this data call is requested in the interest of obtaining the maximum information possible (on the constitution of the domain) from the name itself.

country\_quarter\_sub-region\_gear type\_target assemblage\_mesh size range\_selective device\_mesh size range of the selective device\_vessel length\_species\_commercial category

Each field (e.g. country, sub-region(s) etc.) within the label is connected by an underscore.

If there are multiple entries within a field (e.g. multiple sub-regions, multiple gear types), connect the codes by a dash "-".

- 1) Country: according to the code list in Appendix 1.
- 2) Quarter: use 'all' in case of annual data; if data are aggregated quarterly, indicate the quarter.
- 3) Sub-region: if the domain covers the whole supra-region, or not known sub-regions within a supra-region, use the supra-region code; otherwise use sub-region code(s) according to the code list in Appendix 9.
- 4) Gear type: gear type code(s) according to the code list in Appendix 4.
- 5) Target assemblage: target assemblage code(s) according to the code list in Appendix 5.
- 6) Mesh size range: use 'all' if all mesh sizes are included; otherwise give minimum and maximum meshes in the form <minimum mesh><mesh type><maximum mesh> (e.g. 70D90 for diamond mesh between 70 and 90mm, see Appendix 6); if not applicable (e.g. longlines) use 'NA'.
- 7) Selectivity device: code(s) as used in métier definitions (Appendix 7); if not applicable use 'NA'.
- 8) Selective device mesh range: single number (e.g. 120 for 120mm device); if not applicable use 'NA'.
- 9) Vessel length: use 'all' if all vessel lengths are included; otherwise use code(s) according to the code list in Appendix 2. If a domain covers all vessel lengths above (or below) a certain size, you can use '>' (or '<') before the vessel lengths code.
- 10) Species: use 'all' if the same domain is used for multiple species; if the domain is used for one or two species use code(s) according to the code list in Appendix 12.
- 11) Commercial category: if not known use 'NK'; if not applicable 'NA'; otherwise free text.

#### Appendix 9: Area coding

#### Supra-region

Each vessel must be assigned to the supra-region<sup>10</sup> where most of its activity takes place. It is therefore possible to combine supra-region code with sub-region codes of a different supra-region. Inactive vessels should be assigned to the supra-region where they are registered or generally operate in.

Fishing Areas	Supra Region Code
Baltic Sea, North Sea, Eastern Arctic, North of Azores, East Greenland, NAFO, Extended North-Western waters (ICES areas V, VI and VII), Southern Western waters, CECAF areas around Madera and the Canary Islands <sup>11</sup> (FAO areas 34.1.1, 34.1.2, 34.2.0)	NAO
Mediterranean Sea and Black Sea	MBS
Other regions	OFR

## Sub-region<sup>12</sup> and EEZ indicator

Only the combinations of sub-region codes and EEZ indicator codes listed below are combinations of valid values.

Baltic Sea		
IBSFC areas for Baltic	Sub-region	EEZ indicator
III.c.22	27.3.c.22	NA
III.c.23	27.3.b.23	NA
III.c.24	27.3.d.24	NA
III.c.25	27.3.d.25	NA
III.c.26	27.3.d.26	NA
III.c.27	27.3.d.27	NA
III.c.28.1	27.3.d.28.1	NA
III.c.28.2	27.3.d.28.2	NA
III.d.29	27.3.d.29	NA
III.d.30	27.3.d.30	NA
III.d.31	27.3.d.31	NA
III.d.32	27.3.d.32	NA

#### North Sea, Eastern Arctic, Skagerrak, Kattegat and Eastern Channel

ICES statistical areas	Sub-region	EEZ indicator
2a EU waters	27.2.a	EU
3.a.N (Skagerrak)	27.3.a.20	NA
3.a.S (Kattegat)	27.3.a.21	NA
4a	27.4.a	NA
4b	27.4.b	NA
4c	27.4.c	NA

 $<sup>^{10}</sup>$  Supra-regions are defined in Table 5C of the Commission Decision (EU) 2016/1251.

<sup>&</sup>lt;sup>11</sup> Under the DCF, these areas were included in other regions.

onder the ber, these areas were included in other regions.

