



Regional Coordination Group
North Atlantic

**Report of the
Regional Co-ordination Group
for the North Atlantic
(RCG NA)
Annual Meeting
2018**

**Instituto Español de Oceanografía,
Vigo (Spain)**

10-14 September 2018



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1 Introduction

1.1 General

The RCG NA was established in September 2017 and held its second annual meeting at the Instituto Español de Oceanografía, Vigo in Spain 10-14 September, 2018. Participants included experts and/or National Correspondents from Belgium, Germany, Ireland, the Netherlands, Portugal, Spain and the United Kingdom as well as DG MARE (Commission) and ICES representatives. National correspondents from France, Spain, Germany and Denmark participated by remote access and correspondence.

The meeting was chaired by Leonie O’Dowd and Jon Elson. There were 3 main subgroups covering a) Regional sampling design including bycatch and recreational fisheries, b) End user needs and surveys and c) Data quality including the impact of management measures on data collection. Joel Vigneau, Sieto Verver and David Currie led and reported on these subgroups. Another breakaway group was formed by the National Correspondents to reach agreements on governance issues. Some sessional work was carried out by the whole group and all subgroup and breakaway work was presented and endorsed in plenary.

RCG NA thanks the Instituto Español de Oceanografía, for hosting the meeting, the excellent facilities offered were much appreciated. RCG NA wishes to thank ICES for hosting and organizing the SharePoint and for their support and contribution at the meeting.

Acronyms used throughout report are listed with their meaning in Annex 11.

1.2 Background and legal requirements.

Since Regulation 199/2008, the coordination of the data collection under the DCF has been carried out at a regional level and specific Regional Coordination Meetings (RCMs) were responsible for facilitating this process with the aim of identifying areas for standardisation, collaboration and task sharing between MS. RCMs were held annually and involved participants from each MS involved in the DCF.

Five RCMs were operative:

- the **Baltic Sea** (ICES areas III b_d),
- the **North Sea** (ICES areas IIIa, IV and VIId), the **Eastern Arctic** (ICES areas I and II), the ICES divisions Va, XII & XIV and the NAFO areas.
- the **North Atlantic** (ICES areas V-X, excluding Va and VIId),
- the **Mediterranean Sea** and Black Sea and Large Pelagic
- the **Long Distance Fisheries**: regions where fisheries are operated by Community vessels and managed by Regional Fisheries Management Organisation's (RFMO) to which the Community is contracting party or observer.

The regional split over 5 regions allowed for coordination while taking into account regional aspects and specific problems.

The “Ostende Declaration” penned at the RCM NS&EA 2012 introduced the concept of expanding from a 4 day annual RCM to a more continuous process coordinated by a Regional Coordination Group - engaging with end users.

Since 2016 RCMs have been advocating and progressing intersessional work looking at cost sharing of surveys, end users' needs, data quality and the landing obligation with varying degrees of success.

The re-cast of Council Regulation (EC) No 199/2008 (Regulation 2017/1004) formalised the process and the transition from Regional Coordination Meetings to Regional Coordination Groups.

Council Regulation (EC) No 2017/ 1004

(26) In view of the objective of the Common Fisheries Policy to give more responsibility to Member States and to better involve end-users **of scientific data** in data collection, regional coordination should be **strengthened and** expanded from one single meeting into a continuous process coordinated by Regional Coordination Groups for each marine region **and should aim to cooperate with relevant stakeholders including third countries.**

RCGs are mentioned 21 times in the recast with the aims and tasks listed in paragraphs 15 – 27 and the “how” RCGs are to achieve these tasks is described in Article 9. End-users are considered the drivers for the data collection and are mentioned 27 times.

Article 9 of (EC) No 2017/ 1004 Regional cooperation:

RCGs

- shall aim at developing and implementing procedures, methods, quality assurance and quality control for collecting and processing data;
- shall aim at developing and implementing regional data bases;
- shall consist of experts nominated by MS including NCs, and the Commission;
- shall draw up and agree on rules of procedures for their activities;
- shall coordinate with each other and with the Commission;
- shall invite end-users of scientific data, regional fisheries management organisations, Advisory Councils, and third countries as observers, where needed;
- may draft regional work plans;
- shall submit any draft regional work plan to the Commission before 31 October.

The Commission

- may adopt a work plan after evaluation by STECF using an implementing act;
- may adopt implementing acts
 - for rules on procedures;
 - cost-sharing arrangements for the participation in research surveys at sea;
 - the area of marine region;
 - format and timetables for the submission and approval of regional work plans.

A regional work plan shall replace, or supplement the relevant parts of the national work plans of each of the Member State concerned.

2 Executive Summary

The RCG NA met in Vigo between the 10-14 September 2018 to review the progress of intersessional work since 2017, discuss and agree on outcomes and plan the work for 2018/2019 around the key areas of regional coordination in fisheries data collection: governance; regional sampling plans, identifying enduser needs and data quality.

Addressing ToR 2 on Governance, rules of procedures were adopted by remaining Member States based on intersessional review and required adjustments. These RoPs will roll over until 2019, when they are reviewed during the next annual meeting. RCG NA agreed to merge with RCGNS &EA from 2019 onwards and proposes to hold two joint annual meetings: a technical meeting in June, followed by a formal NC meeting in September to review/discuss proposals and reach agreements. Using the outputs from fishPi2 WP1 on regional subgroups, RCG NA agreed on how subgroups should work intersessionally and listed 9 high level thematic groups. RCG NA emphasised that to achieve tangible outputs requires the setting up of specific and well defined intersessional work tasks and the commitments by individuals and their labs. An increase in the visibility of RCG work is required to encourage higher levels of participation. A dedicated website as well as a RCG secretariat which can assist in the administrative duties and project manage the work are proposed means to achieve this goal and their funding sources were discussed.

The RCG agreed that a limited regional workplan is to be developed and put forward to STECF and building blocks of such a work plan were identified under the headings of “procedures”, “methods”, “Quality assurance and control” and “cost sharing of surveys”. The building blocks under these headings included eligible meetings and intersessional subgroup tasks; standardised sampling methods freezer trawler; quality assurance: + control; RDBES quality assurance, SISP for surveys, and surveys under existing cost sharing agreements. A subgroup was set up to develop the process for submitting the regional work plan.

The commission informed the RCG on the future of EU-MAP including the legal process and preparatory work for the revision of the existing legislations. The RCG agreed to work with the Commission to revise EU-MAP.

To further progress the development of regional sampling plans, the output from intersessional work in fishPi2 WPs 2, 3 and 4 as well as ICES WKPETSAMP were reviewed and next steps agreed. In parallel to the FishPi2 case studies, first steps were taken to develop a regional sampling plan for the pelagic freezer trawl fleet: national sampling strategies were documented and a work plan was drafted for 2018/2019. To regionally coordinate the bycatch sampling of protected, endangered and threatened species (PETS) an intersessional workplan was developed to carry out a bycatch risk analysis in the North Atlantic using output from FishPi1, WKPETSAMP and the sampling data in the RDB. The subgroup on regional sampling plans also reviewed relevant work on recreational fisheries and made recommendations relating to the use of the RDB for recreational fisheries data, sampling all species and for stock assessments to include recreational data where possible. The extract from the salmon and eel subgroup who met in the RCG NS&EA and the RCG MED are copied into this report under the section of regional sampling plans for reference.

ICES continues to be the core end-user for the data from the national work plans in the Northern Regions. Both ICES and the RCG Chairs presented summaries of the progress made on improving

communications between end-users and data-providers and the agreed actions between ICES and RCG chairs as an informal End-User subgroup. This included a summary of how the Stock Information Database was being developed to improve the communication at all stages between data providers and stock coordinators and an update on the ongoing collaboration between ICES, RCGs, MSs and the commission on the evaluation of the list of mandatory surveys for EU-MAP. In reference to the surveys the commission provided a summary of the first phase of the evaluation culminating in the STECF EG 18/04 meeting and the development of an evaluation tool. The summary detailed a second phase of collating stock and survey information for evaluation. The RCG NA continued with data preparation of the surveys and stock database during the meeting.

ICES also provided an overview of the upcoming data calls and benchmarks for the remainders of 2018 into 2019. The RCG NA reviewed the draft 2019 data call, and specific EG data calls in 2018, and provide comment and advice in the report. In addition, RCG NA, with reference to RCG NS&EA comments from the week before, reviewed the recommendations from other ICES EGs.

Fundamental to determining effective regional sampling plans is the control data and sample data derived from the catch sampling programmes currently stored on the existing RDB. Developing those plans is limited in its current structure. The group discussed the ongoing development and financing of the new RDBES and progress made through the SCRDB. Presentations of the outcomes of ICES PGDATA 2018 and EU WKMET 2018 provided a reference for how the RDB data may be reported or summarised for end-users and a reference for how to derive, improve, standardise and document references to agreed metier definitions. The 2017 data and upload logs submitted in response to the joint RCG 2018 data call was reviewed by the group. During the meeting the group considered how the intersessional data subgroup tasked with compiling tools for analysing and reporting the RDB data might progress more effectively. The intention to compile an inventory and report, at the meeting, on the data available for upcoming ICES benchmarks was postponed but set as a task for the intersessional subgroup. Overviews of the data were compiled, and consideration given to how the RDB might help populate standard DCF National Reports.

A summary of the intersessional work of the Landing Obligation subgroup provided a catalogue of MS ongoing experiences of the impact of the regulation on sampling schemes. The summary included a review of the incidence of the new landed catch component (BMS) in the RDB control and sample data. The impact of legislation on how data could be used was also considered by the group in how to maintain confidentiality by aggregating data. The proposed changes to the draft Control regulation in relation to personal data also raised concerns where the identity of a vessel linked to VMS, catch and effort data might only be available for scientific purposes for a five year window.

