FDI

frequently asked questions

(last update: 04 June 2018)

One of objectives of the New-FDI database is the greatest possible compatibility between the New-FDI and Annual Economic Report (AER) data sets. We urge those within national institutes answering to the FDI call to work together with those answering to the Annual Economic Report (AER) data call to achieve consistent uploads.

The relationship between Tables C and D and Tables A

NEW (04.06.2018)

Q: Tables A is linked to Tables C and D by the 'DOMAIN_DISCARDS' field but how do we link the discards?

Note: the explanation of the relationship between tables A and C & D below is relevant to the relationship between tables A and E & F. With the latter the link is through the DOMAIN_LANDINGS field. IF the aggregation of trips to estimate landings biological data are the same as those to estimate discards data then DOMAIN_LANDINGS = DOMAIN_DISCARDS.

A: A good way to consider the relationship between table A on the one hand and tables C and D on the other is as follows:

- Table A holds data by the groupings that are of interest to the Commission for e.g. monitoring the landings obligation. These groups are common across member states within a region allowing for aggregations (by e.g. gear type) across member state data.
- Tables C and D hold data according to the groupings that are used by member states when they raise sampled data. There is no reason why the groupings (labelled in the DOMAIN_DISCARDS field) should be the same between member states.

The FDI-classic only contained the equivalent of tables A and B. It was known that the categories in the 'CATCH' table did not match how member states grouped vessels to raise sampled data. The database was often criticized for having a 'black box' process by which member states populated the discard totals and biological fields of the catch table. Some member states refused to do so.

In the current call member states are still expected to populate the unwanted catch totals of the catch table (table A) but there will also be a record of the data as originally raised (tables C and D). This at least gives an indication of the degree to which raised data had to be partitioned to supply table A (e.g. if the DOMAIN_DISCARDS aggregates over all mesh ranges and table A is filled using a pro-rata of discard amounts based on landings totals, then categories in Table A differing only by mesh range will receive the same discard rate). The goal to achieve greater transparency in how discard and biological data are supplied to Table A is the reason behind the requested format for the DOMAIN_DISCARDS naming.

A hypothetical example follows:

Suppose country XXX raises discards of cod in the Baltic by otter trawlers by grouping all trips:

- From any sub-region of the Baltic.

- From vessels of any length.
- Using any mesh size range.
- Using annual data.

So the DOMAIN_DISCARDS name could be "XXX_all_27.3_OTB_DEF_all_NA_NA_all_COD_NA". The trips used to estimate the unwanted catch will have a total landed weight associated with them. This value would go into the TOTWGHTLANDG field of Tables C and D.

Now let us assume part of the total used for the data in Tables C and D came from trips landing cod by vessels with vessel length VL1824 using otter trawls in area 27.3.C.22 with mesh size 110DXX in quarter 1, and no specon. The landings in that quarter from those trips would be entered into the TOTWGHTLANDG field of Table A.

How to enter the unwanted catch for table A for this one category and quarter? That has been left to the member state BUT one way is to calculate (TOTWGHTLANDG-table-A / TOTWGHTLANDG-table-C)*(unwanted catch-table-C).

For the categories in Table A, JRC will calculate unwanted catch at age and length by making use of the age and length profiles found in Tables C and D. JRC will calculate landings at age and length by making use of the age and length profiles found in Tables E and F.

Fleet population

NEW (25.08.2017)

Q: Should the number of vessels (population) follow the definition in Commission Decision 2010/93 (snapshot 1st January) or Commission Decision 2016/1251 (any vessel registered on 31 December or which has fished at least one day in the year up to 31 December)?

A: Data from 2015 and 2016 falls under Commission Decision 2010/93 data from 2017 under Commission Decision 2016/1251. HOWEVER, the more important consideration is to ensure compatibility between the data submitted to this call and the data submitted to this year's Annual Economic Report (AER) data call. Therefore each member state should follow the same approach to defining the fleet population as they did when answering to the AER data call.

Length measurements

NEW (25.08.2017)

Q: How to enter lengths if the length classes are between 1mm and 1cm or greater than 1cm?

A: If lengths are taken at a gap > 1cm then enter data against single values of cm but with > 1 cm gaps between entries. For example if a species is measured every 5 cm entries in Table_D might look like

SPECIES…	…LENGTHUNIT	MIN_LENGTH	MAX_LENGTH	LENGTH	NO_LENGTH_DISCARDS
XXX	cm	5	150	5	<VALUE1>
XXX	cm	5	150	10	<VALUE2>
XXX	cm	5	150	15	<VALUE3>
XXX	cm	5	150	20	<VALUE4>
XXX	cm	5	150	25	<VALUE5>

Etc.

