

Data and Information Services Report

This report comprises activities from the ICES Data Centre and the Data and Information Group -DIG (SCICOM operational group).

DIG has continued close collaboration with ICES Data Centre, both in terms of identifying strategic areas most likely to impact ICES work, and in concrete steps to apply governance principles and evaluations to different development projects to ensure considerations of all relevant data management principles are considered.

Future Challenges and Opportunities Progress

In March, DIG and ICES Data Centre presented the initial Future Challenges and opportunities paper to SCICOM, that identified Machine learning, Cloud technology, and Open data and code sharing as the three biggest areas of challenge and opportunity. Initially, this was a document for discussion, but DIG and the Data Centre worked further on the approach during and after the May DIG meeting. This has now translated to four main headings (Machine learning, Cloud, open data and code and transparency of process) which will be used by DIG to list and track more specific challenges and opportunities in a risk management style approach.

Data Management and governance principles

DIG has previously presented a list of governance principles or areas of awareness. These are specifically designed to touch on all relevant areas of managing data within an organisation, and can be used to evaluate the readiness and any gaps in applications and management thereof. The DATRAS governance group was proposed to start evaluating trawl survey data against these principles, and have met twice informally (via webex) since January 2018. A resolution has now been proposed to establish the governance group under SGOM. The initial aim was to introduce the principles and ensure dialogue in the survey working groups, before work progresses this year to provide more concrete suggestions to ICES Data Centre.

DIG and ICES Data Centre also recognised that there was an opportunity to incorporate the governance principles at an earlier stage in newer projects to catch any potential issues earlier. Thus, DIG will this year establish a dialogue and quick review of the Transparent Assessment Framework (TAF) and European Seabird At Sea ESAS data platforms. In addition, a governance group for the development of the SmartDots product is also proposed as a resolution, which will make use of the general principles to help guide management of data and the SmartDots age reading platform in general.

Overall, for input data to an assessment, ICES now has governance structures established for Fisheries independent and dependent data (DATRAS Governance group, Steering Group for the Regional Database, WGFAST are proposed for Acoustic data), and as TAF starts to move beyond development to actuality, the governance framework is under discussion inline with the review described above by DIG. Governance is seen as particularly important to retain

continuity, consistency and transparency as the composition of policy frameworks affecting data collection, and advice clients has and will continue to change.