Based on the decision to merge the North Atlantic with the North Sea and Eastern Arctic RCG in 2019 Leonie O'Dowd will continue as Chair, co-chairing the combined group with the ongoing Chair of the RCG NS&EA, Els Torelle.

3 ToR: Governance

This section covers ToR 2 Governance model for the regional coordination group including “Rules and Procedures”; “efficient working of intersessional subgroups”; “the development of regional work plans” and the “DCF legal framework and revision of EU-MAP template”. To address this ToR, the subgroups were also asked to discuss the benefit of regional coordination in particular reference to

their work areas. The outcome of these discussions are incorporated in the summaries of their work in the following sections but are also summarised in Annex 3.

3.1 Progress since RCG NA 2017

3.1.1 FishPi2

Mark James from St Andrews provided an overview of the ongoing fishPi2 project: “Strengthening Regional cooperation in the area of fisheries data collection” which started 14th Dec 2017 with an end date of the 13th May 2019. The key strategic objectives, beyond the title of the project, are to provide clear guidance on the implementation phase of regional sampling plans and build regional expertise.

This is to be achieved with the contribution from 14 institutes, 10 member states and 50 scientists following a clear schedule and defined work packages:

- WP1- Governance (WP Leader – Katja Ringdahl, SLU)
- WP2 – Suitability for Regional Sampling (WP Leaders Dr Liz Clarke & Dr Alistair Pout, MSS)
- WP3 – Regional Sampling Plan Designs (WP Leaders Dr Alistair Pout & Dr Liz Clarke, MSS)
- WP4 – Impact on Marine Ecosystems (WP Leader – Dr Anna Rindorf, DTU-Aqua)
- WP5 – Small Scale and Recreational Fisheries (WP Leader – Estanis Mugerza, AZTI)
- WP6 – Data Quality (WP Leader – Joel Vigneau, IFREMER)
- WP7 – Training (WP Leader – Dr Mark James, USTAN)
- WP8 – Consultation (WP Leader – Dr Mark James, USTAN)
- WP9 – Project Co-ordination and Management (WP Leader – Dr Mark James, USTAN)

The status of each of these work packages was summarised and Mark directed the RCG NA to specific requests where feedback from the RCGs was required.

WP1 – Governance – a list of direct questions/proposals were presented to RCG NA with responses to be sent to the WP lead. This review was carried out in in plenary and the responses are detailed in section 3.2.3.

WP7 – Training – this package is to provide funding to deliver a training/knowledge exchange “event” in February 2019. The WP7 team was keen to have feedback from the RCG’s on the nature, scope and target audience which the RCG’s believe would benefit from this opportunity. Any aspect of the fishPi2 project could be included. Two suggestions from the RCG NA were that the event could be framed as a “clinic” to address how MS might adapt their existing sampling programmes to align with the proposed regional sampling programme and workplan. A second suggestion was that it would be good to engage the National Correspondents to help ensure that they are collectively made aware of the requirements of the proposed regional sampling programme and workplan and to highlight the areas where decisions and resources may be required. Further that it may be possible to undertake the engagement of National Correspondents alongside one of their regular meetings in Brussels. The WP team was going to look at the potential for this arrangement when meeting with the Commission on 27th September.

WP8 – Consultation – Although the consultation process is predicated upon any draft regional sampling programme and work plan recommendations that emerge from the fishPi2 project, it would be helpful to have RCG feedback on the most appropriate target audience for the consultation process. Under the Fishgig project, National Correspondents were targeted. FishPi2 was querying

whether a similar consultation protocol for fishPi2 should be adopted or whether it would be more efficient to consult directly with the RCG's?

The requirements of the WP7 and WP8 teams was discussed in plenary and RCG NA recommends that The RCG NA recommends that fishPi2 WP7 and 8 focusses training on the implementation of statistically sound sampling at two levels:

1. At the technical level to support laboratories to progressively modify their existing sampling programme towards 4S;
2. At the management level to introduce the concept, requirements and implications of 4S sampling to managers responsible of the implementation of the DCF.

Recommendation 2: The RCG NA recommends that fishPi2 WP7 and 8 focus training on the implementation of statistically sound sampling at two levels:

1. At the technical level to support laboratories to progressively modify their existing sampling programme towards 4S;
2. At the management level to introduce the concept, requirements and implications of 4S sampling to managers responsible of the implementation of the DCF.

See section 8.4 for details.

3.1.2 Rules of procedures

At its annual meeting in 2017, the RCG NA drafted rules of procedures within a subgroup of national correspondents and presented these in plenary for agreement. The text published in the RCG NA 2017 contained a traffic light system for each section to indicate either overall agreement or points where no consensus had been reached and further discussions was needed. Two rounds of edits/amendments were conducted subsequently by the NCs of the Member States participating in the RCG NA, to reach a consensus version. Denmark was added as participating member state and was included in the discussion and the consensus process. The final version, endorsed by all NCs was presented at the RCG NA 2018. The version can be found in Annex 6.

3.2 RCG NA 2018 outcomes

3.2.1 The future of the EU-Multi Annual Plan for data collection (EU-MAP)

COM gave a presentation on the recent adoption of the Annual Report Template Commission Implementing Decision (24 August) and on the process of EU-MAP revision. With regard to the EU-MAP revision, Com explained that a two-step approach is recommended at this time, considering the end of the EP and Com mandate next year and the expiry of the current EU-MAP set for end 2019. A renewal of the current provisions will take place in parallel with the preparation of the EU-MAP revision, through extensive consultations (RCGs, MS, and Com etc.) and STECF expert advice. The aim of the revision was to keep the core data requirements and to convert pilot studies into recurrent data collection. The intention of the data team was to ensure adoption of the new MAP in 2020, allowing alignment with the new EMFF. Com also indicated that a study on the state of play of the EU-MAP revision proposals and recommendations made so far in different fora is planned and invited experts to contribute. RCG NA accepted the invitation of RCG NS&EA to take part in the subgroup for EU-MAP revision and also recommended that the new EU-MAP is set up for the entire EMFF period to ensure

stability. RCGs were requested to work and provide final positions on the EU-MAP revision by June 2019 in order to enable an adoption of a revised MAP in 2020. The pan-regional subgroup intends to work along this timeschedule.

Surveys review: spring next year, revision of table ten will be included in the new EU-MAP. Results of internal consultation.

Preparation contracts: Com will issue a second round of funded contract(s) mid-2019 to compile all the recommendations that have been made by different bodies to identify what were the most important points for revision in a new EU-MAP. **The aim of the revision** is not to rewrite but to fine tune where required, and to change pilot studies into data collection.

3.2.2 RCG NA Discussion on the future of EU-MAP and next steps

The following points were discussed in plenary in relation to the future of EU-MAP:

- Retro-planning backwards indicates that feedback on EU-MAP from the RCG is required in June.
- Brain storming required from the experts in the RCG to identify the main elements for changes from an RCG perspective.
- Consultations: The Com wants to have the first draft developed by Experts as they want to give the Member States a draft EU-MAP based on compiled contributions from RCGs rather than request MS to develop draft changes to the EU-MAP, individually.
- RCG NA supports the proposal by RCG NS&EA to have a pan regional subgroup on the new DCF and will attend the sub-group.
- Overlaps between PGECON and the RCGs need to be considered. Matt Elliott to bridge the gap between RCG and PGECON.
- When considering changes, time series and coherence with existing programmes need to be taken into account.

Next steps and actions to set up an intersessional subgroup on the revision of the new EU-MAP:

- Follow up after the RCG, ask for volunteers;
- Get experts and a chair before the Liaison;
- Work out the other logistics at the Liaison;

3.2.3 Proposed structure for intersessional RCG subgroup work

As part of TOR 2- "towards a Governance model for the regional coordination group" RCG NA reviewed the outcome of fishPi2 WP 1 work and discussed how intersessional subgroup work can be progressed on a regional and pan regional level. For this purpose, the statements developed by fishPi2 Work package 1 were used to guide the discussions and provide feedback on the proposed structures. Output from the RCG NS&EA on the same subject were also reviewed. The discussions shaped the proposal for the generic workings of intersessional subgroup work, and the specific subgroup oriented tasks to be carried out in 2018/2019:

fishPi2 WP1 proposal:

We need to

- ⇒ Better consider the complexity of management of personal resources across MS in future RCG work;
- ⇒ Make institutes responsible to tasks to a larger extent (in contrast to individuals);

Make RCG work more visible, traceable and career promoting;

- ⇒ We need to consider regional work plans in a broader perspective than regional sampling plans;

RCG NA agreed with the first statement, but in relation to the second statement, in many cases, RCG members are not in the position to make commitments on behalf of their institutes. When individuals make commitments to work on tasks, they need to make sure that they have the time and resources available. Institutes need to be made aware of the commitments that have been made. Support from the institute can be difficult, especially when RCG work is competing with funded projects and research leading to publications and career development. An increase in the visibility of the RCG and the work that is carried out would help to improve commitment to intersessional work on a personal and institutional level. There needs to be an awareness at the national and Institute level on the benefits of regional coordination to support the national implementation of the work plans and the connection to a regional work plan. The RCG agreed with the last statement and used this perspective in the follow up discussion on the regional work plan.

fishPi2 WP1 proposal:

Do the RCG agree with WP1 suggestions that to achieve this we need to have:

- ⇒ A more formal structure of pan-regional (NS&EA, NA, Baltic) subgroups.
- ⇒ The subgroups should have an appointed chair(s), clear tasks decided by the RCGs and resources, in terms of personnel, shall be made available in communication with the heads of the institutes.
- ⇒ The subgroups should have a clear road-map with milestones.
- ⇒ The subgroup should produce short reports where the participants should be listed as authors. Reports should be made available (website) and should be traceable.

