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**Our Ref: L.27/ACB/RF/av**                                        20 August 2019

Subject: Data call on landings at trip/haul level to support ICES fisheries advice in the Baltic Sea

Dear Reader,

Please find enclosed a document describing the rationale, scope and technical details of the data call to support ICES special request advice related to bycatch levels of cod in Baltic fisheries.
This data call is under the DCF Regulation ((EU) No 2017/1004 and Commission Decision 2016/1251/EU).
All data supplied will be used and stored according to the terms of the VMS/logbook access and use policy (see Appendix 2 of the data call).

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

Sincerely,

Anne Christine Brusendorff
General Secretary

**CC:** Venetia Kostopoulou (DG-Mare, DCF); Bas Drukker (DG-Mare, DCF); Laura Simonayte (Ministry of Agriculture of the Republic of Lithuania)

# Table of Contents

# Data call: landings at trip/haul level from baltic fisheries to support ices fisheries advice.

## 1. Rationale of the Data call

Data will be used to support ICES fisheries advice related to by-catch levels of cod by *métier* and Member Country in Baltic fisheries.

## 2. Scope of the Data call

ICES Member Countries are requested to provide the following information;
All trips/hauls from fishing vessels in the Baltic in 2018.

**Species**: all fish species landed on the trips/hauls in question.
**Areas**: 27.3.b.23, 27.3.c.22, 27.3.d.24, 27.3.d.25, 27.3.d.26, 27.3.d.27, 27.3.d.28.1, 27.3.d.28.2, 27.3.d.29, 27.3.d.30, 27.3.d.31, 27.3.d.32.
**Years**: 2018
**Note**: If no cod is caught (zero landings) within a *métier* in 2018 by a Member Country, there is no need to submit the data at a trip/haul level. However, a list of these *métiers* should be submitted (as a separate .csv or .txt file).

## 3. Legal framework

For EU Member States, this data call is under the DCF Regulation ((EC) No 2017/1004 and Commission Decision 2016/1251/EU) and in particular, Article 17(3) of regulation (EC) No 2017/1004 which states "…*requests made by end-users of scientific data in order to serve as a basis for advice to fisheries management, Member States shall ensure that relevant detailed and aggregated data are updated and made available to the relevant end-users of scientific data within the deadlines set in the request...*"
ICES is thus mandated to request detailed data to provide fisheries advice. This mandate is supported by international agreements and the current EU data collection framework (DCF).
This Data call follows the principles of personal data protection, as referred to in paragraph (9) of the preamble in Council Regulation (EC) No 2017/1004.

## 4. Usage of requested data

ICES will use submitted landings data to address a special request by the European Commisision related to unavoidable by-catches of eastern Baltic cod in fisheries not targeting eastern Baltic cod.

## 5. Deadlines

The data should be submitted by 20 September 2019.

Member Countries that are able to deliver the data at an earlier time are encouraged to do so given the urgency of the advice for 2020 management of Baltic cod.

## 6. Data to report

### 6.1 Geographic and temporal scope

Please refer to Section 2.

### 6.2 Format

Data should be submitted in the format described in Appendix 1.

Accepted data types are; Rdata, .csv or .rsd.

All data supplied will be used and stored according to the terms of the VMS/logbook access and use policy (see Appendix 2). To ensure vessel anonymity, the data format includes a field with "Unique anonymous vessel identifiers".

### 6.3 Electronic Advice outputs

The advice outputs based on data will result in electronic outputs showing distribution of landings of fish species by *métier* and Member Country in the Baltic sea. Graphical outputs can be communicated to the advice recipient as pdf files, tables or shapefiles, where the landings by *métier* (level 6) and Member Country are presented per ICES rectangle or at a lower spatial resolution. This information is provided as an integral part of the advice. The underlying data themselves will not be made available to other parties.

### 6.4 Electronic submission

The data and any supporting information should be reported to the ICES secure website. Please contact [data.call@ices.dk](mailto:data.call@ices.dk) for a country specific login.

Uploaded files must include country code and date in the file name; example, DNK_xxxx_19_03

## 7 Secure usage of data

Regarding the transmission, storage and handling of data, we inform that ICES will provide a secure (https) folder, and a unique password for each country to upload their data to. The data will only be accessible by the technical staff in the Secretariat for the purposes of providing the data to the specific processes/working groups as named in the call.

In addition, ICES has an agreed VMS/logbook access and use policy for data resulting from this type of data call, which governs the process of who is given access and what they can do with the data. See Appendix 2.

