THE SECOND WORKSHOP ON POPULATION OF THE RDBES DATA MODEL (WKRDB-POP2)

VOLUME 2 | ISSUE 88

This document is the product of an expert group under the auspices of the International Council for the Exploration of the Sea and does not necessarily represent the view of the Council.

ICES Scientific Reports

THE SECOND WORKSHOP ON POPULATION OF THE RDBES DATA MODEL (WKRDB-POP2)

Recommended format for purpose of citation:

Editors

David Currie • Edvin Fuglebakk

Authors

Bruno Almón Pazos • David Currie • Jon Elson • Edvin Fuglebakk • Patricia Gonçalves • Olavi Kaljuste
Federico Maioli • Duncan Parnell • Christina Pettersson • Nuno Prista

Contents

List of Tables

i Executive summary

The aims of this workshop were to explain the data model developed for the commercial fisheries Regional Database and Estimation System (RDBES), assist in populating it with real data for the first test data call for the RDBES, and encourage participants to take part in ongoing testing of the RDBES data submission system.

This report documents the progress that participants have done to prepare their institutes for future use of the RDBES system. Some issues with data conversion have been identified and are documented in this report. None of the identified issues are thought to be serious impediments to moving forward with the RDBES development according to the roadmap decided by the Steering Committee of the Regional Fisheries Database in 2019. This roadmap is repeated in this report. The RDBES Core Group (the group of people developing the RDBES data model) and ICES Data Centre will look at the results of this workshop and either respond to individual questions or adapt the data model and documentation as required.

The ICES Data Centre will keep in contact with participants that have expressed interest in taking part in ongoing testing and keep them up-to-date with any data model changes. This workshop (WKRDB-POP 2) and the WKRDB-EST 2 workshop to be held later in 2020 should be considered as two halves of the same process so the chairs will also encourage the participants to carry on working on their data transformation routines so that they can answer the test data-call and attend WKRDB-EST 2.

ii Expert group information

Expert group name	The Second Workshop on Population of the RDBES Data Model (WKRBD-POP2)
Expert group cycle	Annual
Year cycle started	2019
Reporting year in cycle	1/1
Chairs	David Currie, Ireland
	Edvin Fuglebakk, Norway
Meeting venues and dates	2–5 June 2020, By correspondence (68 participants)

iii Terms of reference

Terms of reference	ToR addressed in this report?
a) Describe and explain the RDBES data model to national data submitters using worked examples.	Yes
b) Provide practical guidance and assistance to national data submitters to write working data extraction scripts to convert national data formats to the Regional Database and Estimation System data format and identify incompatibilities or issues with conversion.	Yes
c) Encourage national data submitters to join the Regional Database and Estimation System testing group.	Yes

1 Introduction

Currently national institutes submit raised commercial fisheries data for use in ICES stock assessments using the InterCatch system. Most of them also submit detailed commercial fisheries data for use by the EU Regional Coordination Groups (RCGs) to the Regional Database (RDB) which is hosted by ICES.

The problems in the current system include:

- Lack of transparency;
- Duplication of effort;
- Lack of consistency;
- Lack of data quality indicators.

The Regional Database and Estimation system (RDBES) is currently in development and will replace both InterCatch and the existing 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:

6. Statistically Sound Sampling Schemes (4S);
7. Greater regional coordination;
8. Transparent Assessment Framework (TAF);
9. Improved estimates to ICES stock assessments and advice.

The timeline for the transition between InterCatch/RDB to the new RDBES is given in Table 1.1.

In order to fulfil this timeline, it is necessary to explain the data model to data submitters and give them support in populating it with their national data. It is also necessary to get practical experience with using the data model for estimation so that the data model can be finalized with necessary improvements to support actual estimation. The work with data model population and development of estimation procedures was initiated in 2019 with the workshop WKRDB-POP and WKRDB-EST. The current WKRDB-POP2 and the WKRDB-EST2 that will commence autumn of 2020 are continuations of these workshops. These workshops should be considered two parts of the same process - the outputs from WKRDB-POP are vital as the inputs to WKRDB-EST. These workshops are in 2020 organized around the first test data call issued for the RDBES.

