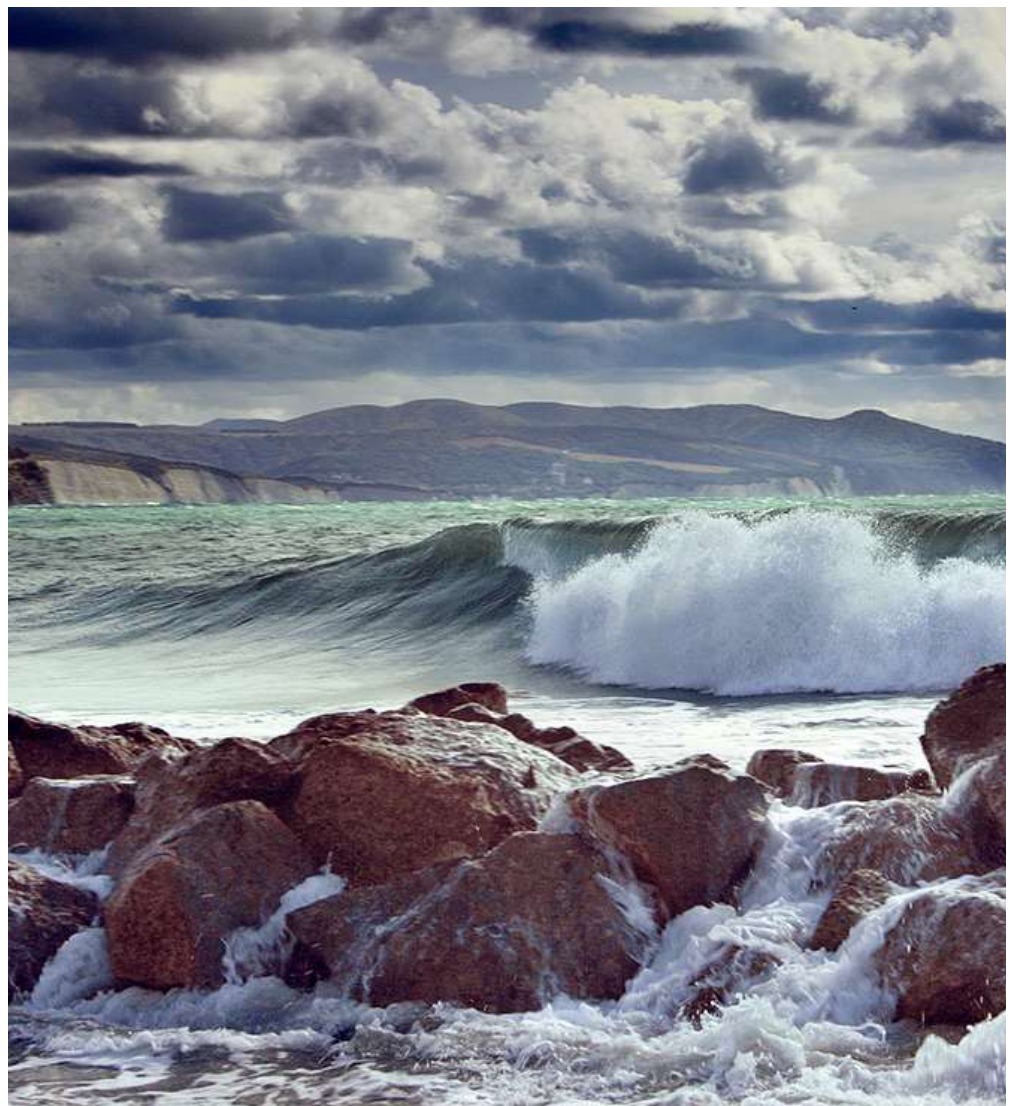


WORKSHOP ON INTRODUCTION TO RDBES DATA SUBMISSION (WKRDBES-INTRO; OUTPUTS FROM 2022 MEETING)

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WORKSHOP ON INTRODUCTION TO RDBES DATA SUBMISSION (WKRDBES-INTRO; OUTPUTS FROM 2022 MEETING)

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i Executive summary

To ensure consistent and transparent commercial fisheries data, there is a need to develop the Regional DataBase and Estimation System (RDBES), which support regional sampling and statistical sound estimations. It is fundamental that national data submitters understand the RDBES data model/format, so they can upload national commercial fisheries and incidental bycatch data into the RDBES.