 $<sup>^{12}\,</sup>Areas\,identified\,below\,include\,seas\,subject\,to\,the\,International\,Convention\,for\,the\,Conservation\,of\,Atlantic\,Tunas.$ 

7.0	7.d	27.7.d	NA
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#### North Western Waters, Eastern Arctic, North of Azores and East Greenland

ICES statistical areas	Sub-region	EEZ indicator
1 RFMO	27.1.a	RFMO
1 COAST	27.1.b	COAST
2a non EU waters	27.2.a	COAST
	27.2.a	RFMO
2b non EU waters	27.2.b	COAST
	27.2.b	RFMO
5.a	27.5.a	NA
5.b EU waters	27.5.b	EU <sup>18</sup>
5.b non EU waters	27.5.b	COAST
	27.5.b	RFMO
6.a	27.6.a	NA
6.b EU waters	27.6.b	EU
6.b non EU waters	27.6.b	RFMO
7.a	27.7.a <sup>14</sup>	NA
7.b	27.7.b <sup>15</sup>	NA
7.c EU Waters	27.7.c	EU
7.c non EU Waters	27.7.c	RFMO
7.d <sup>13</sup>	27.7.d	NA
7.e	27.7.e	NA
7.f	27.7.f	NA
7.g	27.7.g <sup>16</sup>	NA
7.h	27.7.h <sup>17</sup>	NA
7.j EU waters	27.7.j	EU <sup>19</sup>
7.j non EU waters	27.7.j	RFMO
7.k EU waters	27.7.k	EU
7.k non EU waters	27.7.k	RFMO
12	27.12	NA
14.a	27.14.a	NA
14.b	27.14.b	COAST
	27.14.b	RFMO
	1	i

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<sup>&</sup>lt;sup>13</sup> 7.d is included in both the North Sea and North Western Waters tables because is unclear which technical regulations best

<sup>&</sup>lt;sup>14</sup> ICES statistical rectangles of ICES division 7a corresponding to the BSA shall be included.

 $<sup>^{15}</sup>$  ICES statistical rectangles of ICES division 7b corresponding to the BSA shall be included.

 $<sup>^{16}</sup>$  ICES statistical rectangles of ICES division 7g corresponding to the BSA shall be included.

 $<sup>^{17}</sup>$  ICES statistical rectangles of ICES division 7h corresponding to the BSA shall be included.

<sup>&</sup>lt;sup>18</sup> 5b EU to be considered as covering the following ICES statistical rectangles: 49D6, 49D7, 49D8, 49D9, 49E0, 49E1, 49E2, 49E3, 49E4, 50E5.

 $<sup>^{19}</sup>$  ICES statistical rectangles of ICES division 7j corresponding to the BSA shall be included.

## **Biologically Sensitive Area (BSA)**

The following BSA definition has to be used only for table A and table G. Data for the BSA represents a duplication of data supply to accommodate an overlapping area definition (i.e. the BSA area overlaps fractions of ICES divisions 7a, 7b, 7g, 7h and 7j).

ICES statistical rectangles	Sub-region	EEZ indicator
35D8, 35D9, 35E0, 35E1, 34D8, 34D9, 34E0, 34E1, 33D8, 33D9, 33E0, 33E2, 32D8, 32D9, 32E0, 32E1, 32E2, 31D8, 31D9, 31E0, 31E1, 31E2, 30D9, 30E0, 30E1, 30E2, 29D9, 29E0, 29E1, 29E2, 28D9, 28E0, 28E1, 28E2	BSA	NA

#### **South Western Waters**

ICES statistical areas	Sub-region	EEZ Indicator
8.a	27.8.a	NA
8.b	27.8.b	NA
8.c	27.8.c	NA
8.d EU waters	27.8.d	EU
8.d non EU waters	27.8.d	RFMO
8.e EU waters	27.8.e	EU
8.e non EU waters	27.8.e	RFMO
9.a	27.9.a	NA
9.b EU waters	27.9.b	EU
9.b non EU waters	27.9.b	RFMO
10.a EU waters	27.10.a	EU
10.a non EU waters	27.10.a	RFMO
10.b	27.10.b	NA