RCG NA agreed with the above statements. It was also agreed that a list is needed of people who have given clear commitments to carry out the subgroup work. The list should be managed with contact details such as GitHub for mailing lists. Following on from the statements of fishPi1 WP1, the RCG NA looked at the RCGNS EA proposal on the organisation of intersessional subgroups:

NS EA proposal on the improved workings of intersessional groups:

- ⇒ **Participation:** 1 working week, minimum of two people per RCG for pan regional working groups
- ⇒ **Turn into action:** ToRs discussed during RCG and agreed ahead of LM meeting. After LM meeting, sub-group chairs make a workplan, communicated to NCs via RCG chairs (ToRs & task plan), NCs to consult with experts to guarantee time, subgroup chair to prioritise if needed. Implementation of subgroup work plan.
- ⇒ **Outputs: short report** with the outcomes from the different ToRs and action points, **Standalone annexes, Authors, clear advice** on task and actions, and decisions to be taken.

⇒ The report should be **submitted to RCG members one month** before the first meeting of either RCG NS&EA, NA or Baltic. Sub Group chairs report annually to the RCG plenary (or plenaries if pan-regional).

The RCG NA agreed with the above in principal, but emphasised that the intersessional work programme and the organisation of the subgroups need to be task driven rather than static. A pan regional subgroup might have specific regional tasks in a particular year and the membership of a subgroup needs to be adaptive to respond to the task and the expertise required. The Rules of Procedures need to be aligned with the agreed workings of the sub groups.

fishPi2 WP1 proposal:

7 subgroups are suggested relevant and covering the RCG work:

- ⇒ A more formal structure of pan-regional (NS&EA, NA, Baltic)subgroups
1. Subgroup on implication of management measures on data collection
 2. Subgroup on effective interaction between end-users and RCGs
 3. Subgroup on data analysis to support RCG work
 4. Subgroup on design and implementation of regional sampling plans
 5. Subgroup on surveys
 6. Subgroup on diadromous species
 7. Subgroup on regional database

RCG NA commented as follows: The above proposed subgroups should function as umbrella groups to facilitate the intersessional work on particular tasks. The intersessional groups therefore need to be flexible, task driven and adaptive. The development of a regional sampling plan in the North Atlantic for the Freezer trawler fleet fishing for small pelagics is a good example where a specific tasks fits under the umbrella of the wider remit of the *“Subgroup on design and implementation of regional sampling plans”*. It is hoped that small and well defined intersessional tasks supported by the commitment of individuals will allow the RCG to progress its work more efficiently. The RCG NA also made specific comments on the proposed groups above. The subgroup on regional database should include data management and data quality in its remit. Additional subgroups should include:

1. Subgroup on the preparation of the new EU-MAP
2. Subgroup on the preparation of a regional work plan and its building blocks.

fishPi2 WP1 proposal cont.:

- ⇒ Establish a webpage supporting internal communication (including storage of reference lists, tools etc.), consultation with end-users, information to stakeholders. The webpage should also have links to national DCF webpages, other relevant groups and sources of information.
- ⇒ A logo.
- ⇒ A discussion on building blocks, other than regional sampling plan, that can be included in a regional workplan.

Go ahead with a limited RWP.

RCG NA agreed with the above but acknowledged that resources are required to design and maintain a website. The objectives of a dedicated RCG website would be twofold:

- to increase the visibility of its work **to external parties** and disseminate the output of its work;

- to improve **internal** communication, and to facilitate the sharing of information with a platform to host all related reference material.

In order to increase the visibility of its work to external parties, the RCGs need to clearly identify its stakeholders and their requirements.

Section 3.2.5 covers the requirement and potential resourcing of an RCG secretariat.

3.2.4 **Building Blocks of a Regional Work Plan**

The RCG NA agrees with fishPi2 WP1 that building blocks, other than the regional sampling plan, can be included in a regional workplan.

The DCF recast (Council Regulation (EC) No 2017/ 1004) states under Article 9: Regional coordination Groups may prepare joint recommendations in the form of a draft of a regional work plan regarding **procedures, methods, quality assurance and quality control for collecting and processing of data** as referred to in paragraph 2(a) and (b) and paragraph 5 of Article 5, **and regionally coordinated sampling strategies**.

In doing so, the Regional Coordination Groups shall take into account the opinion of STECF when relevant. Those recommendations shall be submitted to the Com, which shall verify whether the draft joint recommendations are compatible with the provisions of this Regulation and with the EU-MAP and, if so, approve the regional work plan by way of implementing acts. Where regional work plans are approved by the Com, they replace the relevant parts of the work plans drawn up by each Member State. Member States shall update their work plans accordingly.

The Commission may adopt implementing acts laying down rules on procedures, format and timetables for the submission and approval of regional work plans.

RCG NA used the elements specified in the DCF recast as headings to identify initial building blocks for a regional work plan. These elements were “*procedures*”, “*methods*”, “*quality assurance and quality control*” and “*regionally coordinated sampling strategies*”.

Procedures:

Page of eligible meetings and participation by Member State
List of subgroups and their intersessional tasks in the same table below.

Methods:

Standardised sampling methods for the freezer trawler fleet on small pelagics

Quality Assurance: + Control:

RDBES Quality assurance, SISP for surveys, documentation.

Cost sharing of surveys:

Surveys already going into cost sharing agreement: Blue whiting for North Atlantic

All the above elements can be incorporated into the regional work plan. RCG Member States need to agree to all elements as the implication of bringing these forward in a regional work plan are, that all

countries in that region are legally bound by them; need to adjust their national work plans in accordance; and follow them in the implementation of their work plan. The development, adoption and submission process of the regional work plan needs to be in line with the RCG rules of procedures.

The format of a regional work plan is not yet defined, nor are there templates for the structure of a regional work plan. The Com indicated that the RCGs have to take the lead in developing such a format and preparing the regional work plan. RCG NA agreed that a subgroup will draft the submission of a regional work plan based on the elements described above to scope out and initiate the process.

3.2.5 RCG secretariat, website and potential funding sources

The RCG NA recognises that for the efficient functioning of the RCG, its intersessional subgroup work and its internal and external communication (via a RCG website), additional resourcing is required and this might need coordinated action among member states and/or the commission. The administrative burden on (co)chairs to arrange meetings and produce the annual report was highlighted as well as the new emphasis on intersessional subgroup work which requires close coordination and monitoring throughout the year. RCGs intersessional subgroup work will function like projects needing project management, defined outputs and monitoring of deliverables.

The RCG NA therefore supports the proposal from the RCG NS&EA to explore the feasibility of setting up a dedicated RCG secretariat. The secretariat would host the RCG website and manage the dissemination of RCG related information and reference material. In addition, it could carry out the project management to ensure coordination and successful delivery of intersessional subgroup tasks, support the organisation of RCG annual meetings and assist with administrative aspects. See Annex 6 of the RCG NS&EA report for detailed proposal on the function of the RCG secretariat.

RCG NS&EA summarised three funding models:

1. Fully funded – by the EU
2. Partly funded by the EU with proportionate or matching RCG member contributions to operational costs
3. Fully funded by RCG members – with flat rate contributions or proportionate contributions based on an agreed equitable formula.

The Com highlighted that under the current EMFF from 2014-2020, the DCF primarily funded Member States under indirect management and that only a very small share of the money is available to Com under direct management projects such as grants. Therefore option three, i.e. funding the secretariat directly by the RCG members would be the only option in the short to medium term.

RCGs are a legal requirement under the DCF recast and therefore setting up future funding mechanisms to ensure their efficient functioning is critical. The RCG NA agreed that Member States should review the new EMFF legislation that is currently being negotiated and propose adjustments to the text for such legal provisions to be made.

A coordinated response by Member States on this issue would further increase the impact. In addition, it was proposed that the subgroup on the new EU-MAP could look at potential funding mechanisms.

3.2.6 Proposal for grants/ RDBES

In previous years, the RCGs put forward priorities for funding projects/proposals under direct management. One of the reasons why this was not continued by the RCG NA in 2017 was that the

funding of the RDB development was highlighted as the number one priority and until the funding was secured, the RCG did not want to put the emphasis on other projects. In addition, the RCG NA struggled with deciding what other proposals to put forward without an objective evaluation process and clear criteria on what merits grant support.

To support the review of future grant proposals, RCG NA brainstormed for evaluation criteria in three groups and came up with the following criteria:

- Overall RCG Need Testing/improving Methods
- Long term interest and results
- System to score
- Cost benefit analysis and detailed proposal
- Does it address enduser needs:
 - Block?
 - Improve?
- Does it address data collection needs
- Develop tools
- MS
- Subject appropriateness
- New and existing issue
- Resources
- Risk Assessment
- Scientific Output
- Regional/Pan regional Nature
- Technical Merit
- Value for Money
- Legislative requirements,
- Practical application/outcome
- Com Criteria - the need addresses an identified gap

Table 1: Criteria for RCG evaluation of study proposals under direct management (★ Brain Storm)

3.2.7 Merging of the two RCGs North Atlantic and North Sea Eastern Arctic:

Based on the proposal by the Liaison group in 2017 to merge, the RCG NA reviewed the pros and cons to merge with the North Sea Eastern Arctic and to change the meeting structure. The current situation was reviewed in a SWOT analysis and summarised below:



Figure 1 - SWOT analysis to review merging of North Atlantic RCG with North Sea Eastern Arctic RCG.

Based on the discussions, the RCG NA agreed to merge with the RCG NS EA in 2019 and hold two joint annual meetings. A technical meeting in June is followed by a formal NC meeting in September to review/discuss proposals and reach agreements. Relates to agreement **RCG NA -2018-A1**.

3.2.8 RDBES Data Policy

The RCG NA agreed to the updated data policy but asked for a placeholder until the 28th of September, so that any outstanding issues can be raised before this. After 28th of September the data policy is endorsed if no issues have been raised. Relates to agreement **RCG NA-2018-A4**, original email with data policy attached for reference.