If a species is measured every 0.5 cm entries in Table_D might look like

SPECIES…	…LENGTHUNIT	MNI_LENGTH	MAX_LENGTH	LENGTH	NO_LENGTH_DISCARDS
XXX	mm	5	150	5	<VALUE1>
XXX	mm	5	150	10	<VALUE2>
XXX	mm	5	150	15	<VALUE3>
XXX	mm	5	150	20	<VALUE4>
XXX	mm	5	150	25	<VALUE5>

Etc.

Following FAO convention the values of LENGTH should represent the lower boundary of the length interval, i.e. for fish grouped to 5cm intervals LENGTH=5 represents between 5 and 9.99cm; for fish grouped to 5mm intervals LENGTH=5 represents between 5 and 9.99mm.

Note: Regulations 850/98 (consolidated version) (Annex XIII) and 1967/2006 (Annex IV) both specify the way fish and crustaceans should be measured, so it is expected length measurements would follow these regulations, (e.g. all finfish are measured as whole length). We ask that the JRC is notified if a species has length measured in a way other than specified in these regulations.

Questions related to Table dimensions

Q: TOTVALLANDG. How do we interpret 'estimated total value'? Not all the landings are traded through the auctions.

A: This is an example of "Handle as for the Annual Economic Report (AER) data call".

NEW (08.09.2017)

Q: TOTWGHTLANDG?

A: Weights should always be 'live weight'.

NEW (04.06.2018)

Q: MIN_AGE, MAX_AGE, MIN_LENGTH, MAX_LENGTH: What to do when the ranges differ between the landed and unwanted catch fractions of the catch?

A: For tables C and D the range of discarded ages/lengths should be stated relating to unwanted catch. For tables E and F the range of landed ages/lengths should be stated relating to landings.

Q: TOTWGHTLANDG in tables C and D: Should it be in these tables because these tables are about discards.

A: The field is included to allow values in table C or D to be split on a pro-rata basis to categories in table A, i.e. P = TOTWGHTLANDG for a category in table A divided by TOTWGHTLANDG for corresponding category (i.e. matching DOMAIN_DISCARDS) in table C.

Use e.g. P*number at age in table C to infer number at age in Table A (for corresponding category).

NEW (04.06.2018)

Q: Fish can be landed with the goal to be discarded as it is not saleable (broken, damaged). How to record this?

A: Include under UNWANTED_CATCH.

NEW (22.09.2017)

Q: How do we define 'DEEP' fishing effort and landings?

A: The definition is as for the FDI-classic data call. That definition was not copied into the New-FDI data call document (sorry). It is entered here:

> Where the deep-sea species related effort is not identified by a métier-sampling exclusively for deep sea species under the DCF, the effort should be identified as follows:
> *(1) the gear is exclusively used in deep-sea fisheries;*
> *(2) catch of Deep Sea species retained >100kg (as per the Regulation[1]), or*
> *(3) catch of Deep Sea species retained <100kg but the percentage of Deep Sea species >=35%.*

1. R(EC) No 2347/2002 establishing specific access requirements and associated conditions applicable to fishing for deep sea stocks.

The deep sea species are defined in annexes I and II of the regulation.

NOTE: for data from 2017 and after the applicable regulation becomes R (EU) 2016/2336. The deep sea species are defined in annex I of R (EU) 2016/2336. There are a few changes compared to annexes I and II of R(EC) No 2347/2002.

Questions related to Appendix 1

Questions related to Appendix 2

Questions related to Appendix 3

Q: I am not familiar with the 'FISHING_TECH' variable.

A: The descriptions are as in Appendix III of Decision 93-2010 (which covers the years being asked for). The code to use would be the same as that used when responding to the Annual Economic Report (AER). If a vessel has operated using more than one fishing technique a dominance criteria must be applied. This is because:

> For economic data all the data for an individual vessel must be kept together. The FISHING_TECH and SUPRA_REGION fields are what allow the data for a vessel to be kept together because all the activity of the vessel must be assigned to a single FISHING_TECH code and a single SUPRA_REGION code.

The economic call deals with fleet segments which are defined using the combination of FISHING_TECH, SUPRA_REGION and VESSEL_LENGTH.

Taking two hypothetical examples:

- A vessel records most effort as LLS (set longlines) but some as of LLD (drifting longlines). In this case for table G_EFFORT the effort would be spread over two entries. One for the effort of LLS and the second for effort of LLD - but in both cases the 'FISHING_TECH' field will be entered as 'HOK'.
- A vessel using mostly demersal trawls (OTB) but also sometimes pots (FPO). In this case the effort would be spread over two entries. One for the effort of OTB and the second for effort of FPO - but in both cases the 'FISHING_TECH' field will be entered as 'DTS'.