Table 1.1. Timeline for RDBES development.

	RDB System	InterCatch	RDBES
2019	Production	Production	Development
	Data in/out	Data in/out	Test data in/out

	RDB System	InterCatch	RDBES
2020	Production	Production	Test by selected stocks
	Data in/out	Data in/out	
2021	Production	Production	Test by all stocks
	Data in/out	Data in/out	
2022	Stay alive	Stay alive	Data call for 2021 data
	Data out	Data out	
2023	Stay alive	Stay alive	Data call for 2022 and all older years
	Data out	Data out	

The RDBES data model for sampled data has been developed over a series of ICES workshops and have only seen minor changes since WKRDB-POP 2019, although additional needs for changes was expected to be uncovered during WKRDB-POP2 as the data model has been exposed to even more sampling programs. The data model is considered to be very close to its final format. The RDBES format for effort and landings data (equivalent to the CE and CL formats in the current RDB) was for the first time considered in detail outside of the RDBES core-group at this workshop.

The funding status of the RDBES development has been precarious for a number of years and it has been difficult to secure money to continue this vital work. However, in a positive development, the ICES Council has approved funding for the software development of the RDBES database and web application. After the first 2 years the progress will be evaluated and if the development requirements are fulfilled the development resourcing will continue at the same level for the following 2 years. This should allow the RDBES development to be completed successfully - further details can be found in the 2019 RDB/RDBES Steering Committee report[1].

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.

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 by 2022;
- 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 by 2023.

---

[1] ICES. 2020. Steering Committee of the Regional Fisheries Database (SCRDB; outputs from 2019 meeting). ICES Scientific Reports. 2:24. 57 pp. http://doi.org/10.17895/ices.pub.5992.

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

Version 1.18 of the RDBES data model was used for the workshop and the details were provided both via the public GitHub repository (https://github.com/ices-tools-dev/RDBES) and the workshop SharePoint. This report will not duplicate the details of the data model.

The data model was explained using a combination of presentations, hands-on sessions, and bookable online support slots that was arranged based on the individual needs of participants. Participants that worked in the same institutes or countries were grouped together and generally attended the support slot together.

During the hands-on sessions participants worked on mapping their national data to the RDBES data model with guidance from the core-group members, and developing code to perform data extraction and conversion. Some participants were able to build on the work they did during the WKRD-POP 2019 workshop, while others were getting started with data adaptation this year. Participants were able to progress at their own pace. The ICES Data Centre have created a development version of the data uploader and validator which was presented to the participants along with an explanation of the data upload format (following the same pattern as the RDB and InterCatch csv upload files). This is currently developed to validate against v1.18 of the RDBES data model, but workshop data submissions form part of the initial testing of this system. The ICES Data Centre will continue developing the submission system to ensure it is fully functional for the RDBES test data call deadline (30 September 2020).

3 Practical guidance and assistance to national data submitters (ToR b)

Each participant worked with data from their respective countries, and attempted to adapt those to the RDBES data model. The data they worked with, the tables in the data model used, and a summary of their progress is documented in Annex 2.

3.1 Progress after the workshop

Most participants will continue working on populating the data model towards the deadline for the test data call in September. Many of these are enrolled in the testing group described in Section 4, and will receive frequent updates about bug-fixes and updates to code-lists and documentation. For other participants and for the general public, periodic updates the data model documentation will be made available at the public RDBES GitHub repository: https://github.com/ices-tools-dev/RDBES.

The data model will not add new features in the period leading up to the deadline for the test data call. Only corrections necessary to accommodate existing features will be made.