3.2.9 RDBES steering committee

The RCG NA agreed on the new structure of the RDB steering committee: relates to agreement **RCG NA-2018-A3**, RCG representation for newly merged RCG will be reviewed.

3.2.10 Rules of Procedures

Remaining countries (France/Denmark) will approve 2017 version as a formality. There will be no changes for 2018. The RoPs will be reviewed and revised in 2019, when RCG NA merges with RCG NS EA and one joint version will be adopted. Relates to agreement **RCG NA-2018-A2**.

3.2.11 Review of the draft control regulation

There are strong concerns about the stipulation that personal data can only be retained for 5 years – in the current draft of the new Control regulation. This led to the recommendation to review the draft Control Regulation and amend where required to allow retention of personal data for more than 5 years for scientific purposes, to fulfil data requirements under the DCF. Member States to coordinate the review and make submissions during legislative negotiations based on the review. A more detailed review of the current draft carried out by David Currie, on the request of the RCG chairs, is available in Annex 9.

Recommendation 1: The RCG NA recommends that the draft Control Regulation is reviewed and amended where required to allow retention of personal data for more than 5 years for scientific purposes, to fulfil data requirements under the DCF. See section 8.4 for details.

4 ToR: Towards Regional Sampling plans

This section covers ToR 4 regional plans and encompasses the progress and integration of the monitoring and coordination of sampling diadromous species; recreational fisheries and incidental bycatch of birds, mammals, reptiles and fish as outlined in ToRs 7, 8 and 10 respectively. Relevant intersessional work including output from fishPi Wp2, 3 and 4 as well as the ICES workshop WKPETSAMP were reviewed and considered when addressing the relevant ToRs.

4.1 Progress since RCG NA 2017

The progress and intersessional work relating to Diadromous species and Recreational fisheries is summarised within the outcomes of the RCG (Section 4.2.4 and 4.2.5 respectively).

4.1.1 **fishPi2 WP2 and WP3**

The planned objectives and deliverables of fishPi2 WP2 and WP3 were presented, together with the progress achieved. WP2 aims to provide guidelines, criteria and software tools for determining suitable regional fisheries for the development of regional sampling plans. The criteria defined by the project so far are: 1) stocks that are fished by more than one country or landed in more than one country, 2) stocks that are commercially important and 3) stocks need to be considered together if they are caught together. Some of the software tools were presented and discussed with the subgroup.

WP3 is designed to deliver an example of a regional sampling plan based on two case studies (one in the North Sea and one in Iberian waters). These case studies are being elaborated from simulation studies where different scenarios will be tested, both for on-shore and at sea sampling. WP3 will also provide a set of functions based on the R-surveys function, as well as rules for allocation of effort and metrics to evaluate the results. Additional aspects covered by this WP are operational issues (practical constraints), balance between national and regional interests, cost implications, and the incorporation of the biological component (length structure) in the sampling plan design.

It was highlighted that the project will finish in March 2019 (extended to May 2019 post RCG meeting) and the results presented are preliminary. The feedback provided by the subgroup will be to the project meeting for WP2 &3 which will be held in October in Lisbon.

4.1.2 **RCG NA intersessional discussions on regional sampling plan**

Following the liaison meeting 2017, where the development of regional sampling plans was proposed as part of the 2017/2018 intersessional work programme, members of the RCG NA discussed a way forward in the selection of fisheries and the development of a regional sampling plan in parallel to the work that is being carried out under fishPi1 WP 2 and 3. Germany, the Netherlands and Ireland expressed interest in progressing a sampling plan for small pelagics and committed expertise to attend the RCG NA 2018 to plan and coordinate the work.

4.1.3 **WKPETSAMP and fishPi2 WP4 - bycatch sampling**

Main outputs from ICES WKPETSAMP and fishPi2 WP4 objectives were presented in the meeting covering relevant issues for the regional sampling programmes for Protected, Endangered and Threatened Species(PETS) bycatch:

4.1.3.1 ***RDBES and PETS bycatch data storage:***

WKPETSAMP was asked to define proper mechanism(s) for storage, maintenance and dissemination of the bycatch data generated from sampling programmes and directed studies. The outcome can be summarized as follows: (1) build routines into sampling (parts of) the entire haul and treat any rare item in the catch as an incidental bycatch, (2) provide observers with proper instructions and training, including protocols for identification and recording of rare catch items, (3) clear indication of species selection within sampling procedures so that real zeroes can be distinguished from zero's arising through non-sampling, (4) adequate design of the national database(s) where catch and bycatch information is stored. WKPETSAMP were further given a presentation on the new data model for the Regional Database and Estimation System (RDBES) and an opportunity to provide feedback on fields needed to take requirements from bycatch studies into account.

Based on this presentation, WKPETSAMP suggests that the following fields should be included in the new RDBES format with reference to the sampling effort dedicated to catch items valid to the entire haul:

- Approximate % hauling operation actually observed (incidental bycatch)
- Approximate % sorting operation actually observed (incidental bycatch)
- Checkbox for slipped incidental bycatch
- Checkbox to indicate whether megafauna could have been observed (was the observer in a position where he or she could observe e.g. drop outs)

4.1.3.2 *Inventory of bycatch at sea sampling programmes*

WKPETSAMP compiled an inventory of ongoing and proposed monitoring programmes under the Data Collection Framework (DCF) sea-sampling programmes, dedicated bycatch monitoring programmes and directed bycatch studies, in which bycatch data are obtained. The inventory describes when the different programmes/surveys started, what kind of monitoring it is, what the main objective of the programme is, where it takes place, what fishery it covers, the sampling design of the programme, sampling intensity and how data is stored, along with some expert judgement on the perceived importance of these fisheries compared to other fisheries in relation to the bycatch of seabirds, marine mammals, PET fish species, elasmobranchs and marine reptiles.

Scientists participating in the WK, provided information on their sampling schemes in their own countries. The suggestion from WKPETSAMP is to fully populate this inventory with information on equivalent programmes from other countries and to update it on an annual basis, allowing for more complete future assessments on how data on bycatches are sampled throughout Europe.

4.2 RCG NA 2018 outcomes

4.2.1 **Using output from fishPi2 to develop Regional Sampling Plans (RSPs)**

The RCG acknowledged that the outcomes of the WP2 and WP3 were premature to serve as a support for decision for implementing the fishPi2 case study Regional Sampling Plan (RSP) for the North Sea or Iberian waters trawlers or to evaluate new candidates for RSPs during the 2018 RCG. In anticipation of what an RSP will be precisely, it is difficult for the RCG to evaluate which would be the criteria for their suitability. Nonetheless, since there will be a WP2 & 3 workshop in the coming weeks, **the RCG suggested the following ideas for consideration in the fishPi2 project**, and apologizes if these considerations are already on the table :

- Investigate the redundancies of the proposed RSP with the National sampling plans (NSP) and full coverage of the different species/stocks covered by the selected fishery, and propose ways to address them;
- Provide a weighting system on species/stocks caught by the selected fishery based on end-user requirements. The objective being to concentrate on the species of interest for the end-user;
- Evaluate the number of samples which would be needed for the variables of interest of the major species, and the consequences of being sub-optimal;
- Evaluate the potential national effects in e.g. the length structure of the catches, and their consequences on the RSP;

Furthermore, the RCG is of the opinion that the benefits for going regional should be quantified, and would be a crucial information for promoting RSP vs NSP. When discussing effort allocations, the RCG anticipates that it will be easier to balance the effort within the MS across their sampling strata than between MS. It was even considered that it may be impossible to modify the national sampling allocation due to internal constraints. This consideration should be given attention when promoting a RSP. Indeed, the RCG will have a role in finalizing the agreements of a RSP, and the flexibility to modify the sampling allocations will be central for the adoption.

The RCG also discussed what would be the step for a RSP pilot study to commence in 2020 (follow-up of WP3), and be in a position to infer on new candidates in the RCG 2019 (follow-up of WP2). Given that the final report of fishPi2 will be released in May, this leaves little room for RCG to consider and implement any conclusions. Ideally a dedicated document summarising the findings from WP2 and WP3 would need to be available before then to circulate among the RCG participants to prepare the ground for any decisions. As this has not been planned as a deliverable within the project and timing is tight enough it is unlikely this document will be produced in time for consideration before June 2019. This will reduce the chance of implementing a RSP in 2020.

4.2.2 **Pelagic freezer trawler fleet - Development of a Regional Sampling Plan**

4.2.2.1 *Background*

The EU freezer trawler fleet targeting small pelagics in the North Atlantic and North Sea has been identified as a potential candidate for the development of a regionally coordinated sampling plan. This fleet targets mackerel, horse mackerel, herring, blue whiting, sprat and greater silver smelt. The fishPi2 project identified the mackerel fishery as a potential candidate for a coordinated sampling approach.

The freezer trawler fleet consists of a relatively small number of vessels (approx. 20) ranging in size from 60 to 150m. They are owned and operated by a small number of companies. Vessels operating in European waters fish under the national flags of 4 countries; The Netherlands, Germany, England and France. The duration of each fishing trip depends mainly on the catch of target species and the storing capacity of the ship. The vessels usually return when all freezing stores are full. Smaller vessels make trips of 2-4 weeks, larger vessels of 5-6 weeks. Catches are processed on board and in principle all fish is maintained and frozen in blocks of 20-25 kg. The majority of vessels depart and land in major European (Dutch?) ports (important for access onshore sampling). Currently, the Netherlands and Germany conduct catch sampling programmes for their respective national-flagged vessels. There are bilateral agreements in place between NL and FR/UK such that NL carries out sampling of catch on an opportunistic basis (the majority of landings take place in NL?). The national sampling schemes differ in extent and methodology and are currently under review with respect to methodology and statistical soundness. There exists a degree of coordination between the German and Dutch catch sampling programmes, although it is largely informal.

The majority of the stock assessments for the exploited stocks are conducted by the ICES working group WGWiDE. North Sea Herring is considered by HAWG.