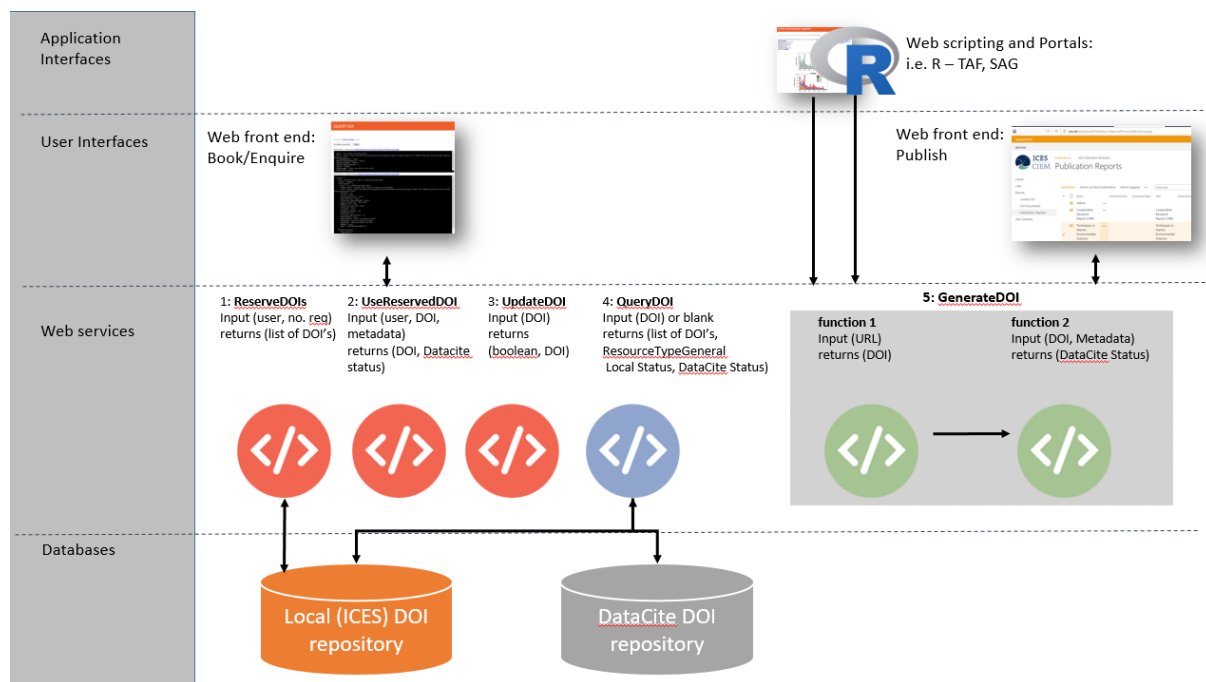
Data Guidelines process review

DIG inherited ownership of the ICES data guidelines from its former expert group format, but have struggled to progress review and responsiveness. While the current Data Guidelines remain relevant, there is a need to expand the scope of these guidelines to capture the more dynamic documentation and coding that is happening in parallel (or instead of) – WGFAST has had some experience in this area, and is looking to DIG and ICES Data Centre for guidance on this. There is therefore a recognised need to review the process to ensure the community can work iteratively and responsively on developing guidance, while there is also a desire to retain a recognised ICES publication. A smaller group of DIG members is developing a process that will enable both mechanisms to exist, while ensuring quality and citation of recognised ICES Data Guidelines. The draft proposal will be ready for the SCICOM March meeting. While this work is ongoing, there will be no attempt to revise or update existing guidelines.

Progress with Digital Object Identifiers

The importance of persistent identifiers for both scientific publications and data that are used in assessment is now well accepted in the ICES community. ICES have adopted the DataCite DOI standard and the roll-out, which has focussed on publications so far, is soon ready for data products. Currently, ICES has the ability to mint unlimited DOI's and the technical framework has now been developed in-house to support this for all types of publications (documents, datasets, URL's of data queries etc.)

The approach builds on a number of web services, which means the DOI's can be created/updated/populated with meta-data from trusted programmes and scripts. All publications in Sharepoint can in practice have DOI's assigned relatively easily, and likewise for other systems such as the Transparent Assessment Framework (TAF), Acoustic and DATRAS portals etc. The implementation at each node is to be specified within the governance mechanisms for the different systems.



First Hackathon in ICES

In May 2018, ICES hosted its first hackathon – WKINVITED. A hackathon is a semi-structured event that focusses on rapid development of an idea into a product. Teams work together, bringing different skills in terms of domain knowledge, technology or design, and aim to produce a prototype or more developed idea of how to approach and solve a problem.

WKINVITED mixed physical and remote participation, with a total of 16 participants, and a total of 5 ideas were developed during the one and a half day event. Overall, there was positive feedback from the participants, and the general consensus was that the event was a success, although lessons were also learned both in terms of requirements of resource for preparation, time available etc.

DIG discussed if a follow up event should be proposed, but at the same time, an opportunity has arisen whereby ICES will participate in the 2019 EMODNET hackathon instead. This is a well-resourced event on a much larger scale, and it was recommended that ICES should try a broader event with a scope for wider integration of data, to learn which format suits best. Neil Holdsworth has progressed discussions with EMODnet, and the ICES participation in the event in (most likely) May 2019 will go ahead.

ICES Linked Data becoming a Reality

With the redevelopment and revision of the ICES Vocabulary services, the underlying model for how keywords and vocabularies are stored and served has changed to enable better linkage between terms, both from inside and outside of ICES. This enables data to be connected to terms, which in turn are also connected to other keywords and concepts. At the outset, this may seem like a modest change, but it has the potential to enable ways of integrating and analysing data that would previously have required huge efforts.