3.2 RDBES issues

Issues with data conversion or upload was documented in the upload log format, the way issues are reported for uploads to the currently operational regional database (RDB). These logs are stored on the workshop SharePoint and will be followed up by the RDBES core group and the ICES Data Centre. These logs were mainly intended to report issues that directly prevented upload. Questions and feature requests were reported in the issue-tracker on the public RDBES GitHub project https://github.com/ices-tools-dev/RDBES/issues.The distinction between these different classes of issues are not always clear, but the RDBES core group will address both kinds of reports. The GitHub project will remain open for questions also after the end of the workshop and the RDBES core group have scheduled regular meetings to address questions.

4   Facilitate participation in future testing of the RDBES (ToR c)

In order to finalize the RDBES upload tool before the deadline for the test data call, participants were encouraged to join a test group which will receive frequent notifications of updates when corrections are made and receive support for solving issues with uploading their data sets. Participants that volunteered are noted in Table 4.1. They will be followed up by the ICES Data Centre.

- At the time of the workshop the RDBES upload tool was available at: https://sboxrdbes.ices.dk.
- In the test-phase, bug reports can be sent to RDBsupport@ices.dk.

The workshop SharePoint contains a folder that is intended to hold example data sets. Participants were encouraged to upload their data sets there as they finalize data preparation, even if that happens after the workshop is done. Such data sets can serve as illustrative examples for other users, and may form the basis for conducting tests of the RDBES upload tool. The folder for example data sets is located at: "04. Working Documents / data_sets"

Table 4.1. Participants in RDBES testing group.

Name	Institute	Country (of institute)	Email
Afra Egan	Marine Institute	Ireland	afra.egan@marine.ie
Ana Fernandes	IPMA	Portugal	acfernandes@ipma.pt
Dália Reis	DRP- Azores	Portugal	dalia.cc.reis@azores.gov.pt
Edvin Fuglebakk	IMR	Norway	Edvin.Fuglebakk@hi.no
Federico Maioli	SLU AQUA	Sweden	federico.maioli@slu.se
Francisco Gómez	IEO	Spain	francisco.gomez@ieo.es
Isabel Bruno	IEO	Spain	isabel.bruno@ieo.es
Jose Rodriguez	IEO	Spain	jose.rodriguez@ieo.es
Josefine Egekvist	DTU Aqua	Denmark	jsv@aqua.dtu.dk
Julia Wischnewski	Thünen-SF	Germany	julia.wischnewski@thuenen.de
Karolina Molla Gazi	WMR	Netherlands	karolina.mollagazi@wur.nl
Katarzyna Krakówka	NMFRI	Poland	kkrakowka@mir.gdynia.pl
Lídia Gouveia	DRP- Madeira	Portugal	lidia.gouveia@madeira.gov.pt
Liz Clarke	MSS	UK - Scotland	liz.clarke@gov.scot
Maciej Adamowicz	NMFRI	Poland	madamowicz@mir.gdynia.pl
Marco A. Ámez	IEO	Spain	marco.amez@ieo.es

Name	Institute	Country (of institute)	Email
Marta Suska	NMFRI	Poland	msuska@mir.gdynia.pl
Nuno Prista	SLU AQUA	Sweden	nuno.prista@slu.se
Perttu Rantanen	LUKE	Finland	perttu.rantanen@luke.fi
Petri Sarvamaa	LUKE	Finland	petri.sarvamaa@luke.fi
Richard Meitern	EMI	Estonia	richard.meitern@ut.ee
Sébastien Demanèche	IFREMER	France	sdemanec@ifremer.fr
Siobhan Moran	Marine Institute	Ireland	siobhan.moran@marine.ie
Suzana Cano	DGRM	Portugal	sfcano@dgrm.mm.gov.pt
Sven Stötera	Thünen-OF	Germany	sven.stoetera@thuenen.de

5   Resources developed by participants

This section highlights resources that the workshop participants have developed and are willing to share. These resources include:

- Code or tools (ideally including links to public code repositories)
- Test data sets that are uploaded to SharePoint[2]. In line with the ICES and RDBES Data Policies, these data **can only** be used by other workshop participants for testing/developing their own data extraction scripts and **must not** be shared any further.