#### **GFCM**

FAO statistical areas	Sub-region Codified GFCM GSA as defined in Resolution GFCM/33/2009/2	EEZ indicator
Northern Alboran Sea	GSA1	NA
Alboran Island	GSA2	NA
Southern Alboran Sea	GSA3	NA
Algeria	GSA4	NA
Balearic Island	GSA5	NA
Northern Spain	GSA6	NA
Gulf of Lion	GSA7	NA
Corsica Island	GSA8	NA
Ligurian and North Tyrrhenian Sea	GSA9	NA
South Tyrrhenian Sea	GSA10	NA
Sardinia (west)	GSA11.1	NA
Sardinia (east)	GSA11.2	NA
Sardinia	GSA11	NA
Northern Tunisia	GSA12	NA

Gulf of Hammamet	GSA13	NA
Gulf of Gabes	GSA14	NA
Malta Island	GSA15	NA
South of Sicily	GSA16	NA
Northern Adriatic	GSA17	NA
Southern Adriatic Sea	GSA18	NA
Western Ionian Sea	GSA19	NA
Eastern Ionian Sea	GSA20	NA
Southern Ionian Sea	GSA21	NA
Aegean Sea	GSA22	NA
Crete Island	GSA23	NA
North Levant	GSA24	NA
Cyprus Island	GSA25	NA
South Levant	GSA26	NA
Levant	GSA27	NA
Marmara Sea	GSA28	NA
Black Sea	GSA29	NA
Azov Sea	GSA30	NA

## **CECAF**

FAO statistical areas	Sub-region	EEZ Indicator
34.1.1 EU waters	34.1.1	EU
34.1.1 non EU waters	34.1.1	COAST
	34.1.1	RFMO
34.1.2 EU waters	34.1.2	EU
34.1.2 non EU waters	34.1.2	COAST
	34.1.2	RFMO
34.1.3 EU waters	34.1.3	EU
34.1.3 non EU waters	34.1.3	COAST
	34.1.3	RFMO
34.2.0 EU waters	34.2.0	EU
34.2.0 non EU waters	34.2.0	COAST
	34.2.0	RFMO
34.3.1	34.3.1	NA
34.3.2	34.3.2	NA
34.3.3	34.3.3	NA
34.3.4	34.3.4	NA
34.3.5	34.3.5	NA
34.3.6	34.3.6	NA
34.4.1	34.4.1	NA
34.4.2	34.4.2	NA

## NAFO (Northwest Atlantic) see also http://www.fao.org/fishery/area/Area21/en

Sub-region	EEZ indicator
21.0A, 21.0B, 21.1A, 21.1B, 21.1C, 21.1D, 21.1E, 21.1F, 21.2G, 21.2H, 21.2J,	
21.3K, 21.3L, 21.3M, 21.3N, 21.3O, 21.3P, 21.4R, 21.4S, 21.4T, 21.4V, 21.4W,	NA
21.4X, 21.5Y, 21.5Z, 21.6A, 21.6B, 21.6C, 21.6D, 21.6E, 21.6F, 21.6G, 21.6H	

#### **CCAMLR**

FAO area 48 (Atlantic Antarctic) see also http://www.fao.org/fishery/area/Area48/en FAO area 58 (Antarctic and Southern Indian Ocean) see also http://www.fao.org/fishery/area/Area58/en

FAO area 88 (Antarctic) see also http://www.fao.org/fishery/area/Area88/en

FAO statistical areas	Sub-region	EEZ indicator
Atlantic Antarctic (to be used only if the information on the subarea is not available)	48	NA
Peninsular	48.1	NA
South Orkney	48.2	NA
South Georgia	48.3	NA
South Sandwich	48.4	NA
Weddel Sea	48.5	NA
Bouvet	48.6	NA
Antarctic and Southern Indian Ocean (to be used only if the information on the subarea is not available)	58	NA
Banzare Bank	58.4	NA
McDonald & Heard	58.5	NA
Crozet	58.6	NA
Marion-Edward	58.7	NA
Antarctic (to be used only if the information on the subarea is not available)	88	NA
Eastern Ross Sea	88.1	NA
Western Ross Sea	88.2	NA
Amundsen Sea	88.3	NA

