# WP_table_1A_dnk_documentation

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This .pdf can be found at https://github.com/ices-eg/RCGs/tree/master/NWPtools/personal_folders/dnk

All Joel's work has been put on https://github.com/ices-eg/RCGs/tree/master/NWPtools/common

I have made changed to script and input, which handles Danish cases - everything can be found at https://github.com/ices-eg/RCGs/tree/master/NWPtools/personal_folders/dnk

## Major issues

### Linkage file

1. areaBis: This needs to be reviewed due to inconsistency e.g. sometime area 27.1 and 27.2 are missing from all areas in the North Sea and Eastern Arctic, stock present in more than one region e.g. mackerel. A common approach should be agreed on at the RCG's.
2. Quota codes / FIDES_stockID: Often quota's do not follow the EUMAP area * species aggregation. Further, a lot of qoutas are missing. A common approach should be agreed on at the RCG's after identifying relevant quotas.
3. Species: The latinName in the linkage table do not always follow the names in the ASFIS file. Further, the creativity when reporting species to EUROSTAT is quite big e.g. Capros aper is reported as both Capros aper and Caproidae. A common approach should be agreed on at the RCG's

### Data sources

1. Why do we use EUROSTAT? - Often the most recent year is not available for all countries. How do we interpret NA's? - these seems to cover both missing submissions and NULL landings. Joel's program ignores NA in mean, but that don't take true NULL landings into account. Why don't we use the RDB? - only landings from area 27?

Table 1: True NA's. A lot of missing landings in 2018

| Country | sum_2018 | sum_2017 | sum_2016 | sum_2015 | sum_2014 |
|---|---|---|---|---|---|
| Belgium | 477154.2 | 511761.6 | 564060.0 | 513712.8 | 556680.9 |
| Bulgaria | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Denmark | 17740226.0 | 20227006.0 | 14737963.0 | 18823105.6 | 16207661.9 |
| Estonia | 2267993.5 | 2184845.8 | 2081257.0 | 1988224.5 | 1818389.6 |
| European union (28 MS) | 0.0 | 93086016.3 | 86136680.0 | 90950223.9 | 87297138.2 |
| Finland | 4438742.2 | 4602276.0 | 4668029.6 | 4333765.1 | 4342446.9 |
| France | 0.0 | 8351713.6 | 8560991.0 | 8190531.6 | 8748933.9 |
| Germany | 5536057.0 | 4755078.3 | 5049122.2 | 5393088.3 | 4742751.1 |
| Ireland | 0.0 | 5503739.1 | 5165791.2 | 5272491.4 | 6224647.6 |
| Italy | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Latvia | 2061251.3 | 2348693.0 | 2216695.1 | 2244810.0 | 2113360.1 |
| Lithuania | 901978.6 | 839863.0 | 873850.5 | 816259.3 | 1158562.7 |
| Netherlands | 8757377.2 | 7361362.5 | 7270951.2 | 7700949.8 | 6321179.8 |
| Poland | 0.0 | 4329004.8 | 4101662.8 | 3960145.2 | 3484981.0 |
| Portugal | 0.0 | 2884479.4 | 3111566.2 | 3333939.0 | 3012985.4 |
| Romania | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Country | sum_2018 | sum_2017 | sum_2016 | sum_2015 | sum_2014 |
|---|---|---|---|---|---|
| Spain | 0.0 | 7772117.0 | 7224330.1 | 8070935.2 | 7854534.8 |
| Sweden | 5939115.4 | 5911765.5 | 5519454.3 | 5281629.0 | 4498362.4 |
| United Kingdom | 15105181.4 | 15502311.7 | 14990955.7 | 15026637.2 | 16211659.9 |

Table 2: True 0's. In the resulting mean (236 t) Landings from 27_8 are ignored due to missing landings in 2018

| | geo | X3A_CODE | Region | Y2018 | Y2017 | Y2016 | Y2015 | Y2014 | Y2013 | Country |
|---|---|---|---|---|---|---|---|---|---|---|
| 7365 | DK | BOR | 27_8 | NA | 271 | 80.77 | 6.27 | NA | 1354.26 | Denmark |
| 9753 | DK | BOR | 27_7 | 27 | 240 | 256.11 | 12.89 | 8757.84 | 11827.88 | Denmark |
| 10091 | DK | BOR | 27_6 | 67 | 37 | 79.73 | 9.79 | NA | NA | Denmark |

# Update to common/input

patch_codIIIa_20191009: Updated by Nuno

Nephrops landings:*work in progress.* started to update, so far only for FU32 & FU33, but found that the hack with fao areas works ok for Denmark. If more years are added, then the scripts need to take that into account.

EUMAP_Table1A_Linkage_EUROSTAT and EC_TAC: for gadus morhua IIIaN I have changed areaBis from "27_3_A-4_AB_NK" to "27_3_A"

# Scripts in dnk personal_folders

## Filling Table 1A_common_input.rmd

Same input as 'Filling Table 1A.rmd' in common folder and script very similar to 'Filling Table 1A.rmd', but the following has been changed in the script

1. Instead of setwd, then link to folders
2. Fixed a bug with number of columns in DFM
3. Added Nuno's code for handling of cod in IIIa
4. Removed characters in EUROSTAT figures
5. Changed T1$shareLanding < -T$1landings/sum(DT$MOY, na.rm=TRUE) - this is not correct since EU28 is there together with landings from each country -> double up on the ECC landings.

*If accepted, then the script runs on the common input*

This script does not really work for Denmark e.g. we end up not being oblige to sample sandeel. Denmark has around 94% of the EU TAC and fish close to 100.000 tons a year. Further, a lot of the qoutas we fish on are not in linkage file. Nearly all the problems are caused by the linkage file, so I have tried to update it, so it can handle Danish fishery.

The updated linkage file can be found at personal_folders/dnk/input - point 2 & 3 below creates the updated version.

1. (00_update_areaBis): This script is not developed, but it is needed.
2. 01_table_1a_linkage_table_correcting_latinName: The latinName in the linkage table do not always follow the names in the ASFIS file - this is corrected here. Different countries report same species with different species 'aggregation' level (species / family) e.g. boar fish are reported both as Capros aper & Caproidae -> all needed scientific names are inserted in latinName. Further, EUMAP sometimes ask for species at the family level e.g. Argentina spp., which in EUROSTAT are

the following species; c("CAA","CAB","CAS","CAT") -> all needed scientific names are inserted. /checks/check_spp_in_EUROSTAT.R is used to find correct species

3. 02_table_1a_linkage_table_correcting_stockId: The quotas Denmark is fishing on is often missing, so the correct ones are added here. /references/kvox18.pdf is used to find the correct qoutas.
4. 03_Filling Table 1A_dnk_input: Using the updated linkage file as input. Very similar to 'Filling Table 1A.rmd'. Very small correction in the main script. Some very Danish addition in the end, since we use the output as input to table 1B & C.
5. 04_Filling_Table_1A_dnk_input_finalized: Very Danish script. Adding comments, seleting, unselecting and combining.

# Random notes

*Some of them are from 2016*

The codes for quotas apparently change from year to year.

elasmobranch - how are these reported to EUROSTAT - check names *TODO*