5.1   Ireland

Example data sets are available on the SharePoint at:

- "04. Working documents / data_sets / IE_Examples"
- Code to validate national data using the RDBES BaseTypes.xsd file has been developed.
- Code to extract data and format it for HCL, HCE, HVD, HSL, H1, and H5 has been developed.
- Code to produce test data sets for all hierarchies is in the process of being developed. The code is publically available on GitHub at davidcurrie2001/MI_RDBES_ExchangeFiles

5.2   Denmark

Example data sets for CL and CE tables were prepared:

- "04. Working Documents / data_sets / CE_CL_Examples"

5.3   Norway

Example data set for hierarchy 13 was prepared:

- "04. Working Documents / data_sets / NOR_HER_o15m_2018"

---

[2]https://community.ices.dk/ExpertGroups/WKRDB/_layouts/15/start.aspx#/2020%20Meetings/Forms/AllItems.aspx?RootFolder=%2FExpertGroups%2FWKRDB%2F2020%20Meetings%2FWKRDB%2DPOP2&FolderCTID=0x01200025BF590CD8BE6C4A856DF04D7EF2F5FE&View=%7B7A87E695%2D3600%2D4921%2D8A7A%2D2256321BEC8B%7D

6 Conclusion

All Terms of Reference (ToR) were satisfactorily addressed at the workshop. With regards to ToR b) only minor incompatibilities were identified, none of which we consider to delay the RDBES development. Development is still progressing according to the timeline referred to in the introduction to this report. With regards to ToR c) a process was set up at the workshop to follow up problems detected by data submitters in the time leading up to the deadline for the test data call (September 2020).

Annex 1:   List of participants

Name	Institute	Country	Email
Afra Egan	MI	Ireland	afra.egan@marine.ie
Alastair Pout	MSS	UK - Scotland	alastair.pout@gov.scot
Ana Cláudia Fernandes	IPMA	Portugal	acfernandes@ipma.pt
Anastasiya Karpushevskaya	AtlantNIRO	Russia	anastasia0006@mail.ru
Andy Gouldby	CEFAS	UK - England	andy.gouldby@cefas.co.uk
Anja Helene Alvestad	IMR	Norway	anja.helene.alvestad@hi.no
Anna Olafsdottir	MFRI	Iceland	anna.olafsdottir@hafogvatn.is
Bernardo Alcoforado	DGRM	Portugal	balcoforado@dgrm.mm.gov.pt
Brendan O'Hea	MI	Ireland	brendan.ohea@marine.ie
Bruno Almón	IEO	Spain	bruno.almon@ieo.es
Christina Petersson	SLU Aqua	Sweden	christina.e.pettersson@slu.se
Claudia Junge	IMR	Norway	claudia.junge@hi.no
Dália CC. Reis	DCF - Azores	Portugal	Dalia.CC.Reis@azores.gov.pt
David Currie (chair)	MI	Ireland	david.currie@marine.ie
Duncan Parnell	CEFAS	UK - England	duncan.parnell@cefas.co.uk
Edvin Fuglebakk (chair)	IMR	Norway	Edvin.Fuglebakk@hi.no
Elise Eidset	IMR	Norway	Elise.Eidset@hi.no
Federico Maioli	SLU Aqua	Sweden	federico.maioli@slu.se
Francisco Gómez	IEO	Spain	francisco.gomez@ieo.es
Harriët van Overzee	WMR	Netherlands	harriet.vanoverzee@wur.nl
Ioannis Thasitis	DFMR	Cyprus	ithasitis@dfmr.moa.gov.cy
Isabel Bruno	IEO	Spain	isabel.bruno@ieo.es
Ivo Šics	BIOR	Latvia	ivo.sics@bior.lv
Jon Elson	CEFAS	UK - England	jon.elson@cefas.co.uk
Jose Lorenzo	IEO	Spain	jose.lorenzo@ieo.es
Jose Rodriguez	IEO	Spain	jose.rodriguez@ieo.es
Josefine Egekvist	DTU Aqua	Denmark	jsv@aqua.dtu.dk