ICES welcomes the practical suggestions elaborated by the Regional Coordination Groups towards a common agreement on the provision and publication of data derived from the ICES VMS/logbook data calls to maintain confidentiality of

published sensitive data (see Appendix 3 for details). These guiding principles will be followed for data obtained under this data call where applicable.

## 8. Contact information

For support concerning submission issues, please contact [data.call@ices.dk](mailto:data.call@ices.dk)

# Appendix 1. Data submission format

This Annex explains the field type (Character or numeric). If the information is not known (as could be the case in the small scale fisheries for vessels below 10 meters that do not carry loogbooks), examples (in bold) on how to fill in the data correctly are provided below.

| Field | Variable name | Description | Format | Code list or example | Mandatory |
|---|---|---|---|---|---|
| 1 | vslFlgCtry | Vessel Flag Country<br><br>Country code based on ISO 3166–1 alpha-3 code. | Character string of length 3. | Fixed code list consisting of:<br><br>DNK, SWE, FIN, EST, LTU, LVA, POL, DEU. | M |
| 2 | vslId | Vessel Identifier<br><br>Unique anonymous vessel identifier. | Character string of length 8. The first 3 characters will be the 3 letter flag country code, the following 5 will be a numeric string with leading zeros. | Examples:<br>POL01234,<br>SWE00012<br>DEU00421 | M |
| 3 | vslLenCls | Vessel Length Class<br><br>Vessel length class overall (m)<br>DCF LOA classes | Character string of length 6. | Fixed code list consisting of:<br><br>VL0008 VL0810 VL1012 VL1218 VL1824 VL2440 VL40XX | M |
| 4 | fishTripId | Fishing trip Identifier.<br><br>Unique anonymous fishing trip identifier | Character string of length 14.<br>The first 3 characters will be the 3 letter flag country code, the following 4 will be the year, the last 7 a numeric string with leading zeros. | Examples:<br>DEU20180000001,<br>SWE20180002474,<br>POL20180056632<br><br>**For vessels below 10m that do not carry logbooks** use SWE20189999999 | M (vessels above 10 meters) |
| 5 | haulId | Haul identifier<br><br>Unique hauls identifier. Forth running number per trip. | Add 2 characters on fishTripId | Examples:<br>LTU20180000001_01<br><br>**If hauls not known** use _00, so it is known when the info relates to a trip and not a haul e.g. LVA20180056632_00 | M (vessels above 10 meters) |
| 6 | landLoc | Landing Location | Landing Location<br><br>LOCODE<br><br>Character string of length 5 the first 2 letters of which correspond to the country, the remaining 3 the unique location code. | Fixed code list; Examples: DKTHN<br><br>**If not known** use country cod (2 letter) and 999<br>Examples<br>DK999 | M |

| Field | Variable name | Description | Format | Code list or example | Mandatory |
|-------|---------------|-------------|--------|----------------------|-----------|
| 7 | landDate | Landing date<br>Landing date of the fishing trip | YYYY-MM-DD<br>Character string of length 10.<br>Year, month, day numerics separated by hyphens. | Finite code list; Examples:<br>2018-12-05<br>2018-02-12<br><br>**For vessels below 10m that do not carry logbooks** use the month when the catch was landed<br>2018-02-00 | M (vessels above 10 meters) |
| 8 | rect | ICES statistical rectangle recorded for the species landing | Character string of length 4 | Fixed code list; Examples<br>36E5<br>09E1<br>**If not known** use 'NONE' | M |
| 9 | area | FAO area codes[*]<br>Corresponding to highest possible resolution ICES sub-area, area, division. | Character string | Fixed code list consisting of:<br>27.3.b.23, 27.3.c.22, 27.3.d.24, 27.3.d.25, 27.3.d.26, 27.3.d.27, 27.3.d.28.1, 27.3.d.28.2, 27.3.d.29, 27.3.d.30, 27.3.d.31, 27.3.d.32 | M |
| 10 | foCatEu6 | *Métier* level 6 | Character string with gear, target, mesh and selection device components, underscore separated. | Fixed code list; Examples<br>OTM_SPF_32-104_0_0,<br>GNS_SPF_120-219_0_0,<br>MIS_MIS_0_0_0 | M |
| 11 | sppCode | Species code<br>The species codes of all the recorded landings from the trip. | WoRMS Aphia ID[†]<br>Character string of length 6 or shorter, of numeric values. | Fixed code list; Examples<br>127419<br>126436<br>11723 | M |
| 12 | sppName | Species name | Accepted WoRMS name corresponding to the Aphia ID[†] | Fixed code list; Examples<br>Capros aper<br>Gadus morhua<br>Sepiidae | M |
| 13 | landWt | Landed Weight<br><br>The live weight equivalent in KG for each recorded species. Including Below Minimun Size (BMS) landings. | Numeric | | M |