At the WKRDBES-INTRO the data model/format of the commercial fisheries RDBES was described and explained to national data submitters in a 3-days long online workshop. The 55 participants agreed that it was a very good and informative workshop, where they after the participation understood the data model. In the second half of the workshop the participants from the different countries could book a support session. Where typically several participants from the same country could ask specific national questions. Such questions could of course be asked at any time during the workshop. But the support sessions gave an obvious opportunity to describe the national situation and ask more detailed national specific questions. There was a consensus from the participants that the format of the 3-days online workshop was very good and the workshop should continue in the format it has.



ii Expert group information

Expert group name	The Workshop on introduction to RDBES data submission (WKRDBES-INTRO)
Expert group cycle	Annual
Year cycle started	2022
Reporting year in cycle	1/1
Chair	Henrik Kjems-Nielsen, ICES Secretariat
Meeting venue(s) and dates	31 May – 2 June 2022, 55 Participants

1 Introduction

Since 2012 national institutes have been requested through the ICES fisheries data call to upload raised commercial fisheries data into InterCatch, which is used for data for the ICES stock assessment. Parallel the EU Regional Coordination Groups (RCGs) have requested detailed commercial fisheries data to be uploaded into the Regional DataBase (RDB), which is hosted by ICES. It is not efficient to have two databases and data calls for originally the same data, the difference is one database holds detailed commercial fisheries data – the RDB, and the other holds nationally raised commercial fisheries data – InterCatch.

The problems in the current systems are:

- Lack of transparency
- Lack of support for statistical estimations
- Duplication of effort
- Lack of consistency
- Lack of data quality indicator

The Regional Database and Estimation system (RDBES) is currently in development and will replace both InterCatch and the RDB. It will store detailed commercial fisheries biological sample data (CS) alongside improved versions of the aggregated commercial effort (CE) and landings (CL) tables of the old RDB and will allow sample data to be raised for use in stock assessments in a transparent manner.

The aims of the RDBES are:

1. To make data available for the RCGs
2. To provide a regional estimation system for ICES stock assessments
3. To increase the data quality, documentation of data, and the use of approved methods
4. To facilitate the production of fisheries management advice and reports
5. To increase the awareness of fisheries data collected and the overall usage of these data

The RDBES should be seen as part of the movements towards:

1. Statistically Sound Sampling Schemes (4S)
2. Greater regional coordination
3. Transparent Assessment Framework (TAF)
4. Improved estimates to ICES stock assessments and advice

In 2022 the third data call for data uploads to the RDBES was send out to all countries. The data call requested for the first time all commercial and incidental bycatch species. The two previous years it had been selected stocks data, which should be uploaded. The plan was that in 2023 InterCatch, RDB and RDBES should run in parallel, and a final comparisons should be made, and then in 2024 the RDBES should take over. That is currently under revision. This is the third year where there have been a data call for data upload to the RDBES, for all countries, thus the countries should be ready to upload all their data into the RDBES. To make sure countries are able to do that there have been three WKRDB-POP workshops from 2019 to 2021. WKRDBES-INTRO is the extension of these workshops, where national data submitters can get an introduction and understanding of the RDBES data model, so the data submitters can convert the national data into the RDBES format and successfully upload the data into the RDBES, for use for the RCGs and the ICES stock assessment. The data uploads are needed for the workshop WGRDBES-

RAISE&TAF in the autumn of 2022, which also helps in the transition to use RDBES. The WGRDBES-RAISE&TAF focus on reproducing the estimation done in InterCatch, but with data from the RDBES using R-scripts in the ICES Transparent Assessment Framework (TAF). WGRDBES-EST is another working group, which support the transition to use the RDBES. WGRDBES-EST works on a R-package, which can be used for estimating the discard and commercial distributions for fish stocks in a transparent way.