Name	Institute	Country	Email
Julia Wischnewski	Thünen-SF	Germany	julia.wischnewski@thuenen.de
Julita Gutkowska	NMFRI	Poland	jgutkowska@mir.gdynia.pl
Karolina Molla Gazi	WMR	Netherlands	karolina.mollagazi@wur.nl
Katarzyna Krakówka	NMFRI	Poland	kkrakowka@mir.gdynia.pl
Kirsten Birch Håkansson	DTU Aqua	Denmark	kih@aqua.dtu.dk
Kristiina Hommik	EMI	Estonia	kristiina.hommik@ut.ee
Laurent Dubroca	IFREMER	France	laurent.dubroca@ifremer.fr
Lídia Gouveia	DRP- Madeira	Portugal	lidia.gouveia@madeira.gov.pt
Lise Heggebakken	IMR	Norway	lise.heggebakken@hi.no
Liz Clarke	MSS	UK - Scotland	Liz.Clarke@gov.scot
Lucía Zarauz	AZTI	Spain	lzarauz@azti.es
Maciej Adamowicz	NMFRI	Poland	madamowicz@mir.gdynia.pl
Marco A. Ámez	IEO	Spain	marco.amez@ieo.es
María Korta	AZTI	Spain	mkorta@azti.es
Marijus Spegys	JTI	Lithuania	marijus.spegys@apc.ku.lt
Marta Suska	NMFRI	Poland	msuska@mir.gdynia.pl
Mikel Aristegui	MI	Ireland	Mikel.Aristegui@Marine.ie
Mikel Basterretxea	AZTI	Spain	mbasterretxea@azti.es
Mikko Vihtakari	IMR	Norway	mikko.vihtakari@hi.no
Nuno Prista	SLU Aqua	Sweden	nuno.prista@slu.se
Olavi Kaljuste	SLU Aqua	Sweden	olavi.kaljuste@slu.se
Patrícia Gonçalves	IPMA	Portugal	patricia@ipma.pt
Paul Coleman	MI	Ireland	Paul.Coleman@Marine.ie
Perttu Rantanen	LUKE	Finland	Perttu.Rantanen@luke.fi
Petri Sarvamaa	LUKE	Finland	Petri.Sarvamaa@luke.fi
Remigijus Sakas	JTI	Lithuania	remigijus.sakas@apc.ku.lt
Ricardo Sousa	DRP- Madeira	Portugal	ricardojorgesousa@gmail.com
Richard Meitern	EMI	Estonia	richard.meitern@ut.ee
Rosario Dominguez	IEO	Spain	rosario.dominguez@ieo.es

Name	Institute	Country	Email
Ruth Kelly	AFBI	UK - Northern Ireland	Ruth.Kelly@afbini.gov.uk
Sébastien Demanèche	IFREMER	France	Sebastien.Demaneche@ifremer.fr
Silje Seim	IMR	Norway	silje.elisabeth.seim@hi.no
Siobhan Moran	MI	Ireland	Siobhan.Moran@Marine.ie
Sofie Gundersen	IMR	Norway	sofie.gundersen@hi.no
Solva Karadottir Eliasen	FMRI	Faroe Islands	Solvae@hav.fo
Suzana Faria Cano	DGRM	Portugal	sfcano@dgrm.mm.gov.pt
Sven Stötera	Thünen-OF	Germany	sven.stoetera@thuenen.de
Tomas Zolubas	JTI	Lithuania	tomas.zolubas@apc.ku.lt
Tone Vollen	IMR	Norway	tone.vollen@hi.no
Victoria Amosova	AtlantNIRO	Russia	amosova@atlantniro.ru
Zuzanna Mirny	NMFRI	Poland	zmirny@mir.gdynia.pl

Annex 2:   Progress tables

A summary of each participating countries progress in populating the RDBES data model (v1.18) is provided in Table A.1 and Table A.2.