One key aspect of enabling linked open data, apart from the work on vocabularies, is the ability to establish persistent identifiers or locations for data – otherwise, you cannot link together the terms and the data. ICES is already working towards enabling digital object identifiers for reports and DIG has recommended that new or revised data submission formats

incorporate the ability for national data submitters to include persistent identifiers which will increase the ability to track data lineage from source to use.

Upcoming Policy reviews

DIG, in close collaboration with the ICES Data Centre, is responsible for managing the process of evaluation and review of the ICES policy of management and dissemination of data. The group looked at initial challenges of the EU regulation on personal data protection (GDPR) and its impact on the existing data policies. The GDPR is most likely to affect data where natural persons can be identified; therefore the Vessel Monitoring System (VMS) and the related AIS are the data types most likely to be under scrutiny. While the initial analysis would indicate that ICES has well documented policies and procedures in place, this will be considered when the VMS data policy is updated as part of a scheduled review in the 2019 work cycle.

As noted by DIG, the data policy for the Regional Database (RDB) was revised by the SC-RDB in December 2017 (attached as Annex 2), it is currently being tabled to the Regional Coordination Groups (RCG's) for acceptance by the participating countries. In brief the changes are:

- Reference to both RDB and RDBES
- Reference to the new DCF regulation (EU) 2017/1004, and specifically as this now refers directly to a regional database
- Stronger reference from the DCF on quality directed towards member states
- New annex 1 developed to summarise all main articles from regulation that are relevant
- New annex 2 developed that specifies more precisely what is meant by use of data and public outputs of aggregated data

New projects and contracts

Council document [Del 03.3](#) highlights the overall status of projects and sub-contracts, as previously noted these make a significant contribution to the data infrastructure at ICES and the aim is to use these resources to enhance the development of the data platforms – the acoustic portal being a major recipient of H2020 funding. Not listed in the projects document is a new contract that ICES have signed with HELCOM to provide an online assessment tool for hazardous substances, which itself builds on the special request from OSPAR to provide such a tool for the OSPAR area.

Annex 1: 2018 Activity: Inputs and outputs to assessments and products

Activity	Project or System	Source funding	2018 Q1	Current Status	Comments
Pre-input assessment to	SmartDots platform Otoliths Exchange	DG MARE Special Request (for 2018)/ Institutes own investment		On track	Live in Beta version http://ices.dk/marine-data/tools/Pages/smartdots.aspx Joint collaboration with ILVO (BE) and DTU Aqua (DK). Successful completion of first age reading event exercise in February 2018. Will be used in a Mediterranean age reading exercise, interest from international community, as far afield as the Falklands. Will also link up to machine learning via WKMLEARN.
Quality assurance of input data to assessment	DATRAS fisheries independent data	DG MARE Special request (for 2018)/ Council investment (2017-18)		On track	2 data input workshops planned for i) Bay of Biscay, Iberian ii) North and Celtic seas
Indices for assessment input				On track	LFI calculation prepared for Baltic, finalizing expert validation ROCKALL and SWC-IBTS data products and indices documented and scripted and available in DATRAS

Activity	Project or System	Source funding	2018 Q1	Current Status	Comments
Governance of data products				On track	First meeting of DATRAS governance group convened in 2018.
Quality assurance of input data to assessment	Acoustic portal Fisheries independent data	H2020 AtlantOS project/ICES Core funding		Behind schedule	Some surveys missing from Norway, although data are starting to be prepared/included, as well as Iberian and Bay of Biscay surveys yet to be included.
Indices for assessment input		H2020 AtlantOS project		On track	Portal live and populated for a number of North East Atlantic and Baltic Surveys including HERAS, PELGAS, BIAS and BASS. http://ices.dk/marine-data/data-portals/Pages/acoustic.aspx
Raising and estimation of commercial catch data for input to assessment	Regional Database and Estimation System (RDBES) Fisheries dependent data	Council Investment (2017-2018)/ DG MARE Special request (for 2018)		Behind schedule	2018 focus is on finalizing as much as possible the underlying data model for all commercial fisheries sampling (at sea, port) and moving to implementation of the system. 2 workshops are supporting this, the first (WKRDB-MODEL) has already concluded and the results discussed with WGCATCH. A Github resource page with the formats, data model, etc. will be established so that institutes can actively participate/start using the information.