The RDBES data model for sampled data has been developed over a series of ICES workshops and a series of RDBES Core Group meetings and the fundamental part have stayed the same. In 2022 the focus have been to include all needed information in the landing and the effort data. The 2022 data call resulted in successful data submissions, where almost all data types have been uploaded by all countries, except two countries.

The RDBES development ties in with ICES Advisory Plan priority areas 1 (Assuring Quality) and 4 (Sharing Evidence). The aim is to continue the development of a comprehensive ICES quality management system for advice including implementing the Regional Database and Estimation System (RDBES) and integrating it with the Transparent Assessment Framework (TAF) that will, where possible, ensure that all advice products are based on data that adhere to the FAIR principles (Findability, Accessibility, Interoperability, and Reusability).

The agreed funding requires the delivery of:

- A fully operational ICES Regional Database (RDBES) with a regional estimation system such that statistical estimates for stock assessment can be produced from detailed sample data in a transparent manner at the end of 2021;
- The ability to incorporate detailed data on Bycatch and PETS AND/OR Recreational data (to be determined by the RDBES Steering Committee) in the RDBES at the end of 2023.

2 Describe and explain the RDBES data model (ToR a)

The data model that was used for the workshop was version 1.19.2. The most recent RDBES data model and documentation can at all-time be found at the following public GitHub repository <https://github.com/ices-tools-dev/RDBES> under documentation.

This report will not duplicate the details of the data model. But shortly describe the RDBES data model which consist of three main data record types; commercial landing (CL), commercial effort (CE) and commercial sampling (CS). The data model for CL and CE are one table structures, but the CS contains 13 different combinations, referred to as hierarchies, of 13 different tables, which resemble the way the data was collected.

The data model was mainly explained presentations, but there was also demonstrations of upload files uploaded into the RDBES. Beside that it was possible for participants from a country to book an online support slots, where the participants from the country could ask individual questions regarding, how they should convert their national data into the RDBES data format. At the online support slots the Core Group members answered and guided the participants.

Data submitters, who should upload data to the RDBES, need to be created in the RDBES before accessing the RDBES system on the web. New data submitters should contact RDBsupport@ices.dk to be created in the RDBES. This email address should also be used, if there are technical issues when uploading data files, or requests for new codes.

If there after the workshop are questions regarding choosing the right hierarchy or how to include specific national data in the national uploaded data, then questions can be asked at the RDBES GitHub as issues: <https://github.com/ices-tools-dev/RDBES/issues>

Access to the RDBES is at: <https://sboxrdbes.ices.dk>, but only named users can access the RDBES.

2.1 New developments

Updates to the Frequency Measurement and Biological Variable tables have been implemented. Many of the existing codes and code lists have been updated and new codes and code lists have been added. The new metier codes and fields for bycatch have been implemented. The new development that have been agreed during the end of 2021 and start of 2022 was not included in the used data model version, but the new developments will be included in the data model used for the data call 2022 with a deadline of 23th September 2022. The main updates are to the landing (CL) and effort (CE) data. Inclusion of salmon and sea trout data and inclusion of more data for incidental bycatch data are also in the new coming development.

2.2 Commercial Landing and Effort data

The previous years the focus have been on the sampling data, therefore there was need to focus on the landing and effort data, to make sure the landing and effort data model included all the needed information. Several new fields will been added to the landing and effort data model. For example a field to describe where the information that determines the statistical rectangle come from. More detailed information on the effort data on numbers of hooks, pots or traps and total length of gillnets will be added. The numbers of Fish Aggregating Device (FAD) and number of support vessels, which can be used for the Fisheries Dependent Information (FDI) data call will also added. Fields regarding flagging of confidentiality and encrypted vessel ids will also be added to the effort data.