Table A.1. Progress–sample data.

Institution	Dataset	Hierarchy	Datacall[3]	Progress[4]	Comments
DTU Aqua, Denmark	Danish observer at-sea, 2019	H1	Yes	Complete	May try to add this to H2 as well to see what the implication would be of that.
DTU Aqua, Denmark	Sampling of HUC at auctions, 2019	H9	Yes	Partial	
DTU Aqua, Denmark	Sampling of unsorted landings at factories by DTU Aqua	H11	Yes	Partial	
DTU Aqua, Denmark	Sampling of unsorted landings by the Dansih control	H2	Yes	Partial	FOaggregationLevel = T
EMI, Estonia	spr.27.22-32	H8	Yes	Complete	Upload unsuccessful as of August 2020
IMR Norway, Bergen	Coastal reference fleet; 27.1-4a.	H1	No	Started	
Thünen-SF, Germany	mac.27.nea	H1	Yes	Partial	R script has to be improved (include all reference codes, make R code more generic etc.), processing for lower hierarchies tables is not started yet.
Thünen-OF, Germany	spr.27.22-32	H1, H4	Yes	Partial	Script is still partially in Python, needs proper R translation. Started with the H1 sprat samples, H4 yet to be done

---

[3] The column 'Data call' (Yes/No) indicates if the data set contains samples for the stocks in the RDBES test data call.

[4] The column 'progress' (Started/Partial/Complete) indicates the progress made in populating the data model:

'Started': hierarchy has been identified, but most tables have not been populated

'Partial': hierarchy has been identified, and most tables have been populated

'Complete': hierarchy has been identified, all tables have been populated, and all issues have been reported in the upload log

Institution	Dataset	Hierarchy	Datacall[3]	Progress[4]	Comments
IMR Norway, Pelagic	Catch lottery samples for herring 2018	H13	No	Complete	
Finland (Luke)	Sprat 27.22-32 (Trawl)	H1	Yes	Partial	Script re-written in R and adjusted to 1.18 data model during 2020 WKRDB-POP2 meeting
Finland (Luke)	Her 3031 Her 2932 (Trawl)	H1	No	Partial	Script re-written in R and adjusted to 1.18 data model during 2020 course
Finland (Luke)	Her 30,31 Her 29,32 (Fykenet samples)	H1	No	Started	not finalized (under development)
Finland (Luke)	Vendace, Eel, Salmon, Trout, Perch, Pikeperch, Whitefish,		No		not started
NMFRI, Poland	Polish Baltic Sea sampling data	H1 and H2	Yes	Partial	Tables of upper hierarchies mainly filled in. Lower hierarchies identified, not implemented yet. R code is being developed.
AZTI, Spain	CS	H2 and H5	Yes	Partial	H5 successfully imported (July 2020), H2 yet to be done
SLU Aqua, SWE	Cod 21; Sprat 22-32	H1 and H2	Yes	Started	Started H1. Clear picture on how to organize the R script and the DB at lab level.
Portugal (IPMA)	Onboard sampling data (OTB)	H3	Yes	Partial	Changed from H1 to H3 based on the sampling design. VD and SL prepared but need to compile info at national level. Still need to develop code for the lower hierarchy tables.
Portugal (IPMA)	Market Sampling (mackerel and blue whiting)	H5	Yes	Started	Get familiarized with the data model (e.g. tables, fields)
Portugal (DRP-Açores)	Market sampling of bigeye tuna	Not decided	No	Started	Get familiarized with the data model (e.g. tables, fields names)
Portugal (DRP-Madeira)	Market sampling of bigeye tuna	Not decided	No	Started	Get familiarized with the data model (e.g. tables, fields names)