#### IOTC

FAO area 51 (Indian Ocean, Western) see also http://www.fao.org/fishery/area/Area51/en FAO area 57 (Indian Ocean, Eastern) see also http://www.fao.org/fishery/area/Area57/en

FAO statistical areas	Sub-region	EEZ indicator
Indian Ocean, Western (to be used only if the information on the subarea is not available)	51	NA
Red Sea sub-area	51.1	NA
Gulf sub-area	51.2	NA
Western Arabian Sea sub-area	51.3	NA
Eastern Arabian Sea, Laccadive and Sri Lanka sub-area	51.4	NA
Somalia, Kenya and Tanzania sub-area	51.5	NA
Madagascar and Mozambique Channel sub-area	51.6	NA
Oceanic sub-area	51.7	NA

Mozambique	51.8	NA
Indian Ocean, Eastern (to be used only if the information on the subarea is not available)	57	NA
Bay of Bengal	57.1	NA
Northern	57.2	NA
Central	57.3	NA
Oceanic	57.4	NA
Western Australia	57.5	NA
Southern Australia	57.6	NA
Other Areas		
FAO statistical areas	Sub-region	EEZ indicator
FAO area 18 (Arctic Sea) See also http://www.fao.org/fis	hery/area/Area18/	en
Arctic Sea	18	NA
FAO area 31 (Atlantic Western Central) see also http://w	ww.fao.org/fishery,	/area/Area31/en
Atlantic, western central	31	NA
FAO area 41 (Atlantic Southwest) see also Regulation (EC	216/2009	
Atlantic, Southwest (to be used only if the information on the subarea is not available)	41	NA
Northern	41.1	NA
Central	41.2	NA
Southern	41.3	NA
FAO area 47 (Atlantic Southeast) see also Regulation (EC)	216/2009	
Atlantic, Southeast (to be used only if the information on the subarea is not available)	47	NA
Orange river and Cape of Good Hope	47.1	NA
Agulhas	47.2	NA
SEAFO	47.A	NA
SEAFO	47.B	NA
SEAFO	47.C	NA
SEAFO	47.D	NA
FAO area 61 (Pacific Northwest) see also http://www.fao	.org/fishery/area/A	Area61/en
Pacifc, Northwest	61	NA
FAO area 67 (Pacific Northeast) see also http://www.fao.	org/fishery/area/A	rea67/en
Pacific, Northeast	67	NA
FAO area 71 (Pacific Western Central) see also http://ww	w.fao.org/fishery/a	area/Area71/en
Pacific, Western Central	71	NA
FAO area 77 (Pacific Eastern Central) see also http://www	w.fao.org/fishery/ar	rea/Area77/en
Pacific, Eastern Central	77	NA
FAO area 81 (Pacific Southwest) see also http://www.fao	.org/fishery/area/A	Area81/en

Pacific, Southwest	81	NA		
FAO area 87 (Pacific Southeast) see also http://www.fao.org/fishery/area/Area87/en				
Pacific, Southeast (to be used only if the information on the subarea is not available)	87	NA		
Northern	87.1	NA		
Central	87.2	NA		
Southern	87.3	NA		