2.3 Salmon and sea trout data

There has been focus on including commercial salmon and sea trout data into the RDBES, thus there have been 10 online meetings during spring between ICES Secretariat and the chair and data users from the Assessment Working Group on Baltic Salmon and Trout (WGBAST). The suggested updates of the landing and effort data model was discussed and agreed with the Core Group. There was a need to include the Fishing area category; river, coast or open sea, and the name of the potential river. The total number of fish is one of the fundamental values for WGBAST and will therefore be added. Instead of a single value for the uncertainty for the relative standard error, WGBAST often use intervals e.g. 90 % confidence interval or 90 % probability interval. Therefore, the type of uncertainty measure have to be added and instead of having one uncertainty field, two fields are needed for the intervals. That will be changed for three landing fields and one effort field. Because the WGBAST also have recreational fisheries data, there have been a short dialog between the ICES Secretariat and recreational experts in general from WGRFS and the intersessional Regional Coordination Group (RCG) recreational fisheries, further work is needed.

2.4 Incidental bycatch

The good corporation Nuno Prista had with bycatch experts have continued during the spring and it was identified that two new fields in the sample data table SA are needed to fulfil the needs of WGBYC, in addition to the fields added in 2021. This year is the second year where incidental bycatch data are requested in the data call. In 2021 it was only harbour porpoise (*Phocoena phocoena*) and Northern Gannet (*Morus bassanus*) that was requested data for. But this year all bycatch species will be requested.

3 Support sessions for participants (ToR b)

Before the WKRDBES-INTRO the participants from the countries could request a support session, with a duration of 25 minutes, where any question or guidance could be asked to the RDBES Core Group. It was also possible at the workshop to request a support session. Six countries requested a support session. There was also interest for having a double session regarding incidental bycatch. There were enough support sessions, because there were available support sessions for countries to request at all times during the workshop. The countries asked country specific questions regarding their situation, mainly questions was regarding choosing the right hierarchy according to their sample data collected and where and how to include specific fisheries data.

3.1 Answers from the support sessions

Below are answers to some country's questions from the support sessions. The idea is that the answers from these questions can help other data submitters to their similar questions, and hereby easier can convert the national data into the RDBES data format. The following countries contributed to this very informative questions and answers section: Spain, Latvia, Lithuania and Germany.

1. Questions regarding Species List SL

The observers have the instruction to sample everything they find in the market. There are three situations that we are not sure how to report in the RDBES data format

a. How to deal with species grouped in the landings?

Answer:

If all species are sampled and identified down to taxonomic species, then all possible species that could appear in any of the markets should be in the Species List. When a species is in the species list, then it is not needed to upload a zero sample in the Sample SA record – that is the concept of the Species List. Then during the estimation of catches a zero catch will be calculated for all species. Which have not a value uploaded in the Sample SA record and are in the Species List, which contains all species, which will be sampled if they appear in the taken sample. (See slide 12, 13 & 14 in 'WKRDBES-INTRO Species_Selection_True_Zeros_and_Bycatch.pptx' on the sharepoint.)

b. How to deal with species badly identified

I.e. saled as *Eutrigla gurnardus*, but identified as *Trigla lyra* by the observer.

Answer:

The recommendation is to include in the species list all cases of species misidentification that we have observed

Id	SLcatchFraction	SLcommercialTaxon	SLspeciesCode
1	Lan	Eutrigla gurnardus	Eutrigla gurnardus
2	Lan	Eutrigla gurnardus	Trigla lyra

c. How to include species that we find in the sampling, but which are not recorded in the sale

Answer:

There are two possible solutions:

- To use the name of the species identified by the observer (SLspeciesCode) to fill in the commercial name which is missing (SLcommercialTaxon)
- To include all observed species which are missing in the sale, in a generic group such as Animalia/ Osteichthyes

2. Question regarding refusals

We know a priori that some vessel will not allow us to sample. Shall we keep them in the sampling frame? Or shall we keep them out (as the small ports that we never sample)?