Activity	Project or System	Source funding	2018 Q1	Current Status	Comments
Protected species bycatch estimates	Bycatch database (PETS) WGBYC	ICES core/DCF		On track	Bycatch data format and portal fully established, in 2018 ICES ran a successful data call receiving data also from many Mediterranean countries
(ICES Area): Various spatial/tabular data products for analysis of fishing effort and impact	VMS and Logbook Fisheries dependent data	Various		Potential for data provision issues	Usually part of the OSPAR-ICES requests, however not agreed by OSPAR in 2018 workplan. Note that for the ICES area, data are still not provided by Spain, Russia and Greenland. Although Spain has indicated that they will provide data by end of July 2018, which is too late for advice/assessment but nonetheless a major step forward. DIG have reviewed VMS and AIS data provision in relation to the GDPR. Preliminary conclusion is that ICES has various measures in place for VMS (data call, VMS access policy, secure system), However for AIS, these measures are not in place (although at present ICES do not ask/receive AIS).
(Med and Black Sea) Various spatial/tabular		DG ENV Special request (for 2018)		On track	This is the first time that ICES will attempt a data call in the Mediterranean and Black sea under the EU MAP/DCF umbrella for use in evaluating methods for MSFD: Descriptor 6,

Activity	Project or System	Source funding	2018 Q1	Current Status	Comments
data products for analysis of fishing effort and impact related to MSFD D6					Criteria 2 (Seafloor impact) for Europe as a whole.
(NEAFC Area): Various spatial/tabular data products for analysis of fishing impact		NEAFC MoU		On track	Technical issues largely addressed in inter-sessional period between bilateral meetings in 2017 and 2018. Expect further improvements to data flow once agreed by NEAFC contracting parties.
Repeatable and documented assessments, quality control of inputs and outputs to assessment	Transparent Assessment Framework (TAF)	Council		On track	Latest news http://ices.dk/news-and-events/news-archive/news/Pages/All-systems-go-for-new-assessment-framework.aspx
	Stock Assessment Graphs (Database) SAG	ICES Core/DG MARE Special request		On track	Relating to visualization of advice beyond PDF, to prepare SAG for housing additional data from stock assessment sheets. The Commission is pleased that we are linking part of this work to the INSPIRE Directive, moreover we are working on a use case with the Commission on the application of INSPIRE models to Fisheries data outputs.

Activity	Project or System	Source funding	2018 Q1	Current Status	Comments
	Stock Information Database	ICES Core		On track	Rationalizing the stock information across stocks and quality controlling the information.
Repeatable and documented assessments, quality control of inputs and outputs to assessment	Contaminants Assessment Tool	OSPAR, HELCOM and (AMAP)		On track	Building on the approach for Eutrophication assessment tool that ICES developed with HELCOM. Implement for all 3 regional conventions/programmes to cover the entire ICES Area
	Eutrophication Assessment Tool	HELCOM, OSPAR		On track	Building on the assessment tool already developed under a HELCOM led project, OSPAR are have made a special request for ICES to develop this framework for their common comprehensive procedure for eutrophication assessment.