## **Functional Units (FUs)**

NEP_SUB_REGION	SUB_REGION	FU	ICES statistical rectangles
27.3.a.FU3	27.3.a	3	44F7, 45F7, 43F8, 44F8, 45F8, 43F9, 44F9, 45F9, 46F9,
27.3.d.FU3	27.5.d	3	45G0, 46G0, 47G0, 48G0, 46G1, 46F8, 47F9, 47G1
27.3.bc.FU3	27.3.bc	3	44G0, 45G1
27.3.a.FU4	27.3.a	4	41G1,43G2
27.3.bc.FU4	27.3.bc	4	42G0, 43G0, 42G1, 43G1, 44G1, 41G2, 42G2
27.4.b.FU5	27.4.b	5	36F1, 37F1, 36F2, 37F2, 36F3, 37F3, 36F4, 37F4
27.4.c.FU5	27.4.c	5	35F2, 35F3,
27.4.b.FU6	27.4.b	6	38E8, 39E8, 40E8, 37E9, 38E9, 39E9, 40E9
			45E8, 46E8, 44E9, 45E9, 46E9, 47E9, 48E9, 49E9, 44F0,
27.4.a.FU7	27.4.a	7	45F0, 46F0, 47F0, 48F0, 49F0, 44F1, 45F1, 46F1, 47F1,
			48F1, 49F1
27.4.b.FU8	27.4.b	8	41E6, 40E7, 41E7
27.4.a.FU9	27.4.a	9	44E6, 45E6, 44E7, 45E7, 44E8
27.4.a.FU10	27.4.a	10	47E6
27.6.a.FU11	27.6.a	11	44E3, 45E3, 46E3, 44E4, 45E4, 46E4
27.6.a.FU12	27.6.a	12	41E2, 42E2, 43E2, 41E3, 42E3, 43E3, 41E4, 42E4, 43E4
27.6.a.FU13	27.6.a	13	39E4, 40E4, 39E5, 40E5
27.7.a.FU14	27.7.a	14	38E5, 35E6, 36E6, 37E6, 38E6
27.7.a.FU15	27.7.a	15	36E3, 35E4, 36E4, 37E4, 38E4, 35E5, 36E5, 37E5
27.7 k FU16	27.7.6	16	31D5, 32D5, 33D5, 31D6, 32D6, 33D6, 32D7, 33D7,
27.7.k.FU16	27.7.k	16	34D8, 35D8
27.7.c.FU16	27.7.c	16	34D5, 35D5, 34D6, 35D6, 34D7, 35D7
27.7.j.FU16	27.7.j	16	32D8, 33D8
27.7.b.FU17	27.7.b	17	34D9, 35D9, 34E0, 35E0
27.7.j.FU19	27.7.j	19	31D9, 32D9, 33D9, 31E0, 32E0, 33E0
27.7.g.FU19	27.7.g	19	31E1, 32E1, 32E2
27.7.a.FU19	27.7.a	19	33E2, 33E3
27.7.g.FU2021	27.7.g	20-21	28E1, 29E1, 30E1, 29E2, 30E2, 31E2, 30E3
27.7.h.FU2021	27.7.h	20-21	28E2
27.7.g.FU22	27.7.g	22	31E3, 32E3, 31E4, 32E4
27.7.a.FU23	27.7.a	23	22E5, 23E5, 24E5, 22E6, 23E6, 24E6, 22E7, 23E7, 24E7
27.7.a.FU24	27.7.a	24	21E6, 21E7, 21E8
27.7.b.FU24	27.7.b	24	20E7, 19E8, 20E8
27.8.c.FU25	27.8.c	25	15E0, 15E1, 16E1
27.9.a.FU26	27.9.a	26	13E0, 14E0, 13E1, 14E1
27.9.a.FU27	27.9.a	27	06E0, 07E0, 08E0, 09E0, 10E0, 11E0, 12E0, 09E1, 10E1, 11E1, 12E1
27.9.a.FU28	27.9.a	28	03E0, 04E0, 05E0, 03E1, 04E1, 05E1
27.9.a.FU29		29	02E0, 02E1, 02E2
27.3.a.FU23	27.9.a	23	UZLU, UZEI, UZEZ

			<u> </u>
27.9.a.FU30	27.9.a	30	02E2, 03E2, 02E3, 03E3
27.8.c.FU31	27.8.c	31	16E4, 16E5, 16E6, 16E7
			44F2, 45F2, 46F2, 47F2, 48F2, 49F2, 50F2, 51F2, 52F2,
			44F3, 45F3, 46F3, 47F3, 48F3, 49F3, 50F3, 51F3, 52F3,
27.4.a.FU32	27.4.a	32	44F4, 45F4, 46F4, 47F4, 48F4, 49F4, 50F4, 51F4, 52F4,
			44F5, 45F5, 46F5, 47F5, 48F5, 49F5, 50F5, 51F5, 52F5,
			44F6, 45F6, 46F6, 47F6, 48F6, 49F6, 50F6, 51F6, 52F6
27.4.b.FU32	27.4.b	32	43F5, 43F6, 43F7
27.4.b.FU33	27.4.b	33	39F5, 40F5, 41F5, 39F6, 40F6, 41F6
27.4.b.FU34	27.4.b	34	41F0, 42F0, 43F0, 41F1, 42F1, 43F1
27.4.OUTFU	27.4	Out	Any statistical rectangle not identified above as NEP
27.4.001F0	27.4	Out	caught outside an FU
27.6.OUTFU	27.6	Out	Any statistical rectangle not identified above as NEP
27.0.001F0	27.0	Out	caught outside an FU
27.7.OUTFU	27.7	Out	Any statistical rectangle not identified above as NEP
27.7.001F0	21.1	Jul	caught outside an FU
27.8.c.OUTFU	27.8.c	Out	Any statistical rectangle not identified above as NEP
27.0.0.001F0	27.0.0	Jul	caught outside an FU
27.9.a.OUTFU	27.9.a	Out	Any statistical rectangle not identified above as NEP
27.9.a.UUTFU	27.3.d	Out	caught outside an FU
·			·