4.2.2.2 *Brief descriptions of national sampling programmes:*

4.2.2.2.1 Germany

The German sampling scheme is based on on-board observers only. The current programme target is approximately 4-5 trips annually (there are approximately 40 trips annually by German flagged freezers). Trip selection is opportunistic and targeted the NEA Mackerel fishery in Q1, the North herring fishery in Q2 and 3, Atlanto-Scandian Herring in Q3, Western Horse Mackerel in Q4 and Herring in 7.d Q4. Occasionally a request is made for skippers to retain a sample of unsorted catch which is collected upon landing if no observer has been placed on board the vessel.

Observers take a random sample of catch from the majority of fishing hauls and measure for length and weight. Samples of the entire fish is retained and frozen for otolith extraction and reading onshore. Germany has 2 dedicated pelagic age readers.

4.2.2.2.2 Netherlands

The Dutch sampling scheme currently consists of 2 separate programmes.

An observer program conducts 12 trips annually (3/4 observers) homogenously distributed over the year. Trips are selected in cooperation with the pelagic fishery companies. Selected vessels include both Dutch flagged and foreign flagged vessels (excluding German flagged vessels from 2018 onwards). At present the selection procedure is ad hoc, and, therefore, considered to be non-random. The fishing area is not a consideration in the stratification of sampling trips as the choice of fishing area and target species is usually a last minute decision, and may even change during the trips. Sampling is conducted by an observer who is instructed to take samples from all hauls. Incidentally it is possible that a haul is not sampled (due to working hours or technical issues). During trips observers take an unsorted random sample of 100-150kg. The total sample is weighted, samples by species are weights, and all individuals are measured. This programme is a continuation of the national discard sampling programme and currently proceeds under the remit of bycatch sampling. At present, the collected data is not used for the WG assessment.

A second, self-sampling programme is used to provide sampling data for raising catch to catch at age for the WG assessment. Using a reference fleet (selected in an ad-hoc way) of 3 vessels, catch samples of approx. 25 kg are taken on board by trained crew members. These samples are taken from the unsorted catch by species. The crew members are instructed to take one sample a week by species by ICES area combination during a trip. For seasonal fisheries (for example, the argentine fishery), the sampling intensity is increased to ensure sufficient data collection. Samples are frozen and collected upon landing. This is then analysed for length and weight and 25 fish are randomly selected from each sample for ageing.

4.2.2.2.3 France

In recent years, France has provided length sampling data to the assessment working groups. It is unclear which segment of the national fleet this corresponds to. A more detailed description of the national fleet and analysis of the utility of this data is required.

4.2.2.3 *Proposed Intersessional Work*

4.2.2.3.1 Work Aims

Definition of the freezer trawler fleet and an analysis of recent history of exploitation of pelagic stocks in the Northeast Atlantic.

Proposal for a statistically robust regional sampling scheme to support improved data for stock assessment by 31st October 2019 for inclusion in 2020 national workplan to include:

- Draft sampling agreement.
- Fully documented process.

Phase 1 (Q4, 2018): Preparatory Phase

- Identification of appropriate national contacts for the provision of data to support the study.
- Compile a comprehensive fleet description.
- Compile data requirement and design data call (copy of fishPi2 data call?) – Logbook, Sampling Data, VMS?
- Issue data call and compile a dataset of available data for 2013-present
- Compile national sampling programme reports to ensure optimal use of available data.
- Compile ICES WG sampling reports to catalogue WG identified deficiencies with respect to sampling effort and coverage.
- Document current sampling scheme protocols to include details on trip selection, reference fleet selection and description, haul selection, self-sampling methods.
- Details of bilateral agreements and historical sampling levels. Documentation of process flow.
- Establish GitHub repository for exchange of code/documentation
- Establish links with fishPi2 project team (WP2, 3) to avoid duplication of effort/maximise efficiency.
- Schedule workshop/skype and draft ToRs
- Review of phase 1

Phase 2 (Q1, 2019) Investigative

- Conduct a SWOT analysis of national sampling programmes
- Comparison of historical sampling data (length-frequency data, length and weight at age). Is there evidence of redundant sampling effort that could be re-allocated?
- Fleet behaviour analysis (flag country, vessel owner, vessel size/fishing method, trip length, catch by species/area/month). This will identify potential sampling stratification schemes.
- Investigate utility and availability of data collected by fishers
- Workshop in Galway, possibly March 2019 (incorporate with LO intercessional work)
- Review of phase 2

Phase 3 (Q2, 2019) Development of a Regional Coordinated Sampling Plan

- Evaluated via simulation
- R code development (including an investigation of the utility of R survey package)
- Observer (at-sea) vs reference fleet (on-shore) schemes
- Alternative stratification schemes (PSU/SSU)
- Development of a real-time tool for monitoring in-year sampling coverage – leverage Marine Institute solution (David Currie)
- Sampling resource implications
- Identify processes and requirements for harmonisation of national sampling protocols

- Consideration of extension to include other fleets targeting small pelagic fisheries in North Atlantic/ North Sea

Relates to resolution

4.2.3 PETS species – Development of Regional Sampling Plans

4.2.3.1 *Develop criteria to evaluate if at-sea sampling programmes meet end user needs to assess the impact on the ecosystem.*

To set up criteria for evaluating if at-sea sampling programmes meet enduser needs in relation to assessing the impact on the ecosystem, a bycatch risk assessment for species in different areas and métiers needs to be carried out. The bycatch risk assessment should be correlated with the sampling coverage of monitored effort under the EU MAP or other studies monitoring bycatch. The method is described in the fishPi report Work Package 3 (WP3) and by WGBYC. The first objective should be to identify those protected species with high bycatch rates by fishery/métier. Then, the sampling coverage of these fisheries under the EU-MAP at-sea sampling national programmes need to be assessed.

The approach of combining species abundance, bycatch rates, fishing effort and current monitoring levels by fishing grounds is a useful tool to identify the overall bycatch risk, highlight sampling needs and identify gaps or shortfalls in monitoring levels as a first step. It would also identify which MS fisheries have the highest effort in different fishing grounds / métiers. This information is needed when allocating appropriate sampling levels between MS involved in these fisheries. In ICES WGBYC (2013) a methodology to estimate the bycatch risk of different groups of species, based on the métier, fishing effort and abundance in each different fishing region was developed. fishPi (2015) then combined this risk approach with the DCF sampling effort, to provide an index of which areas and fishing gears are most in need of additional sampling.

High bycatch risk métiers and fishing grounds were identified in the North Sea and North Atlantic regions, considering different protected species or taxa. In order to check the relative distribution of monitoring effort under the EU-MAP against the risk by métier, the risk index by métier for different regions was combined with the planned effort in the EU MAP National programmes. This index provides an initial blueprint for determining which métiers in which regions require monitoring, in addition to the DCF catch sampling at sea for commercial fisheries in order to improve estimates or understanding of bycatch across all protected species groups.

Based on the information mentioned above, RCG NA consider that an update of the risk assessment for the North Atlantic Region should be done **intersessionally by the regional sampling programme subgroup**. This update will be based on the existing risk tables completed in fish Pi 1 and updated information obtained from the RDBES: **a)** métiers effort data by region and **b)** effort and coverage of the at sea sampling programmes of these métiers in this region.

For the RCG NA 2018 meeting, RCG NA requested to participants to fill in a template summarizing the pilot studies carried out under the NWP in the period of 2017-2019.

With the updated risk assessment table, the inventory completed in WKPETSAMP and the information provided for the pilot studies carried out under the NWP during 2017-2019, a preliminary analysis of

potential métiers to be monitored because of high bycatch rates and relative low sampling effort could be identified.

For this risk analysis, outcomes from fishPi2 WP4 outcomes will be also considered. Under this WP there is an attempt, based métiers with potentially high bycatch, to follow all the stages described for the regional sampling programmes in fishPi.

This intersessional work will allow as a first approach, to discuss during next year RCG meeting, relevant aspects of additional sampling requirements to be considered in future regional sampling plans by the RCGs.

Specific task for regional sampling programme subgroup:

An update of the risk assessment table for the RCG NA Intersessionally.

1. Update bycatch risk assessment for the North Atlantic
2. Contrast with fisheries overviews from RDB
3. Review NA Pilot studies for existing bycatch pilot studies
4. Identify gaps in monitoring coverage for high risk fisheries

Relates to resolution on risk assessment of bycatch in the North Atlantic.

4.2.4 **Sub group: Eels and Salmon**

As part of a continued initiative to account for the pan-regional nature of the Salmon and Eel fisheries and sampling coordination under the DCF all the Eels and Salmon experts agreed to meet annually at one RCG. The Salmon and Sea Trout experts agreed to meet at the RCG NS&EA in Copenhagen, Denmark September 3rd – 7th 2018 but as the scheduling of WGEEL in the same week as the RCG NS&EA the RCG eel experts chose to meet at the RCG Mediterranean and Black Sea in Kavala, Greece, September 18th-20th 2018.

A report of those meetings will be included in their respective RCG reports but as the RCG NS&EA meeting preceded the RCG NA 2018 meeting a summary of the salmon and sea trout subgroup work is reproduced below.

4.2.4.1 **Salmon and sea trout**

The sub group was attended by 12 experts on Atlantic salmon and sea trout, plus one expert who joined the meeting on Wednesday September 5th via Skype. The experts represented ten countries, from both the Baltic and Atlantic areas.

The draft ToRs relevant to Atlantic salmon and sea trout were discussed and agreed by the sub group in plenary, before allocating tasks to individual members. It was decided to structure this annex according to the ToRs with a slightly changed order, so a particular line of logic was followed.

As in 2017 a series of recommendations were posed to the ICES Working Groups in their role as end users. These are summarised in the text table below and are detailed in RCG NS&EA 2018 report, Annex 14.