ICES
CIEM

International Council for
the Exploration of the Sea
Conseil International pour
l'Exploration de la Mer

SCICOM/September 2018

Doc 23b

Agenda Item 7.3

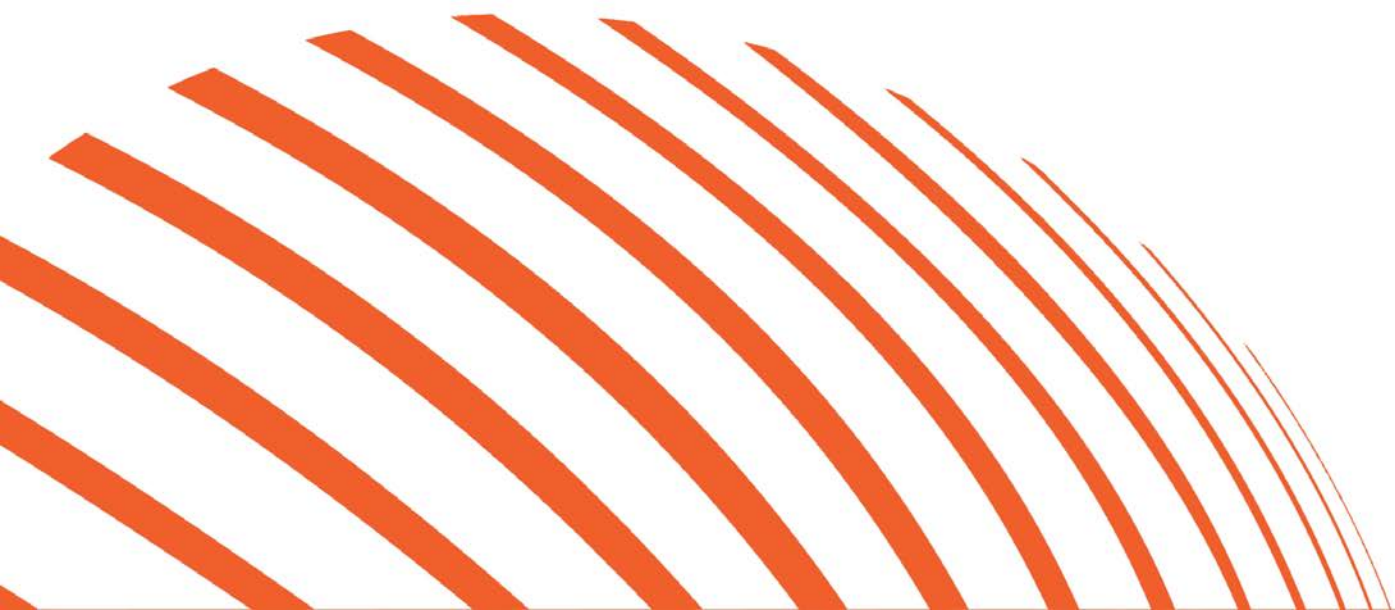
Revised on 10 September 2018

Commercial Fisheries Data

Data policy for the Regional Database (RDB) and Regional Database and Estimation System (RDBES)

11 December 2017

ICES - Science for Sustainable Seas



Goal

The present Regional Database, and the new Regional Database and Estimation System are herein referred to as the RDBES. The Regulation (EU) 2017/1004¹ is hereafter referred to as the Data Collection Framework (DCF).

The main aim of the RDBES is to:

- 1) To ensure that data can be made available for the coordination of regional fisheries data sampling plans, including for the DCF Regional Coordination Groups (RCGs),
- 2) To provide a regional estimation system such that statistical estimates of quantities of interest can be produced from sample data,
- 3) To serve and facilitate the production of fisheries management advice and status reports,
- 4) To increase the awareness of fisheries data collected by the users of the RDBES and the overall usage of these data.

The goal of this policy is to clearly state the conditions for data submission, data access and usage rights. The database herein is the regional database referred to in Article 18(1) of the DCF.

Scope

For the European Union Member States, the basis for data policy rules is the provisions of the DCF, specifically Article 18(1) available in the annex 1.

For non-EU countries, the basis for data policy rules is in accordance with the limitations on data use specified by each country².

This policy applies to all providers and users of data uploaded into the RDBES, and to ICES activities for providing access to data.