Questions related to Appendix 4

NEW (22.09.2017)

Q: In the case of harvesting with divers (shell fishing by hand), what fishing gear code can we use?

A: The code 'NO' (for "no gear") has been included in the list of accepted gear codes.

NOTE: the gear code 'NK' (for "not known") is also included.

Questions related to Appendix 5

Q: Appendix 5 splits mesh size ranges by regions ('Baltic' etc.). Which areas (for example ICES areas or GFCM areas) are included in each region?

A: Definition of areas as applied to gear mesh size ranges have been taken from COM-2016-134. Text in black is from the proposed regulation amendment, that in blue are our additions for further clarification.

(a) 'North Sea' means ICES divisions IIa, IIIa and IV;
(b) 'Baltic Sea' means ICES divisions IIIb, IIIc and IIId; i.e. subdivisions 22, 23, 24, 25, 26, 27, 28-1, 28-2, 29, 30, 31, 32.
(c) 'North Western waters' means ICES sub-areas V (excluding Va and non-Union waters of Vb), VI and VII; ICES area I is also added.
(d) 'South Western waters' means ICES sub-areas VIII, IX and X (Union waters) and CECAF zones 34.1.1, 34.1.2 and 34.2.0 (Union waters);
(e) 'Mediterranean Sea' means the maritime waters of the Mediterranean to the East of line 5° 36' West; i.e. all GSA areas other than 28-30.
(f) 'Black Sea' means waters in the General Fisheries Commission for the Mediterranean (GFCM) geographical sub-area 29 as defined in Annex I to Regulation (EU) No 1343/2011
(Resolution GFCM/33/2009/2); i.e. GSA areas 28, 29, 30.
(g) 'Outermost Regions' means waters around the outermost regions as referred to in the first paragraph of Article 349 of the Treaty[1] divided into three sea basins: West Atlantic, East Atlantic and Indian Ocean

For areas not listed in (a) to (g) above the codes from Appendix 5 should still be used.

[1] Article 349 of the treaty of the Functioning of the European Union (TFEU) lists Guadeloupe, French Guiana, Martinique, Réunion, Saint-Barthélemy, Saint-Martin, the Azores, Madeira and the Canary Islands.

- Any of ICES areas 5, 12 and 14 can take North Western Waters codes – **also ICES area 1**
- Any CECAF area can take South Western Waters codes
- Fishing from other areas can take Outermost Regions codes

Q: The 'Swedish grid' trawl in the Skagerrak uses a square mesh cod end (70-89mm).

A: The code 70S90 will be accepted by the upload facility for the 'North Sea' region.

Questions related to Appendix 6

NEW (04.06.2018)

Note: In the FDI-classic and trial New-FDI calls this field had the name FISHERY

Q: How should we deal with mesh size ranges for the Fishery definitions?

A: The key point is the sentence in bold

Metier definitions to conform to those agreed by the relevant RCMs

Metier definitions have already been agreed in the Regional Coordination Meetings (RCMs) and the FDI call will follow these definitions. A list of the accepted definitions can be found using a link from the New-FDI data upload web page (https://datacollection.jrc.ec.europa.eu/dc/fdi). See link "Fishery code list" under "Important Notes".

Q: Is the target assemblage part of the fishery definition decided on a trip by trip basis or based on yearly catch compositions?

A: The footnote to Appendix IV of Decision 93-2010 says:

> *"(a) The retained part of the catch should be classified by target assemblage (crustaceans, demersal fish, etc.) at a trip level or at a fishing operation level when possible, and sorted by weight or by total value in the case of valuable species (e.g. Nephrops, shrimps). The target assemblage that comes up at the first position should be considered as the target assemblage to be reported in the matrix."*

Questions related to Appendix 7

NEW (22.09.2017)

Q: What do I do if the sampled data is quarterly?

A: If data for Tables C to F is quarterly then enter the data for each quarter separately.

Note: The upload facility will check for a domain name with 11 parts separated by an underscore "_"

Questions related to Appendix 8

NEW (17.08.2017)

Q: I am not familiar with the 'SUPRA_REGION' variable.

A: The code to use would be the same as that used when responding to the Annual Economic Report (AER). Every fishing vessel must only receive one SUPRA_REGION code. Therefore if a vessel has operated in more than one supra region a dominance criteria must be applied. This is because:

> For economic data all the data for an individual vessel must be kept together. The FISHING_TECH and SUPRA_REGION fields are what allow the data for a vessel to be kept together because all the activity of the vessel must be assigned to a single FISHING_TECH code and a single SUPRA_REGION code.
>
> The economic call deals with fleet segments which are defined using the combination of FISHING_TECH, SUPRA_REGION and VESSEL_LENGTH.