Answer:

It depends how are we dealing with these vessels from the sampling design.

- If we are not including them in our sampling frame, then we can consider them as “out-of-frame”. This is reported with SelectionMethod “Not applicable” and ReasonforNot-Sampling: “Out of frame”
- Otherwise, if we include them into the sampling frame, so that they can be selected, we shall record the refusal (even if we are not actually calling them because we know they will not allow us). In order to record the refusal, an option is to pick the trip that we could have sampled and report it as refusal. This is done in the table VS for on board sampling (H3) and in the table LE for market sampling (H5)

3. Question regarding biological sampling (age, maturity, etc)

We have quota sampling, with some sampling objectives defined by species, area and length categories (for demersal species) or season (for pelagic species). We go to the market and we sample what we need to fulfil these objectives. We need guidance about how to report this sampling.

Answer:

The recommendation received were the following:

- It is very important to report quota sampling: SelectionMethod = NPCLQS-O (Non-Probabilistic Cross-Level Quota sampling at other levels than trip)
- We need to report one Species List SL table for each sample. The SL table consist on just the species targeted.
- Stratification by size category (demersal): we can use one strata with the size range targeted (ie, <45 cm), and identify the rest of strata as “out of frame”. Out of frame strata can be grouped all together, or we can use one out of frame strata for each size range.
- Stratification by season (pelagic): we can use two strata: season & out-of-season
- These strata can be defined in the DE table or in the OS table.

4. Question regarding collected but not aged otoliths

How collected but not aged (read) otoliths can be recorded (because assessment groups do not use them any more)?

Answer:

It is recommended to report that these samples have been collected, even if they have not been analysed. The instruction is to put 99 in the value for age in the table BV (BVValueMeasured).

5. Question regarding biological sampling on board

We have a biological sampling on board, where we sample maturity of monkfishes. This is done in the same trips where we do sampling of discards, but the selection of the sample is different. For discard sampling we take a basket from a haul, and measure length of all the fish inside the basket. Sampling is performed in all hauls. For maturity sampling, we do quota sampling, and sampling is done only in those hauls where the catch of monkfishes is significant (until reaching sampling objectives)

Answer:

- Option a: We can consider the maturity sampling as a different sampling scheme. *This is the option we prefer.
- Option b: In the RDBES there are ways to record both samplings in the same sampling scheme as they were sampled together (several options discussed using subsamples, strata, catch fraction.)

6. Questions regarding PETs sampling

a. Our PETs sampling is done on board, together with discard sampling. Observers have the instruction to report all PETs species that they can observe in the different operations.

Is this the same or a different sampling scheme as discard sampling?

Answer:

This is a similar situation as in question number 5 above, and the two options are also valid here.

b. How shall we report the number of individuals (PETs) observed, in the SA table or in a lower hierarchy?

We don't sample length or any biological variable of PETs species. We only record the state of the specimen (dead, alive, etc).

Answer:

Then the data for the sampling scheme stops at the SA table. The state of the specimen is reported with the variable SAspecimensState. The number of individuals observed is reported with SANumberSampled and SANumberTotal (in this case both variables will be the same). It is also important to report SAunitType = Individuals

Upper hierarchy question:

Sometimes we do not select a vessel directly, but rather a shipping company (for large vessels) does the selection, and the company also select a trip.

Is this situation covered by the hierarchy 1?

Answer:

The choice of the hierarchy 1 is not wrong, although other variants can be also considered, e.g., hierarchy 2, where shipping company is a cluster. A stratification by the group of vessels (large/small vessels) can be also included. Anyway, this doesn't affect the estimation results.

Sampling approach for large vessels – convenience sampling.

Species list question:

When all species are sampled when fishing in both the North Atlantic and in the North Sea, should there be two different species list uploaded or one combined species list?