Access rights

According to the DCF, provision on access rights and time frame are described under Articles 17(1), 17(3) and 17(4) provided in the annex 1 to this document.

The DCF defines:

- i) **Detailed data** as data based on primary data in a form that does not allow natural persons or legal entities to be identified directly or indirectly
- ii) **Aggregated data** as the output resulting from summarising the primary or detailed data for specific analytical purposes

¹ Regulation (EU) 2017/1004 of the European Parliament and of the Council of 17 May 2017 on the establishment of a Union framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy and repealing Council Regulation (EC) No 199/2008 (recast)

² In response to official data calls to the RDB

Data use for fisheries management:

Advice to Fisheries Management

- i) Countries grant permission for **aggregated** data, see Annex 2, to be used by ICES in the provision of scientific advice to the European Commission and other ICES clients of scientific advice. A list of the ICES groups that require access to aggregated data will be provided to the RCG's and ACOM members by **01 DEC** each year.
- ii) EU Member States (MS) grant permission for **detailed** data to be used by the RCG's for the purposes of Article 9 of the DCF.
- iii) An ICES entity on the approved list in (i), requiring **detailed** data from the RDBES, via the RDBES host can request access in writing to each country and EU MS³. The EU MS will be obliged to respond within two months from the date of the request.

Other uses

- iv) An entity requiring **detailed** or **aggregated** data from the RDBES, can request access in writing to each Country^{Error! Bookmark not defined.}. The EU MS will be obliged to respond within two months from the date of the request.

For requests related to scientific publication, for EU MS Article 17(7) of the DCF applies.

Persons from the European Commission have full access to, or can receive, EU countries' data from the RDB/RDBES.

An **inventory**, based on MS public reports, of data housed in the RDBES is available without restriction and on the RDBES website.

Access Roles

Based on the access granted in Access rights, users are given access to RDBES according to a role based matrix. For simplification and as guidance, the version presented below is shown with fewer roles and access types than are available in the actual role matrix that controls access in RDBES. All roles are managed by password controlled login, with the exception of 'Public' where no login is granted/required.

³ The focal point in EU MS being National Correspondents in consultation with individual countries or autonomous data providers within member states. For non EU countries the ICES delegate is considered the focal point.

	National Responsible	Detailed Data Reader	Aggregated Data Reader	Public
Manage	X			
Process/estimate	X	X		
Read/Download data				
- Detailed data	X	X		
- Aggregated data	X	X	X	
- Inventory	X	X	X	X

Governance of the RDBES

The RDBES is hosted by ICES and is managed by a steering committee (SCRDBES).

Security

RDBES is hosted on a secure server and restricted to persons who have a user name and a password, a user name is for the sole use of that individual. Login is through a website secured with HTTPS protocol.

The RDBES follows the principles of personal data protection, as referred to in Article 2 of the DCF.

Data ownership

The national data in RDBES is owned by the individual countries.

Policy for Data Providers

Although the ICES Data Centre may perform some data quality/integrity control, the data providers always retain complete responsibility for data processing and data quality, according to Articles 14 and 16 of the DCF.

When changes (new data and revisions) are made in the data source (the national database containing the primary data) countries are responsible to in a timely manner update and process their own data in the RDBES.

It is the responsibility of the data provider to make sure that data that cannot be identified to any individual vessel or legal entity or at a resolution violating confidentiality rules⁴.

Policy for Use of Data

ICES, as the host and maintainer of the RDBES, will make data available in a timely way according to the defined **Access rights**

- Correct and appropriate data interpretation is solely the responsibility of data users.
- Data sources (individual data providers) must be duly acknowledged.
- Data Users are obliged to inform ICES of any suspected problems in the data.
- Data Users must respect any and all restrictions on the use or reproduction of data such as restrictions on use for commercial purposes

⁴ The principles of personal data protection, as referred to in Article 17(2) in Regulation (EU) 2017/1004.