ToR 1 Review progress since last year

ToR 1.3: Consider feedback from End-Users (ICES EGs) to the recommendations from RCM Baltic 2017 (elaborated as points 1-5 below), and follow up accordingly.

At the RCG Baltic meeting in 2017, the Diadromous Sub Group (RCG) directed recommendations to the ICES Expert Groups WGNAS (Working Group on North Atlantic Salmon) and WGBAST (Working Group on Baltic Salmon and Trout) and asked for a response regarding end-user needs for stock assessment. A response was delivered from WGBAST (RCG NS&EA 2018, Annex 14) though the feedback did not cover all information/data needs, it highlighted some important issues about the process of selecting Index Rivers and a brief evaluation of the need to coordinate parts of the data collection. Due to heavy workload with a full assessment in 2017, feedback was not delivered by WGNAS although the recommendations were discussed at the working group meeting.

To cover the total data/information needs for stock assessment, the RCG has elaborated the recommendations from 2017 into the following specific points that should be addressed by ICES EGs on diadromous fish before the RCG meeting in 2019:

1. For commercial fisheries in Union waters, advise on the selection of stocks for which variables (sex-ratio, maturity, fecundity) have to be collected in support of scientific advice, and the and sampling level, temporal frequency of data collection.
2. For commercial fisheries in freshwaters, specify stock-related variables to be collected for individual specimens, on age, length, weight, sex, maturity and fecundity, by life stage. Noting that the requirement to collect annual catch quantities by age class or life stage is obligatory.
3. For recreational fisheries in all waters, advice on the end-user needs for age or other biological data, noting the requirement to collect annual volume (numbers and weights or length) of catches and releases is obligatory.
4. Define the rivers, and their selection criteria, to be monitored for salmon at regional level, noting that 'rivers' in the Legal Text is interpreted to represent 'water bodies' (STECF 2017).
5. Coordinate, at regional level, the selection of stocks from which salmon variables (parr, smolts, ascending adults) have to be collected, and advise on temporal frequency (annual or not) of the collection of variables for salmon.

Based on the elaborated recommendations above, the subgroup produced a first draft of a list of data needed to assess status and provide scientific advice for salmon stocks in the North Atlantic and the Baltic Sea. The preliminary compilation needs input to give a complete picture of the data requirements and is therefore directed to WGNAS and WGBAST for their feedback to the RCG meeting in 2019. The two EGs are encouraged to consider in their responses also quality aspects and possible needs for coordination of the data collection between countries, including standardization of methodologies (e.g. age reading, electrofishing and methods to estimate smolt abundance).

The new EU data collection regulation covers to some extent data collection on sea trout in the Baltic Sea, and the feedback from WGBAST should therefore ideally include also data needs for this species. However, there is currently no analytical assessment carried out for sea trout in the Baltic Sea because of a lack of suitable methodologies. ICES working group WGTRUTTA was established in 2017 to develop assessment models and establish biological reference points for anadromous trout. Until this developmental work has been finalized, it is not possible to identify in detail which data will be needed in the future to assess status of sea trout populations in the Baltic Sea or elsewhere. The RCG therefore

suggests postponing the compilation of data requirements for sea trout until WGTRUTTA has finalized its three year term and an assessment model has been agreed upon.

The group also discussed the issue of data collection on salmon stocks that have been extirpated and currently part of a reintroduction programme. The group agreed that biological data on such stocks, although very useful in monitoring the success of the programme and thus the MS, is not of great use in any international or regional stock assessment. It therefore should not be necessary to collect data on such stocks for assessment purposes. At a time when stocks return to a self-sustaining state data collection for use in international stock assessment should resume.

Recommendations from the RCG NS&EA 2018 subgroup work:

Recommendations detailed in RCG NS&EA 2018 report:

RCG NS&EA 2018 R13: The RCG recommends WGNAS and WGBAST to consider the list of possible data required for Atlantic salmon stock assessments in the 2018 RCG report and to report back to RCG in 2019 on this list with suggestions for changes and/or additions.

RCG NS&EA 2018 R14: The RCG recommends WGNAS and WGBAST define the rivers to be monitored for Atlantic salmon at regional level, noting that 'rivers' in the Legal Text is interpreted to represent 'water bodies' (STECF 2017).

RCG NS&EA 2018 R15: The RCG recommends WGNAS and WGBAST suggest a selection of stocks from which salmon variables (juveniles, smolts, ascending adults) have to be collected, and advise on temporal frequency (annual or not) of the collection of variables for salmon.

RCG NS&EA 2018 R16: The RCG recommends WGBAST and WGNAS to comment on current quality assurance in their data, and recommend actions to improve QA in future.

RCG NS&EA 2018 R17: The RCG recommends that WGBAST and WGNAS should be encouraged to consider adopting the RDBES database as their primary data resource.

4.2.5 **Monitoring Recreational Fisheries**

The value, benefit, and impact of marine recreational fisheries (MRF) in Europe are now well recognised (e.g. Armstrong et al. 2013, Hyder et al. 2017; 2018; Radford et al. 2018). As a result, there has been a requirement to provide data of catches and releases of certain MRF under the DCF since 2002, and the EU-MAP also includes the need for pilot studies of MRF within 2 years of the directive coming into force. It is unclear how regional cooperation can support the data collection, assessment and management of MRF, so the RCG NA has a ToR on MRF that includes an assessment of progress with pilot studies, summaries of the EU funded regional cooperation projects (e.g. fishPi2, STREAM, SECFISH), and review of WGRFS outcomes and recommendations. As a result, a presentation was made on MRF outlining the situation in Europe, the European Parliament position statement, data requirements, current status of monitoring, the limited numbers of stock assessment that include MRF, WGRFS outcomes and recommendations, and regional cooperation. MRF was discussed both at plenary and within subgroups. The main focus of the discussion was to assess progress with pilot studies, regional cooperation, and developing recommendations for the RCG NA.

Many countries are conducting pilot studies, with studies underway in most countries excluding the Balkans. However, these studies are being done in many different ways, with variable coverage of platforms, gear, and species. This is because it is difficult to harmonise MRF studies due to varying practices and cultural differences in responses to survey instruments. Instead, the focus has been assessing the quality of surveys, so that the data can be used together within stock assessment. One

large difference was that many pilots only covered the DCF species despite the limited additional cost. This is not efficient and means that MRF data was not available for most species, so the RCG recommended that multispecies pilot are done.

Recommendation 7: The RCG NA recommends that marine recreational fisheries surveys collect data on all species caught rather than, solely, the species defined in the DCF. See section 8.4 for details.

Three recommendations were made by the WGRFS that required review by the RCG NA: 1. MRF should be included in the RDBES; further studies are needed of post-release mortality; and MRF should be included in more stock assessments. The RCG NA discussed the recommendations and agreed a position on each. The RCG NA agreed that MRF data should be included in the RDBES as soon as is practically possible. However, a proposal is needed of an appropriate technical solution, the associated resource, and impact on existing development, in order for ICES to agree a way forwards (Recommendation 8). Finally, the RCG NA acknowledged that MRF was included in a very limited number of stock assessments and MRF should be included in stock assessments where there is evidence of impact (e.g. cod, sea bass, and pollack). MRF should be a routine part of ICES data call and included in the ToRs for benchmark assessments, and justification provided for exclusion. In addition, the impact of MRF on all stocks should be reviewed by the STECF after the delivery of pilot studies (Recommendation 9).

Recommendation 7: The RCG NA recommends that marine recreational fisheries data are included in the RDBES as soon as is practically possible. A proposal of a preferred option is needed that assesses the range of technical solutions, the associated resources, and impact on existing development. On this basis, an agreement of how to move forwards including timelines should be agreed by ICES. See section 8.4 for details.

Recommendation 9: The RCG NA recommends that: the importance of recreational fisheries removals is reviewed and included in stock assessments where recreational catches are found to be large. See section 8.4 for details.

The role of regional coordination in MRF surveys was discussed in relation to the projects funded by the EC. fishPi2, STREAM, and SECFISH all included studies of MRF regional cooperation, but the projects were not sufficiently advanced to provide useful insight at this stage. All projects are due to report in May 2019, so the RCG NA agreed to review the outcomes alongside advice from the WGRFS (Recommendation 10).

Recommendation 10: The RCG NA recommends that the potential for regional cooperation in marine recreational fisheries surveys is reviewed by WGRFS based on the outcomes of the regional cooperation projects fishPi2, STREAM, and SECFISH. See section 8.4 for details.

There was also discussion about the interactions between the WGRFS and RCG. This was felt to be a useful interaction and the RCG acknowledged the need for support on MRF. The potential was highlighted for future discussions and the opportunity to request advice on specific topics from the WGRFS in future.

References relating to ToR 8 and section 4.2.5:

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5 ToR: End-user needs and interactions

This section covers ToR 3 “End-user interactions and identification of end-user needs” and ToR 6 “Surveys”.

5.1 Progress since RCG NA 2017

During 2018, RCG chairs continued to work with ICES to progress the actions raised at the first intersessional End-user sub-group meeting at ICES in March 2017. These included improving the ICES Stock Information Database, improving the administration, documentation and access to Reference Datasets in the RDB- ES and keeping track of the research surveys used in advice. The subgroup met at ICES in March, 2018 and as well as the above provided the Commission with advice on the proposed evaluation of surveys and the revision of Table 10 in EU-MAP. Intersessional sub-group work on the cost sharing of surveys was postponed for 2018 until after a full evaluation of surveys was complete. The intersessional work is summarised below.

5.1.1 Intersessional sub-group on End-Users

In 2017, the chairs of the Northern RCGs (BALTIC, NS&EA and NA) initiated a dialogue meeting with ICES as their main scientific end user to establish a framework that facilitates the feedback between data collection and data requirements. The objectives for this initial meeting was to:

- start formalising a framework of communication between data providers (RCGs) and data end users (ICES);
- see how best to improve on current interactions and communications with RCGs and ICES including using established mechanisms;
- Use the above to draft ToRs and intersessional work for the RCGs.