Answer:

Proposition is to create two (one for NA and one for NS) species tables or one common table with species from NA and NS. This can help to maintain a reasonable zeros in sampling tables. If all species are sampled, then it is important to get all species which are caught on the list, then it is possible to calculate as many true zeros for as many species as possible, which gives a more accurate picture of the reality.

Question regarding hierarchy

During the discussion expert help was asked to find the correct hierarchy for coastal fishery data where the sampling scheme aims to collect samples of specific species from the coastal fishery (salmon, trout, pikeperch, eel). For the DCP purposes additional data are necessary. During the observed trips is not possible to collect the necessary amount of biological data due to the low catches of these rare species. Samples are collected according to special agreements with the coastal fishing companies. The total number of samples is not fixed and may vary depending on the planned number of individuals for each species. Sampling time is species and area-specific. The problem is the data quality, minimum information from fishermen, biological information mainly.

Answer:

Expert advice is trying to use for these data preparation hierarchy 13 and test it with previous year data. If it not possible, create an issue in the github (<https://github.com/ices-tools-dev/RDBES/issues>) and explain the problem and ask for a suggestion. From our side it is necessary to improve this data quality, especially data about the fishing operation.

Question regarding “Hierarchy correct”

Expert advice was necessary for coastal fishery data, for field “Hierarchy correct” in the “Design” table. In 2021 the system of selecting coastal fishermen for the observer sampling was changed. Sampling from the fishermen list was introduced.

Answer:

Experts recommended using “Yes” in the field “Hierarchy correct”.

Question regarding bycatch

Expert advice was asked on how to deal in situations when there are bycatch species present in samples collected by fishermen self-sampling.

Answer:

The expert recommendation was to include the information on bycatch species in the “sample table” by adding the corresponding sample weight. Information on these species shouldn't be included in the "species list" and sample weight shouldn't be raised to the whole catch. Only target species should be included in the "species list".

Question regarding use of hierarchy

The situation is as follow:

For sea sampling the steps are as follows (hierarchy 1):

1. Select a vessel from vessel list
2. Select the fishing trip
3. Selecting the fishing haul.

For on shore sampling the steps are as follows (hierarchy 8):

1. Select a date.
2. Select randomly vessel which is at sea.
3. Contacting the selected vessel arranging a sampling contact. If is not possibly to get a sample we contact another vessel, which is at sea.

For small scale fishery at coastal zone the steps are as follows (hierarchy 13, for the vessels with LOA \leq 8 meters):

1. Gear selection (gillnets or fyke-nets);
2. Species selection (depending on seasonal migration);
3. Landing selection (one per month usually during high fishing season (1-6; 9-12));
4. Contact with fishing companies fishing in that area and with that fishing gear,
5. Going to the landing place to collect the samples (usually no refusals)

Question for hierarchy 13 regarding the FO table

We are going to apply hierarchy 13 for sampling of landings from small scale coastal fleet. The same SSF vessel usually fishes with different gear (different length, different mesh size, gillnets and fyke-nets), so stratification by vessel gives very blur information on exact fishing effort. Therefore, we are going to use vessel-landing as Primary Sampling Unit (PSU), and as Secondary Sampling Unit (SSU), we will use standardized fishing operation, namely NetMeterDays (NMD), as one standard fishing operation we count 30NMD, or 1 SSU = 30NMD. Applying this approach, we are going to count the amount of sampled fishing operations and total fishing operations for FO table.

What is your opinion on it?

Answer:

FO number is optional. FODuration and FOGearDimension could be filled to provide info similar to FOnumber. However, FOGearDimension and FODuration are only for sampled fishing operations. All issues will be in Github so it could be consulted during the process.

Questions for hierarchy 8 regarding TE table

Our sampling frame is two weeks in on-shore events. Would be possible to add new variable "2 weeks" in TEtimeUnit? If no we'll continue to use "month" and add two landings events in one TEid. For as is OK, but does it fit to data used in estimates?

Answer:

The code "Fortnight" can be used, it is mean 14 days. All codes can find at <https://vocab.ices.dk>

3.2 Countries feedback regarding their issues

Below are examples of countries answers to three standard questions regarding issues or use of hierarchies, to give an idea of what the issues are. The questions were asked before the workshop.