Questions related to Appendix 9

Questions related to Appendix 10

Questions related to Appendix 11

Questions related to Appendix 12

Questions related to Appendix 13

Questions related to Appendix 14

NEW (17.08.2017)

Q: For the Economic data call Days at Sea (TOTSEADAYS) are provided aggregated by VESSEL_LENGTH and FISHING_TECH. If also GEAR_TYPE and MESHSIZERANGE are added, the number of the Days at Sea could be higher and these results could not be used for the economic analysis.

A: There is a distinction to be made between days at sea (as measured by TOTSEADAYS and as associated with measures TOTKWDAYSATSEA and TOTGTDAYSATSEA) and fishing days (as measured by TOTFISDAYS and as associated with measures TOTKWFISHDAYS and TOTGTFISHDAYS).

For days at sea recording over different gears does not inflate the total days at sea - at least not if the member state uses the principles established in the second transversal variables workshop (the 'Nicosia' meeting). Appendix 14 of the New-FDI data call directs member states to use the methodology agreed in Nicosia.

Borrowing text from the Vignette help file of the fecR package (written to allow member states to calculate both days at sea and fishing days in the agreed way).

> "Each fishing trip is made up of different fishing activities. A fishing activity is the use of a particular gear in a particular area on a particular date. Gear is a combination of the

gear type and the gear mesh size. Gears of the same type but of different mesh size are considered to be different gears. Area is a combination of the economic zone, the fishing area and the fishing rectangle."

"The total days at sea is calculated as the number of commenced 24 hour periods of the trip. Only the total duration of trip is considered, i.e. the difference between departing and returning."

"The total days at sea are split equally across each day on the trip on which fishing occurs, i.e. the number of unique fishing dates on the trip."

"Within each fishing date, the days at sea attributed to that day is split equally across the fishing activities on that day."

i.e. fishing effort is calculated for each fishing trip and, once the days at sea have been established for the trip, considering different gears and mesh sizes simply leads to a partitioning of that total into constituent parts.

For fishing days the situation is different.

A distinction is made between active and passive gears.

"In essence, fishing with passive gears happens in parallel while fishing with active gears happens in series."

"Considering the active gears, each date which has a fishing activity using an active gear is allocated 1 fishing day. This is split equally among the active gear activities on that date."

"Considering the passive gears, each fishing activity using a passive gear is allocated 1 fishing day. If there are multiple fishing activities with passive gears on the same fishing date, they each get allocated 1 fishing day."

and crucially

"There may be more fishing days on a trip than days at sea."

The Nicosia workshop was working on the principle (report page 8)

"As stated in the FAO handbook of fisheries statistical standards "For biologists, a good measure of fishing effort should be proportional to fishing mortality. For economists it should be proportional to the cost of fishing." Fishing Days is the measure related to fishing mortality, Days at Sea is the measure related to the cost of fishing. The measure of Fishing Days should be related to the amount of time a fishing gear or gears are in the sea (best fishing time proxy that is EU-wide available, currently). When gears are used in parallel this measure will not equal the number of days on which fishing occurs for the vessel."

NEW (08.09.2017)

Q: The fecR package will not accept trips with different trip IDs if they start and finish with the same date & time combination.

A: Version 0.0.2 of the fecR package was updated to allow trips with different IDs to start and finish with the same date & time combination. The fecR package can be found on the CRAN web site https://CRAN.R-project.org/package=fecR. It is recommended to check you have the latest version before using the fecR package.

An important note on the fecR package:
The package expects ICES rectangle codes as part of its input. This therefore currently restricts the package to use on data from areas with ICES rectangles.

Notes related to the upload facility

N: Duplicate row error messages.

ISSUE: If codes entered for an individual column are rejected by the upload facility, the rows affected may also receive an error message related to duplicate rows. This is because the upload facility regards the 'failed' code as if it were a NULL. This can lead to rows that were already identical except for one column, (e.g. mesh size range), being treated as duplicates if the one column has an error and the entries in that column are both treated as NULL.

TIP: Ignore duplicate row error messages unless there are no error messages connected with individual codes.

N: Trailing rows and columns.

ISSUE: If data is deleted from cells in an EXCEL table, but the row (or column) is not deleted, on export to csv format the file will be filled with NULLS. This is especially a problem if data is deleted such that a final row (or column) contains no data because in this case there is nothing visible to show the row/column still exists in EXCEL.

TIP: If a csv file has been created by exporting from an EXCEL file, open the file in a text editor and check for commas in a row or rows after the data. Also check for extra commas at the end of rows.