Following the meeting in 2017, it was agreed that the chairs of the RCGs continue this dialogue as a pan regional and intersessional subgroup with ToRs as presented in the 2017 Liaison report. In February 2018 the sub-group made up of the Chairs of the Northern and Long Distance RCGs (BALTIC, NS&EA, LDF and NA); the chair of PGDATA, the WGEEL Chair, STECF representative and ICES secretariat met in Copenhagen. The objective of the meeting was to continue the process between

ICES and the RCGs, to improve the dialogue and feedback between data providers (RCGs) and data end users (ICES) and specifically to review the agreed actions from the 2017 meeting on benchmark process, data calls/data inventory and surveys and agree on next steps. As part of the benchmark process, progress was made on a live issue list, which will allow closer feedback loops between data collectors and end-users. Fields relating to data usage are intended to aid prioritisation of data needs. The RCGs will continue to work on fisheries sampling overviews on selected stocks to be benchmarked so that summaries can be presented at data compilation workshops. For data calls, the RCGs agreed to review the ICES assessment data call and feedback on any issues encountered. ICES is developing a data call module for stock coordinators to identify data variables and communicate with data provider. This data call module can be used as a tool to provide feedback on data needs vs data availability. It was highlighted and stressed that diadromous species should feed into the same data call structure. For the STECF survey review, progress on the preparation of background material was reviewed and next steps identified. It was agreed that the planned STECF meeting in May should be a preparation meeting to further develop documentation and scope out the evaluation criteria for a survey review at a later date. This was recommended to the Commission.

A full set of minutes are presented in Annex 7

5.1.2 Cost Sharing of Surveys

The principle of cost sharing of surveys was established at an intersessional subgroup meeting in 2016 and published in the RCG NA 2017 report.

The RCG points out that the existing cost-sharing agreements for the "International Ecosystem Survey in the Nordic Seas" (ASH) and "Blue Whiting Survey" are continued into 2019 as stated under the current agreements. Also, pending the STECF survey review (and subsequent modification of Table 10 of EU-MAP) the discussion on cost sharing of other surveys is postponed until after this review and no additional cost sharing is undertaken at the moment.

5.1.3 Mandatory research survey review and STECF 18-04

In 2017 RCGs recommended how survey data could be collated usefully in preparation for a proposed STECF EG meeting in May 2018 to review the mandatory survey list in table 10 of EU-MAP. In preparation for this meeting a small intersessional group covering the NS&EA, Baltic and NA, in collaboration with MS, continued work started at the RCGs 2017 and collated the survey information from the Annual Work Plans and related stock information. The Intersessional End-user subgroup meeting in March 2018 – See section 5.1.1 above – proposed a phased approach to the evaluation. Collating the information for the meeting, in collaboration with MS, was not necessarily going to provide the EG with the information they would need. The first STECF meeting should determine the data, criteria and tools required for the evaluation.

5.1.3.1 STECF 18-04 14-18 May 2018

COM presented the outcomes of the STECF EWG 18-04 on the 'Preparation for the evaluation of the list of mandatory research surveys at sea', that took place in Varese, Italy, 14-18 May 2018. The EWG 18-04 was tasked to develop the methodology to be used for the future evaluation of surveys. The agreed methodology is end-user driven and has the stock as the starting point, rather than the survey. Com explained the reasons behind the adoption of this novel approach, which is in line with the new DCF legal framework. Based on this new approach the EWG worked on two database-like tables, entitled 'stock' table and 'survey' table, that have to be populated by end users, MSs and RCGs. The

information contained in the 'stock' and 'survey' tables will feed into the evaluation process, which is schematically represented by a flow chart entitled 'Decision Support Tool (DST)'. Each proposed survey will be assessed against all the stocks covered. The analysis per stock will help evaluate, not only how many stocks are sampled in a survey, but also the extent of coverage and the methodology used per stock. This will provide an indication of duplication between surveys (to be avoided) against the degree of complementarity (to be allowed).

The Member States and Regional Coordination Groups were requested to populate the two tables ('stocks' and 'surveys' tables) with a proposed list of surveys, to be included in the new DCF legal framework. In addition, the RCGs were asked whether the starting point for this exercise - as suggested by the EWG 18-04 - should be the stocks listed under Tables 1A and 1C of the EU-MAP. Com informed the RCG that the end users will also be requested to provide their contribution on the use of survey data.

The Commission sent out the data call at the End of July 2018 with a deadline for the completion of these tables, being the end of the first week of November, 2018 Member states would complete them in collaboration with the RCGs. Collation of the data continued during the RCG meetings.

5.2 RCG NA 2018 outcomes

5.2.1 Request for information on research surveys at sea (stocks and surveys)

At the STECF EWG 18-04 on the 'Preparation for the evaluation of the list of mandatory research surveys at two database-like tables were developed: 'stock' table and 'survey' table, that the Commission have requested to be populated by end users MSs and RCGs.

The 'stock' table aims to lists all the stocks by marine region, including stocks currently assessed and stocks for which there is no assessment, but for which a need is anticipated in the medium term. The starting point for population of the stocks list is the EU MAP (Tables 1A and 1C). The 'survey' table aims to provide summary information on the survey characteristics and will be also used to assess the survey potential to provide ecosystem data.

The information from both tables will feed into the survey evaluation process developed by the EWG 18-04. The RCGs were asked to coordinate the completion of these tables at the regional level. RCG NA concluded that the survey table should include those surveys which were ongoing and used for stock assessments.

RCG NA noted the importance of standardising unique survey names. A naming convention had been suggested at the RCGs NA and NS&EA in 2017 so that an individual survey that provides independent stock indices can be identified. This would comprise of the elements Region (RCG Region)/survey acronym/time period and MS (ISO-3-Alpha code). An independent but coordinated survey would be identified by the MS code – for example - NSEA_IBTS_Q1_ESP. Elements might only be required if there was the chance it could be confused with other surveys. Other local elements may need to be added to identify any number of surveys carried out by the same institute working in the same area at the same time – a sub survey element may be needed – e.g. Spanish mackerel egg surveys, 3 surveys in same period targeting Horse mackerel or Mackerel (species code HOM and MAC respectively). Independent surveys could be identified by the acronym alone but if internationally coordinated there may be some part of the acronym that identifies this. The current mandatory surveys coordinated by

WGBEAM already appear to contain the BTS (Beam Trawl Survey) acronym and WGIBTS surveys contain the acronym IBTS (International Bottom Trawl Survey). In all other cases the National Acronym or national naming convention could be adopted. This would then be used for the revised table 10. For this exercise although elements of the Survey ID may already be listed in separate fields in the STECF database, those elements will still need to be concatenated to distinguish between surveys that need to be referred to independently.

RCG NA agreed that RCGs should take the lead in establishing the survey codes which would form the standard for EU Member States. ICES and other end users would be encouraged to adopt these and if happy, to communicate them to survey groups to use. ICES would be requested at the very least to ensure that there was mapping to existing codes if they wanted to maintain them.

It was agreed that stock codes needed to have clear link to EU-MAP Tables 1A and 1C and for it to be possible to reference ICES advice through a link to ICES stock keys. If other RFMOs have stock codes then these should also be used but Tables 1A to 1C would remain the starting point. This will permit it to be possible to identify clearly how well stocks are covered by surveys and will help inform on any future revision of Tables 1A to 1C.

It was noted that some stocks covered by national surveys were not in Table 1A (e.g. whelk). It was therefore recommended that if advice was needed on the stocks, the requirement to survey should be in the new EU MAP (stock in Table 1A and survey in Table 10).

The RCG NA noted that work on the standard stock and survey lists would continue beyond the September round of RCG meetings. It was anticipated that the Liaison Meeting would compile what is available at that point and forwarded to ICES. It was expected that an ad-hoc contract or dedicated group would be needed to convene by November to complete the population of the tables.

When reviewing, collating and validating the few submissions from MS, the RCG NA subgroup, found inconsistencies in how they had been completed. There was some ambiguity in the link between the Stock table and the Survey table. There were inconsistencies in how the stocks and the surveys were referred to. RCG NA started to create a definitive reference list linking the stocks defined in table 1A and C by species name and area with the ICES stock codes. This was then used to populate the stock table with reference to MS submissions post STECF EWG 18/04. The Stock and Survey tables and with accompanying explanation were forwarded to the RCG BALTIC Chairs and an informal intersessional subgroup (Maria Hanson, Marie Storr Polsen and Jon Elson) agreed to complete the tables in collaboration with MS for the final submission.

5.2.2 **Feedback of end-user needs from ICES/GFCM, JRC, STECF and others**

One representative of the ICES Secretariat Advisory Department attended the RCG NA part-time and provided an overview of upcoming data calls (2018/2019), benchmarks (2019) and data transmission failures (2017/2018). At the time of the RCG NA meeting three benchmarks, four inter-benchmarks and 11 data calls had been planned for 2018/2019. From the 184 potential data transmission failures identified in 2018 by the ICES Secretariat, a total of 10 failures were communicated to the European Commission. These failures related to 2017 data requested by various ICES data calls.

The data call module existing within SID (Stock Information Database) that is being developed by the ICES data centre was presented. Stock coordinators and data submitters have access to this online

module where i) data needs for the different stocks can be edited and approved by stock coordinators (i.e. edits to the requested data by stock in the data calls), and ii) data submitters will be able to see which data are requested by stock in advance of the data call and provide comments/suggestions before the publication of the 2019 fisheries data call. This module will also include “data transmission issues” (e.g. data were not received on time, data quality was poor) identified by stock coordinators. At RCG NA it was discussed that the possibility to compile benchmark information and issue lists by stocks within SID would be highly appreciated.