## **Appendix 10: Geographical indicator**

Code to distinguish fishing fleets operating in outermost regions and fleets operating exclusively in non-EU waters (international waters and third countries including those with fishing partner agreements).

The provision of this information is not compulsory.

Name	Definition	Code
No geographical indicator	EU waters, i.e. EEZ of any EU member state	NGI
Non EU waters	More than 50% of activity occurs in non-EU waters	NEU
International waters exclusively	100% of activity occurs in non-EU waters	IWE
Madeira	Portuguese outermost region (autonomous region)	P2
Azores	Portuguese outermost region (autonomous region)	Р3
Canaries	Spanish outermost region (autonomous community)	IC
Morocco Coastal	Most of the activity occurs in area 34.1.1	MA
French Guiana	French outermost region (overseas department)	GF
Guadeloupe	French outermost region (overseas department)	GP
Martinique	French outermost region (overseas department)	MQ
Saint-Martin	French outermost region (overseas community)	MF
Reunion	French outermost region (overseas department)	RE
Mayotte	French outermost region (overseas department)	YT

Appendix 11: Coding of specific conditions related to technical measures

Specific condition	Code			
Baltic				
Gear equipped with a BACOMA	BACOMA			
Gear equipped with a T90	Т90			
North Sea, Skagerrak and Kattegat				
$^{1)}$ OTB, TBN $\geq$ 35mm equipped with selective grid with 19mm max bar spacing and unblocked fish outlet	GRID19			
<sup>1)</sup> OTB, TBN ≥ 70mm equipped with selective grid with 35mm max bar spacing	GRID35			
1) TBB 80-119mm with increased mesh size in the extension of the beam trawl, 'Flemish Panel'	TBBFP			
<sup>1)</sup> OTB, OTT, TBN 90-119mm equipped with 'Seltra Panel'	SELTRA			
<sup>2)</sup> OTB, TBN ≥ 80mm equipped with a 'netgrid' selectivity device	NETGRID			
<sup>3)</sup> OTB, TBN ≥ 80mm constructed to 'SepNet' specification	SEPNEP			
North Western Waters				
<sup>4)</sup> TBB 80-119mm with increased mesh size in the extension of the beam trawl, 'Flemish Panel'	TBBFP			

- 1) Technical gear measure used to define vessels receiving a de-minimis exemption under: a) for 2018 data, Commission Delegated Regulation (EU) 2018/45; b) for 2019 data, Commission Delegated Regulation (EU) 2018/2035; c) for 2020 data, Commission Delegated Regulation (EU) 2019/2238.
- 2) Technical gear measure used to define vessels receiving a survivability exemption under: a) for 2018 data, Commission Delegated Regulation (EU) 2018/45; b) for 2019 data, Commission Delegated Regulation (EU) 2018/2035; c) for 2020 data, Commission Delegated Regulation (EU) 2019/2238.
- 3) Technical gear measure defined: a) for 2018 data, in Commission Delegated Regulation (EU) 2018/45 allowing derogation from Regulation 850/98; b) for 2019 data, in Commission Delegated Regulation (EU) 2018/2035; c) for 2020 data, Commission Delegated Regulation (EU) 2019/2238.
- 4) Technical gear measure used to define vessels receiving a de-minimis exemption under: for 2018 data, Commission Delegated Regulation (EU) 2018/46; b) for 2019 data, Commission Delegated Regulation (EU) 2018/2034; c) for 2020 data, Commission Delegated Regulation (EU) 2019/2239.