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[*] https://vocab.ices.dk/?ref=358
[†] http://www.marinespecies.org/aphia.php

# Appendix 2. Conditions for detailed VMS/logbook data use

Access and use conditions for detailed Vessel Monitoring System (VMS) and log book data made available through ICES Data calls**.**

### Goal

This policy governs the process of who is given access and what they can do with the data resulting from ICES data calls.

### Scope

This policy applies to all data users‡ of data given access in accordance with the aims of the specific data call, and to ICES activities for providing access to these data.

### Data user security requirements

1. Data shall be used only for the purposes of facilitating scientific advice and will be strictly related to the agreed terms of reference of the activity executed by the data user.
2. Electronic data provided to the data user(s) shall not be kept on a users computer/database upon completion of the task related to the term of reference.
3. Data users shall treat the data as confidential and the transmission or sharing of these data are not allowed.
4. Data users shall ensure that visualisations or data products derived from the data adhere to the confidentiality rules under EU Regulation (EC) No 2017/1004.

### Data ownership

The data is provided by ICES member countries, or by proxy through the Regional Fisheries Commissions, and therefore in all cases data are owned by the individual countries.

### Limitations of the data

Although the ICES Data Centre do perform data quality/integrity control, the data providers always retain complete responsibility for data quality.

### Policy for Use of Data

ICES, as the host and provider of access to the data, will make data available in a timely way according to principles set out in section 3 of the ICES data policy (http://ices.dk/marine-data/guidelines-and-policy/Pages/ICES-data-policy.aspx)

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‡ All persons (and groups of persons) that are members of an ICES Group (e.g., Expert Group, Advice Drafting Group, Workshop), or members of the ICES secretariat involved in the acquisition and processing of these data.

## Acknowledgement of these conditions

| End user name (printed) | Email address | Date | Signature |
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**Appendix 3: Suggestions from RCGs (ref. August 2018) and further ICES suggestions to ensure anonymity within electronic data outputs associated with VMS/ Log book data derived advisory products**

Regional Coordination Groups (RCGs) are groups of member states of the European Union operating in the same marine region. Their mission is to coordinate their data collection activities and implement procedures, methods, quality assurance and quality control for collecting and data processing. The RCG NS&EA suggested to ICES a number of measures to ensure anonymity and maintain confidentiality of published sensitive data. This document is based on the response to RCG NS&EA request.

ICES welcomes the practical suggestions elaborated by the RCG's towards a common agreement on the provision and publication of data derived from the ICES VMS/Log book data call. The RCG's have considered the member countries under the EU Data Collection Framework, thus when implementing the suggestions, ICES has to consider that the ICES data call is also for contracting parties outside of the scope of the DCF. This document is therefore a practical response for implementation of an ICES workflow (see Figure 1 below) and publication rules, regardless of affiliation to specific legislative policies.

ICES agrees that the long-term goal is that no filtering out of vessels should be done in the data provided under the data call, as this affects the quality of the management advice provided. The suggestion made by RCGs to ensure that all future data are submitted (and previous data are resubmitted) with no filtering is welcomed. ICES also welcomes the suggestions on how to better ensure data security of data contained in c-square labels (i.e. the sensitive information being Lon./Lat. at $0.05^\circ$ x $0.05^\circ$).

The following is ICES' interpretation of how to implement these recommendations at an operational level. ICES intends to make this text an integral part of the VMS data call in order to clearly specify the approach agreed with the RCGs for provision and publication of data derived under this data call.