Institution	Dataset	Hierarchy	Datacall[3]	Progress[4]	Comments
Northern Ireland	Northern Irish at sea observer program, all stocks	H3	Yes	Started	R script under development for H3. Useful conceptual issues resolved around hierarchical structuring of program
BIOR, Latvia	spr.27.22-32	H1	Yes	Partial	
JTI, Lithuania	spr27.22-32 her.27.25-2932	H8	Yes	Started	
IEO, Spain	Market length sampling Divisions 6 - 9	H5	Y	Partial	Issues with hierarchy solved this week with core group support session. Some data from lower tables pending.
IEO, Spain	Market length sampling (specific small scale fleet targeting Blackspot seabream)	H7	N	Started	
IEO, Spain	On-board length sampling Divisions 6-9	H1	Y	Started	
IEO, Spain	Biological sampling	H7	Y	Started	Lower Hierarchy C.
UK, E+W (Cefas)	Offshore observer sampling	H1	Yes	Partial	Upper hierarchy tables DE to SA complete. Lower hierarchies being retrieved and processed in line with guidance from core group support..
UK, E+W (Cefas)	Onshore sampling	H5	Yes	Started	Data collated for upper and lower hierarchies. Species lists being re-defined following workshop guidance. Lower hierarchies identified but will be completed once offshore tables complete.
UK (SCO) MSS	Onshore pelagic sampling	H1	Yes	Partial	Data collated but code-lists not yet implemented.
Wageningen Marine Research WMR, the Netherlands	Dutch DCF at sea self-sampling programme	H1	No	Partial	

Institution	Dataset	Hierarchy	Datacall[3]	Progress[4]	Comments
Wageningen Marine Research WMR, the Netherlands	Landings Demersal Market Sampling	H7	No	Partial	
Wageningen Marine Research WMR, the Netherlands	Pelagic at sea sampling	H1	Yes	Partial	
Marina and Freshwater Research Institute, Iceland	Ad hoc samping by fishermen at sea sent to institute where the fish is measured. Species mac.27.nea and whb.27.1-91214.	H2	Yes	Started.	
Marine Institute, Ireland	Irish CS data from 2017	H1	Yes	Partial	Validated CS errors from 2017 data.
Marine Institute, Ireland	Irish CS data from 2019	H1 and H5	Yes	Partial	Code was developed during the workshop and completed afterwards
Faroe Marine Research Institute	Catch and sampling of Mackerel and Blue Whiting in North east Atlantic 2019	H5	Yes	Started	About to start
Russian Federal "Research Institute of Fisheries and Oceanography" "VNIRO" Atlantic branch of VNIRO ("AtlantNIRO")	spr.27.22-32	H1	No	Started	not finalized (under development)
IFREMER, France	French sampling data			Started	

Table A.2. Progress–census data (landings and effort).

Institution	CE progress[5]	CE Data call[6]	CL progress	CL Data call	Comments
DTU Aqua, Denmark	Completed	Yes	Completed	Yes	
IMR Norway Tromsø			Partial	No	
EMI, Estonia	Partial	Yes	Partial	Yes	
Thünen-SF, Germany	Started	Yes	Partial	Yes	
Thünen-OF, Germany	Started	Yes	Partial	Yes	logDis still to be included in our national CL/CE
NMFRI, Poland	Completed	Yes	Partial	Yes	
Portugal (DGRM + DRP-Açores + DRP-Madeira)	Partial	Yes	Partial	Yes	Information needs to be finished and compiled at national level
BIOR, Latvia	Partial	Yes	Partial	Yes	
JTI, Lithuania	Partial	Yes	Completed	Yes	
Spain	Started	Y	Started	Y	Work on progress. General Secretariat of Fisheries in charge.. Petition done to avoid/change mandatory scientific estimation field when there is not such estimation.
IFREMER, France	Partial	Yes	Partial	Yes	Progress done: Confrontation code list (from ICES vocabulary server) with French data. Issues reported in the "Upload log" document. Improvement of the R-script on French data to calculate effort data in particular "number of fraction trips" and "number of dominant trips". On-going task to be completed before testing the upload.