Note: Definitions of the 'Seltra panel', 'Netgrid selectivity device', 'Flemish panel' and 'SepNep' can be found in Commission Delegated Regulation (EU) 2018/2035.

#### **Appendix 12: Species coding**

Species coding according to the FAO Fisheries and Aquaculture Statistics and Information Branch 3-alpha code (http://www.fao.org/fishery/collection/asfis/en).

The data call upload tool currently uses the species list edition released in 2020. If you need to include in the dataset some species with a code agreed after this release, please contact the JRC data submission team.

In addition, for landings where it is not possible to associate an FAO 3-alpha code please use the code OTH (i.e. other species).

#### Appendix 13: Observer refusal rate

The refusal rate is one of the key quality indicators of assessing a probability based sampling scheme. As defined by the Study Group on Practical Implementation of Discard Sampling Plans SGPIDS 2<sup>20</sup>, the refusal rate in the fisheries context is the proportion of skippers who, having been successfully contacted, ultimately failed to allow the observer to go on-board to obtain the sample. The refusal rate is calculated as the number of industry refusals divided by the number of sequential selections or approaches where contact was successfully made.

To ensure refusal rates are comparable across fleets, Member States and years, the fundamental basics vessel selection must be identified. Refusal rates cannot be calculated without a probability based vessel selection system, without which none of the assumptions for the estimates hold and variance or bias cannot be calculated.

SGPIDS 3<sup>21</sup> outlined a number of key variables, which should be reported alongside the refusal rates. These variables are described as quality indicators and are essential when determining bias: not available, no contact details, no answer, observer declined, industry declined, sampled.

#### Appendix 14: Latitude, longitude and c-squares

C-squares (acronym for concise spatial query and representation system) is a grid-based global locator system. C-squares at 0.5\*0.5 degree resolution were chosen because a c-square is directly equivalent to the square grid produced for the Mediterranean by GFCM and because c-squares can be aggregated to reproduce the ICES rectangle geography<sup>22</sup>.

In Tables H and I, please provide in alternative (1) a value in the field C\_SQUARE or (2) values in all the 3 fields: RECTANGLE\_TYPE, RECTANGLE\_LAT and RECTANGLE\_LON.

In the first case, the c-squares format expected in the column C\_SQUARE is the following: XXXX:XXXX (e.g. 1502:380:4).

In the second case, rectangle information will be converted to the c-squares notation, and any plotting will be performed using the c-squares 0.5\*0.5 degree grid system. Points on the line are normally encoded within the next higher c-square, i.e. further away from the global origin. This implies effort and landings will be assigned to a different c-square depending on where in the ICES rectangle (or GFCM/IOTC/ICCAT square) the latitude and longitude are taken. Therefore, for consistency across Member States data, please supply latitude and longitude of the centre of the rectangle/square, for example:

For ICES rectangle 01D9: RECTANGLE\_LAT = 36.25 and RECTANGLE\_LON= -10.50

A description on how latitude and longitude values are converted to the c-squares notation is available at http://www.cmar.csiro.au/csquares/spec1-1.htm. The resources section<sup>23</sup> of the c- squares website offers useful information and examples to help encoding/decoding geographical coordinates<sup>24</sup> into C-squares notation.

<sup>&</sup>lt;sup>20</sup> Report of the Study Group on the Practical Implementation of Discard sampling plans (SGPIDS 2). ICES CM 2012/ACOM:50.

<sup>&</sup>lt;sup>21</sup> Report of the Study Group on the Practical Implementation of Discard sampling plans (SGPIDS 3). ICES CM 2013/ACOM:56.

<sup>&</sup>lt;sup>22</sup> see https://circabc.europa.eu/webdav/CircaBC/MARE/MDR/Library/Documentation/StatRecGrids 130703ma.doc

<sup>&</sup>lt;sup>23</sup> http://www.cmar.csiro.au/csquares/resources.html

<sup>&</sup>lt;sup>24</sup> Using the WGS84, EPSG:4326 Coordinate Reference System.