- a. Was there any issues or challenges regarding the use of hierarchies last year?

We still need to confirm the hierarchy for both at-sea and on-shore sampling as it is not immediately clear if they fit into the hierarchies provided. Hopefully some of this will become clearer as we populate the data model.

- b. Are some of your sampling data potentially based on other hierarchies, which you have so far not used?

See above.

- c. What is the biggest challenge regarding using new hierarchies?

If the hierarchy is available then there is no problem.

- a. Was there any issues or challenges regarding the use of hierarchies last year?

All our data from all fleet segments were uploaded into the RDBES database in 2021. Hierarchy number 1 was used for the data. Expert advice is necessary for coastal fishery data, for field "Hierarchy correct" in the "Design" table.

- b. Are some of your sampling data potentially based on other hierarchies, which you have so far not used?

Expert help is necessary to find correct hierarchy for coastal fishery data where the sampling scheme aims to collect samples of specific species from the coastal fishery. Minimum information from fishermen, biological information mainly. In the FishFrame database such data were imported as "vendor data".

- a. Was there any issues or challenges regarding the use of hierarchies last year?

Choosing the right hierarchy difficult when a company owns several vessels and specifies the vessel to be sampled and the time.

- c. What is the biggest challenge regarding using new hierarchies?

It is not really the hierarchies that are tricky but combining all the needed info to populate the design variables, when we do have a proper design and wants to use a design-based estimator.

- a. Was there any issues or challenges regarding the use of hierarchies last year?

No issue noticed during the tests done in 2021 on herring and sprat data. Hierarchy 1 was used.

- b. Are some of your sampling data potentially based on other hierarchies, which you have so far not used?

Not applying so far, but may be needed for other species than herring and sprat, that are sampled under different strategies.

- c. What is the biggest challenge regarding using new hierarchies?

Not applying so far. Potential issues can emerge after the 2022 data call if more species than herring and sprat are meant to be included (e.g. pike perch, whitefish), as they are sampled under different strategies and may require using a different hierarchy.

- a. Was there any issues or challenges regarding the use of hierarchies last year?

We used hierarchy 8 for on shore sampling. no major issues were encountered yet.

- b. Are some of your sampling data potentially based on other hierarchies, which you have so far not used?

We are planning to use hierarchy 1 for sea sampling and hierarchy 13 for small scale fishery in coastal zone.

4 Future RDBES INTRO workshops (ToR c)

The participants gave feedback on the workshop and future workshops. There was a consensus that the workshop was very good. The presentations were informative and gave a good understanding of the data model. It was ideal to have the presentations and explanations in the first half of the workshop and then the bookable support session in the second half. The structure of a 3-days online workshop was also good, because everybody who would like to participate could participate, because the workshop was online and the length was 3 days. The support sessions where the Core Group answered questions was very good and should also be a part of future workshops. This also support that future workshops should be online, because it is much easier for the Core Group to participate in the workshop if it is online. Having the workshop online also gave the participants flexibility to potentially work on a short upcoming priority task, and therefore they had the opportunity to participate. The conclusion is that future the workshop should continue with the current set up.

5 Conclusion

All of the three resolutions have successfully been addressed at the WKRDBES-INTRO. The RDBES data model have been described and explained through presentations and answers to questions. Participants have if needed booked a support session, where they were given answers to all their questions. The format of the workshop was discussed, and there was a consensus, that future workshops should have the same format as this workshop.

Annex 1: List of participants

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Annex 2: Resolutions

WKRDBES-INTRO

The **Workshop on introduction to RDBES data submission (WKRDBES-INTRO)** chaired by Henrik Kjems-Nielsen, ICES Secretariat will be held online for a total of three days from 31 May–2 June 2022 to:

- a. Describe and explain the RDBES data model to national data submitters and introduce participants to the necessary documentation for providing data.
- b. Arrange support sessions where participants can request expert guidance on adapting national data to the RDBES data model.
- c. Develop a format for future RDBES training courses.