Data can be shown in reports as described in Annex 2

Data Quality

According to Articles 14(1) of the DCF Member States are responsible for the quality and completeness of the primary data collected under national work plans, and for the detailed and aggregated data derived therefrom which are transmitted to end-users of scientific data. For non-EU countries, with reference to the ICES Data policy, data providers are responsible for the quality and completeness of data delivered to ICES.

On the basis of the recommendations made by the SCRDBES, ICES develops and applies quality assurance procedures as appropriate and feasible, and in cooperation with data providers and other organizations. ICES may also receive reports on potentially erroneous data. ICES will inform data providers of relevant quality issues.

DISCLAIMER

Correct and appropriate data interpretation is solely the responsibility of data users. Data Users must not expressly or otherwise imply ICES substantiation of their work, results, conclusions and/or recommendations.

Whilst the data have been quality controlled by the supplying institutes, there are inherent flaws in gathering the information and care should be taken in analysing the data for purposes that the data were not primarily intended for. Thus users are urged to treat the data with caution.

If the user has any queries on the validity of the data, to report errors, or the conclusions to be drawn from the analysis they have undertaken, please contact RDBsupport@ices.dk. If the query is about a specific national dataset then the user may wish to contact the National Focal Point for Fisheries data collection (<http://datacollection.jrc.ec.europa.eu/national-correspondent>) or ACOM member for non-EU countries (<http://ices.dk/community/groups/Pages/ACOM.aspx>).

Annex 1: Relevant articles from “Regulation (EU) 2017/1004 of the European Parliament and of the Council of 17 May 2017 on the establishment of a Union framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy and repealing Council Regulation (EC) No 199/2008”

Article 2 (Data protection): Where relevant, the processing, management and use of data collected under this Regulation shall comply with, and be without prejudice to, Directive 95/46/EC and Regulations (EC) No 45/2001 and (EC) No 223/2009.

Article 14(1): Member States shall be responsible for the quality and completeness of the primary data collected under national work plans, and for the detailed and aggregated data derived therefrom which are transmitted to end-users of scientific data

Article 17(1): EU Member States shall set up adequate processes and electronic technologies to ensure an effective application of Article 25 of Regulation (EU) No 1380/2013 and of this Regulation. They shall refrain from any unnecessary restrictions to the dissemination of detailed and aggregated data to end-users of scientific data and other interested parties.

Article 17(3): In the case of 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, which shall not be shorter than 1 month from the date of receipt of a request for those data.

Article 17(4): In the case of requests other than those referred to in paragraph 3, Member States shall ensure that the relevant data are updated and made available to the relevant end-users of scientific data and other interested parties within a reasonable period of time. Within 2 months from the date of receipt of the request, the Member States shall inform the requesting party of the duration of such time, which shall be proportionate to the scope of the request, and of the possible need of additional processing of the data requested.

Article 17(7): Where detailed data are requested for scientific publication, Member States may, in order to protect the professional interests of data collectors designated by the body in charge of the implementation of the national work plan, require that the publication of data be delayed by 3 years from the date to which the data refer. Member States shall inform the end-users of scientific data and the Commission of any such decision and of the reasons therefor.

Article 18(1): With a view to reducing costs and facilitating access to detailed and aggregated data for end-users of scientific data and other interested parties, Member States, the Commission, scientific advisory bodies and any relevant end-users of scientific data shall cooperate to develop compatible data storage and exchange systems, taking into account the provisions of Directive 2007/2/EC. Those systems shall also facilitate dissemination of

information to other interested parties. Such systems may take the form of regional databases. Regional work plans referred to in Article 9(8) of this Regulation may serve as a basis for agreement on such systems.

Link to Regulation

<https://publications.europa.eu/en/publication-detail/-/publication/dd3dc59f-557f-11e7-a5ca-01aa75ed71a1>

ANNEX 2 Use of data

Detailed and Aggregated data

According to the definitions in this Data Policy, which is taken from the EU Regulation 2017/1004, landing (CL) and effort data (CE) are considered aggregated data, and sample data (CS) are considered detailed data. The sample data (CS) will have to be aggregated to month and sub-division/unit to be considered aggregated.