Taking into account the RCG recommendations, ICES suggests the below principles to ensure practical implementation within the ICES workflow in order to ensure the provision of the best possible data via the data call and publication of results following the legal setting for such data.
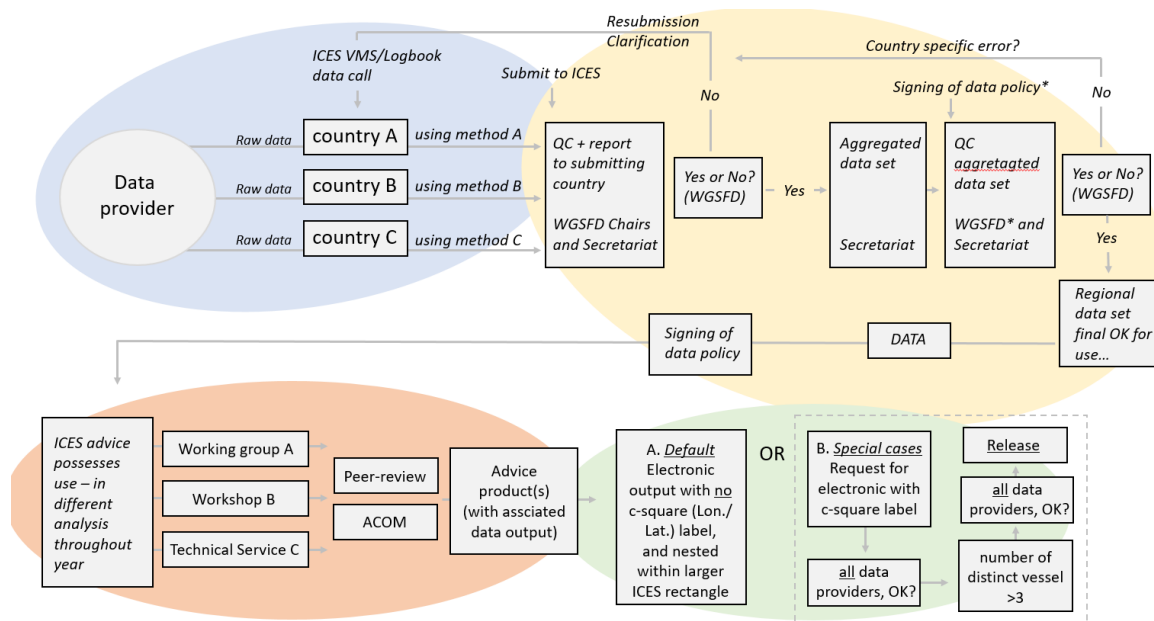
a) _Applied as a default_ - ICES will, as a default, for all electronic advice outputs (see ICES VMS and Logbook data call 4 February 2019, section 6.3 Electronic advice outputs) derived from (and associated with) VMS and logbook data supress the c-square label (i.e. the sensitive information being a combination of Lon./Lat. at $0.05^\circ$ x $0.05^\circ$). For electronic advice outputs, the only spatial information for each score will be which larger ICES rectangle it falls within. There are 200 c-squares (at $0.05^\circ$ x $0.05^\circ$) contained within any given ICES rectangle. This will ensure all analysed scores and associated covariant for each c-square can be made available, without the sensitive information (Lon./Lat. at $0.05^\circ$

x 0.05$^{\circ}$). Similar approaches are also becoming common practice for peer review journals[§], as they help ensure vessel anonymity, while allowing transparency/reproducibility of the analysis (a prerequisite for many assessments under the EU MSFD).

b) *Applied in cases where c-square labels are required* - In cases where the longitude and latitude of c-squares at 0.05$^{\circ}$ x 0.05$^{\circ}$ are required as data outputs either by an advice requester or other party, international effort values of any c-squares containing three vessels or less will not be shown. In such cases, the data outputs will only be produced by ICES following permission from all data providers. Once produced, a review period will be provided for all data providers to flag issues prior to their release.

It is a six-month process from the issuing of the VMS/Logbook data call, to having a quality assured aggregated regional data set ready for analysis for several advisory purposes (Figure 1 below).

In addition to *ad hoc* special requests submitted to ICES at short notice, VMS and logbook data have also become an integral part of a range of annual ICES advisory products for all ecoregions (e.g. the Fisheries Overviews Advice and Ecosystem Overviews Advice). ICES aims to minimise the preparation time and administrative burden to the member countries by making this data call once, and with the above rules being explicit and transparent about how these data will be published. ICES believes that the suggested default option "a)" above helps ensure anonymity, while allowing transparency/reproducibility of advice product analysis. While only in case "b)", with the permission of all data providers, ICES will not show international effort values of any c-squares containing three vessels or less to ensure an additional layer of anonymity will not be shown.



**Figure 1.** Conceptual diagram illustrating the workflow steps in the ICES VMS and log book data call process, as well the secure use of the data in the advice process, for experts to analyse and

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[§] e.g. Amoroso *et al*., 2018, "Bottom trawl fishing footprints on the world's continental shelves", in PNAS at www.pnas.org/cgi/doi/10.1073/pnas.1802379115

produce VMS and log book data derived products used in ICES management advice on the spatial distribution and impact of fisheries.