[5] The column 'CL progress' and 'CE progress' (Started/Partial/Complete) indicates the progress made in populating the data models for landings (CL) and effort (CE), respectively:

'Started': a few fields have been filled
'Partial': most fields have been attempted filled for at least one species
'Complete': all fields have been attempted filled for two or more species, and all issues are reported in the upload log

[6] The column 'CL Data call' and 'CE Data call' (Yes/No) indicates if the landings (CL) and effort (CE) contains data for the stocks in the RDBES test data call.

Institution	CE progress[5]	CE Data call[6]	CL progress	CL Data call	Comments
UK (SCO, NIR, E+W) MSS, Afbini, Cefas	Started	Yes	Started	Yes	The UK control data for all administrations is held on one database. The UK administrations will collaborate on determining any changes required to the current RDB CL and CE extraction code. UK(SCO) will likely compile and submit the data on behalf of all UK administrations.
Wageningen Marine Research, WMR, The Netherlands	Partial	Yes	Partial	Yes	
Marina and Freshwater Research Institute, Iceland	No data to do this. Not applicable.	Yes	Started	Yes	
Marine Institute, Ireland	Partial during workshop - completed after workshop	Yes	Partial during workshop - completed after workshop	Yes	CL and CE data from 2019 uploaded
Atlantniro, Russia			Partial	No	

Annex 3: Progress reports

Some participants provided additional written reports on progress in their adaptation to the RDBES, following up on the progress reports from WKRDB-POP in 2019. These are included in this annex.

Table A.3. WKRDB-POP2 meeting 2020: Natural Resources Institute Finland.

FIN RDBES data extraction status before 2020 meeting
Data extraction from Finnish national sampling database SUOMU to RDBES was created during 2019 WKRDB-POP meeting. Data was compatible with RDBES 1.16 data model covering Finnish pelagic trawl fisheries sampling data. Extraction was implemented in Java (system integration).
FIN RDBES data extraction plan during 2020 WKRDB-POP2 meeting
To test RDBES sandbox data validation with 1.18 data model test-uploads including Sprat 27.22-32 and Herring 27.30 trawl sampling data are planned to be carried out during the meeting. Data extraction from national database SUOMU is planned to be re-written in R instead of Java to improve transparency and collaboration between Finnish staff. CE and CL data models are planned not to be populated during the workshop. National databases and scripts to extract CE and CL data from Finnish logbooks need to be studied in order to ensure common sources of data for Vessels between sampling data and logbook data and define levels of scientific estimations used and needed for stock assessment in CL and CE for different fisheries.
Progress made
Partial data extraction from national database SUOMU including Sprat 27.22-32 and Herring 27.30 trawl sampling data was implemented in R. Work to extract Herring Fykenet samples to RDBES Hierarchy 1 data model was started during the meeting. To document the extraction scripts RMarkdown documentation tool was used. (Uploaded to the workshop SharePoint: "08. Personal Folders" / "Finland") Partially extracted data was validated to RDBES sandbox (data model 1.18) at the end of the meeting without successful feedback from the system. The file was incomplete at the end of the meeting. Further work is required after the meeting to meet the test data call requirements.
Issues identified
Hierarchy 1 was selected to be tested for Herring fykenet samples. Primary sampling unit (PSU) for the fisheries is a fisher. Before the meeting it was unclear whether hierarchy 1 was suitable for passive gear fisheries where vessel is not the PSU. Core development group agreed that PSU´s could be fishers in hierarchy 1. A new variable might be needed to separate fishers from vessels in the data model