Rules for use of data from the RDB

The data cannot be shared with other persons outside the specific RCG or specific ICES Expert Group and cannot be used for other purposes than within the specific RCG or specific ICES Expert Group. The data can be stored at the RCG's or ICES Expert Group's SharePoint but must be password protected, and the chair must control access to the password. All persons who have a version of the data must delete the data after the specific RCG or specific ICES Expert Group have finished its work.

Showing data in public reports

General Rule

Sample data (CS), landing data (CL) and effort data (CE) can always be shown when data are disaggregated at the following level:

Year	Quarter	Species	Metier level 4-6	Area ⁵
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Landings (CL) and Efforts (CE) specific rules

The data that will be publicly available through the RCGs or ICES Expert Groups reports must be aggregated to at least the following highest resolution level.

In the overall data there in general must be more than two different units in each variable to be able to aggregate over the variables (e.g. to aggregate by country the data must include at least 2 different countries). When showing landings and/or effort data in a public report the highest

⁵ Subdivision or unit (FAO definition, <http://www.fao.org/fishery/area/Area27/en>)

resolution is determined by selecting at least 4 out of the 7 following variables. Only one option/figure can be shown to ensure conclusions cannot be drawn from a combination of several figures:

Vessel flag country	Year	Month	Species	Metier level 4-6	Vessel length category	Statistical rectangle
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The following are some examples of this rule

Examples:

Landings data can be plotted by species, statistical rectangles and year when data are aggregated over country, month, metier level 4-6 and vessel length category.

Effort data can be plotted by metier level 4-6, statistical rectangles and year when data are aggregated over country, month and vessel length category and species.

If it is needed to publish data at higher resolution the relevant National Correspondents have to be asked for approval.

Sample (CS) specific rules

The data that will be public available through the RCGs or ICES Expert Groups reports should be aggregated to the same level as the landings data.

The CS data holds information (auxiliary variables and obtained data) from sampled trips. **It is not allowed to publish CS data in a report in such a way that the individual catches from a given trip are shown.**

Data need to be aggregated before shown in tables or figures. In this context data covers both the data in the CS and data derived from the CS data e.g. estimated discard.

In the overall data there in general must be more than three different samples in each variable to be able to aggregate over the variables. When showing sample data in a public report the highest resolution is determined by selecting at least 3 out of the 9 following variables, and only one option/figure can be shown to ensure conclusions cannot be drawn from a combination of several figures:

Vessel flag country	Year	Month	Species	Metier level 4-6	Vessel length category	Vessel size category	Vessel power category	Statistical rectangle
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The following are some examples of this rule

Sampling example:

Sampling data can be plotted by species, statistical rectangles and year only when data are aggregated over country, month, métier level 4-6, vessel length category, vessel size category, vessel power category.

Map Plotting

Individual hauls (HH) holds information on the geographical positions from sampled fishing operations. It is sometimes valuable to show these positions (e.g. for QA purposes). If doing so only meta data or auxiliary variables can be used in the plots - never the result of the actual sampling. When plotting maps a *maximum* of three of the following variables can be used.

Vessel flag country	Year	Month	Species	Métier level 4-6	Vessel length category	Vessel size category	Vessel power category	Position
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This rule does not apply if the amount of data in the map is so sparse that individual vessels or trips might be identified. It is the responsibility of the data user to ensure that maps do not plot data that comes from a small number of vessels or trips.

Example: It is allowed to plot the positions of fishing operations by year, species and countries as long as métiers, vessel size category, vessel power category, vessel length category and month are left out. If the data user wanted to include métiers instead then one of the other variables (year, species or country) would need to be left out.

If it is needed to publish data at higher resolution the relevant National Correspondent have to be asked for approval.

Individual fish

Individual fish (CA) holds information on measurement from individual fish. It is always acceptable to show these as individual measurements.