WKRDB-INTRO will present a written report to ACOM by 31 August 2022.

Supporting information

Priority	<p>The activities of this workshop will give the necessary introduction to new users of the Regional Database and Estimation System, RDBES, and promote further adaptation of the system. This workshop will help countries to correctly convert their national data formats to the RDBES format, and ensure necessary input for establishing future ICES training courses. The RDBES when it is implemented works as a database for the Baltic Sea, North Sea & Eastern Arctic, North Atlantic and Long Distance Fisheries Regional Coordination Groups (RCGs). The RDBES will also function as a database and estimation system for ICES Fisheries Advice. The development will concentrate on harmonisation, quality assuring, documentation, approved estimation methods and transparency. Consequently, these activities are considered to have a very high priority.</p> <p>ICES will issue a data call in 2022 for 2021 samples for all stocks, and 2021 landings and effort data for all stocks, in the new RDBES format. The ideal conclusion is that at the end of this workshop each person attending has developed working scripts to extract the data that will be requested by the RDBES data call</p>
Scientific justification	<p>The RDBES will be extensively used by the RCGs and ICES both to store detailed fisheries sample data and use it for estimation - therefore it is essential that national data submitters are familiar with the RDBES format and confident in correctly converting their national data to this format. The WKRDB-POP (2019), the WKRDB-POP2 (2020), and the WKRDB-POP3 (2021) started this process but new workshop have to continue because not all relevant institutions have participated in these previous workshops, and it is necessary to both maintain introductions to new institutions, and develop a long term training program that can ensure that necessary training can be provided for new personell in the future.</p> <p>ToR a) – Describe and explain the RDBES data model to national data submitters and introduce participants to the necessary tools for providing data.</p> <p>The different components of the RDBES data format will be explained, and participants will be introduced to resources that provide detailed documentation of the data model, an online data-submission portal, and the RDBES issue reporting solutions.</p> <p>ToR b) – Arrange support sessions where participants can request expert guidance on adapting national data to the RDBES data model.</p> <p>This is the most important part of the workshop and will be allocated at least two full days - it will entail the RDBES Core Group providing practical online assistance to the attendees, through bookable support-slots. The workshop attendees must be familiar with their own national sampling programme designs, and must have made preparations necessary to provide real data sets of their national samples to the workshop. The Core Group will then help them make decisions of which RDBES tables are relevant to fill in, and provide clarifications to the</p>

	<p>documentation when necessary. The more work that attendees have done in trying to populate the RDBES format with their own data before the workshop the more value they will gain from this work.</p> <p>When new questions are identified and resolved they can be added to the RDBES “Frequently Asked Questions” so that other people can benefit from the answers, and when unclarities in the documentation is resolved through support slots, the Core Group can follow up with revisions to the documents.</p> <p>ToR c) – Develop a format for future RDBES training courses.</p> <p>As long term training-offers are expected to be necessary when the RDBES becomes fully operational, experiences from this training workshop should be reported in order to help develop a suitable format for a future ICES training course.</p>
Resource requirements	<p>Members of the “RDBES Core Group” will be requested to participate in the support sessions and as hands-on instructors/demonstrators.</p> <p>The ICES Data Centre will provide technical support for RDBES data uploading, and the presentations introducing participants to the RDBES.</p>
Participants	~60 people
Secretariat facilities	SharePoint, Online meeting room support
Financial	No financial implications.
Linkages to advisory committees	There are no direct linkages with the advisory committees, but most of the stock assessment Working Groups will in the future use the RDBES as one of their primary data sources.
Linkages to other committees or groups	There is a link to WGRDBESGOV, WGRDBES-EST, WGCATCH and WGQUALITY.
Linkages to other organizations	The RDBES will support the work done by the RCGs under the European Commission, EC. The aim is also allow the RDBES to support the countries in providing data for the data calls under the EC.