The European Commission has an interest in reviewing the scientific surveys currently funded and a recent STECF expert group meeting (STECF EWG 18-04) has elaborated a decision tool to aid with their prioritization. The ICES Secretariat will collaborate with RCGs by reviewing the links between stocks and surveys used for stock advice.

Currently there are several physical meetings where better communication between RCGs, ICES Secretariat and ICES WGs can be encouraged; RCG Chairs meeting with ICES secretariat (spring), RCG meetings (summer) and Liaison meeting (autumn).

5.2.3 Consideration of recommendations to RCGs in 2018

Relevant RCG recommendations from ICES expert groups 2018 were reviewed taking into account the comments from RCG NS&EA. To improve communication and help limit duplication of work and needs for recommendations between RCGs the RCG NS&EA 2018 proposed a decision table to be passed on from one subsequent RCG to the next. This captures the decisions and potential pan-regional proposals that need input from all RCGs.

For some of the external recommendations it highlighted that requests arriving to RCGs were frequently ill-defined. The RCG NA therefore sought to provide a clear and practical advice, including where possible who should take responsibility, as to how the recommendation should be dealt with.

In a number of cases it was apparent there were recommendations relating to requests for new surveys or extensions to existing surveys. RCG NA recommends that these should be dealt with using the six criteria established for review of mandatory surveys and highlighted by STECF 18/04 i.e.:

- Internationally coordinated and harmonised surveys;
- Surveys designed to inform decisions for fisheries and ecosystem management needs;
- Access of survey data to the scientific community;
- Survey coverage;
- No duplication between surveys;
- Non disruption of data time-series.

The RCG NA reviewed the conclusions of RCG NS&EA. For recreational fishing surveys, the RCG NA was provided with updated text for recommendations which in one case enabled this to be endorsed by the group.

Comments by recommendation are as follows:

ID	EG	Recommendation	RCG NS&EA Notes	RCG NA Notes
30	WGBAST	Catch estimates of recreational salmon and sea trout fisheries are	This is a potentially a compliance failure- note that	Endorsed by RCG NA

ID	EG	Recommendation	RCG NS&EA Notes	RCG NA Notes
		uncertain, incomplete or totally missing for several countries. Studies to estimate these catches are needed.	it is mandatory for all MSs to collect data on recreational fisheries. This may be helped by ICES understanding which derogations and bilateral agreements are in force - suggest that Commission provide this information to ICES.	
31	WGBAST	Sufficient data coverage of sea trout parr densities from typical trout streams is needed from all countries. Continuing sampling for longer time-series is required for assessment.	Refer to decision tree for inclusion of survey in mandatory surveys list/inclusion in AWP for funding (art in DCF regulation - 6 points) as text above	Endorsed by RCG NA
33	WGBAST	Bycatch of salmon in the pelagic fishery for other species should be explored.	Refer to decision tree for inclusion of survey in mandatory surveys list/inclusion in AWP for funding (art in DCF regulation - 6 points).	Endorsed by RCG NA
68	WKASMSF	WKASMSF recommends to implement the 'WKMATCH 2012 maturity scale revised' (as described in chapter 4) in the ICES and RCG databases following the implementation plan (as described in chapter 7), and use this as the only scale for data submissions from 01-01-2020.	RCG NS&EA endorses recommendation that RDB uses the same scale (insert reference), distributed to RCG members and other ICES countries and communicated to WGBIOP.	Endorsed by RCG NA
71	WKASMSF	WKASMSF recommends to adopt the 'WKMATCH 2012 maturity scale revised' and approve the implementation plan (presented in chapter 7). Approval should be sent to WGBIOP. (Note that all requests with regards to maturity scales or stages in the ICES, RCG and GFCM databases should be directed, in the form of a recommendation, to WGBIOP for approval.)	See above (implementation plan for No. 68)	Endorsed by RCG NA
72	WKASMSF	All survey groups should update their manuals with the correct references (see chapter 4 in this report) and include or update the conversion table for the national maturity scales.	RCG NS&EA Endorses - Should be adopted within the SISF - conversion scale should also be included.	Endorsed by RCG NA

ID	EG	Recommendation	RCG NS&EA Notes	RCG NA Notes
74	WKASMSF	WKASMSF recommends to follow the suggested method of estimation of the maturity ogive (see chapter 9) for the 'WKMATCH 2012 maturity scale revised' and GFCM scales.	Endorse plus suggest include scales.	Endorsed by RCG NA
92	WGHANSA	A pelagic survey to be carried out on an annual basis in Autumn in the western Portuguese coast to provide information on the recruitment of small pelagics (particularly sardine and anchovy) in that region	Refer to decision tree for inclusion of survey in mandatory surveys list/inclusion in AWP for funding (art in DCF regulation - 6 points) as text above	Endorsed by RCG NA
94	WGHANSA	Length distributions and biological parameters of catches are collected for sardine in area 7 by countries operating in those waters. The WG is seeking additional participation from countries fishing sardine in area 7, especially experts from Denmark, Germany and the Netherlands.	Normally expect to contact the ACOM members for the countries concerned - Supplementary question - addressed from MSs present in RCG NS&EA - NLD, DEU and DNK - to ask if there is a specific issue with regard to insufficient expertise. - Also to note EU-MAP thresholds for sampling.	Endorsed by RCG NA
130	WGBYC	Fleet level sampling programmes need to be designed to ensure adequate sampling for assessments of protected species bycatch. The design needs to consider which areas, métiers, number of vessels to be sampled, amount of sampling days/hauls etc. Priority areas for monitoring should be informed by the Bycatch Risk Assessment work of WGBYC and the fishPi method used in WKPETSAMP.	Need for new sampling programme needs to take into account cost and fitness for purpose. Can we make suggestions to improve current sampling programmes to more effectively cover PETS? Understood that commercial sampling design isn't appropriate - Likely need separate and specific sampling to look at PETS, may be informed by Pilot Studies where commercial sampling not sufficient.	Endorsed by RCG NA. Please see section on PETS Section 4.2.3
136	ADGBYC	The ADG recommends to coordinate between WGBYC and RCGs which species/metiers are the main interest to track for each RCGs	See above – ID 130	Endorsed by RCG NA
107	WGRFS	A database that brings together estimates of marine recreational fisheries catches for end users is needed as a matter of urgency. A	RCG - Important that all data used in stock assessment stored in RDB and that methods are standardised	Following provision of new information not available to RCG NS&EA, RCG NA felt

ID	EG	Recommendation	RCG NS&EA Notes	RCG NA Notes
		<p>paper that summarises the key issues and proposed solution to include recreational catches in the RDBES is provided in Annex 7 of the WGRFS 2018 report. Support is needed from ICES to resolve this issue, agree timescales, and put a solution in place for 2019.</p>	<p>and how to combine data is better understood. While we are still in pilot phase under EU-MAP for recreational fishery surveys, this is not highest priority at least this year - perhaps 2-5 years. Need to finalise the fundamentals of the database before adapting the database.</p>	<p>able to endorse this request and agree that it is a priority. No repository currently exists for this data. A solution along the lines of 'Intercatch' for recreational fishing is suggested. Database fields have been suggested (18 months ago). The work is not expected to be significant. WGRFS have asked ICES to come up with options and costs.</p>
108	WGRFS	<p>Studies of the impacts of catch and release are lacking for most common recreational species. More studies need to be funded on key species including cod, sea bass, pollack, sea trout, salmon, Atlantic halibut and bluefin tuna. A proposal has been drafted by WGRFS (Annex 6) for the European Commission to fund a service contract lot under the EMFF umbrella, that should be put forward to the EC by ICES and the RCGs.</p>	<p>RCG endorses proposal - Recommends take forward via the liaison meeting - request for funds from EC direct management - expect 1.2 million Euros available that could be utilised to help intersessional work of this type. (Jorgen - draft recommendation for LG).</p>	<p>RCG NA agreed in plenary not to make recommendations on external funding but recommends applications should meet certain criteria. See section 3.2.6.</p>
182	WGRFS	<p>(Given new evidence on the proportion of removals by marine recreational fisheries (2-43%), the RCGs and ICES regional assessment groups (WGCSE, WGBIE, WGNSSK, WGBFAS) consider inclusion of recreational catches in a broader set of stock assessments and advice, and highlight where extended data collection is required.)</p>	<p>Not considered</p>	<p>Recommendation to ICES as end user - Route identified: Ensure data is included in general data call for data (esp. benchmark call) - Highlight issue of impact of marine recreational fisheries and identify data gaps. ICES to contact RCG with issue list.</p>

ID	EG	Recommendation	RCG NS&EA Notes	RCG NA Notes
		A key knowledge gap for marine recreational fisheries is fisher behaviour and its impacts on the effectiveness of management and policy. A workshop is needed to understand the current state of knowledge and make recommendations of how to take this important area forwards. A new workshop on integrating human dimensions into the management of marine recreational fisheries (WKHDR) sponsored by WGRFS is proposed (WGRFS 2018 report, Annex 9) for consideration by ICES.	Not considered	RCG NA endorses the need for workshop – proposed September 2019. Commission advised this would be useful before EU-MAP revision!

5.2.3.1 *Recommendation from WGWISE 2018*

The 2018 ICES WGWISE meeting met late August and this group has put forward a recommendation on the blue whiting survey of relevance for this group. Despite not being formalised through the ICES procedures, RCG NA felt that this recommendation could be discussed already.

Regarding International Blue Whiting Spring Survey (PELACUS)

Recipients:

WGIPS

Recommendation:

WGWISE recommends that IBWSS study ways to survey 8abd division in order to understand the dynamics and connectivity between blue whiting spawning components.

Background:

IBWSS covers the core spawning area of blue whiting, but little is known about the connectivity between this area and the possible southern spawning areas as revealed in recent research papers.

5.2.3.1.1 *Background:*

The current year the IEO-Spain has joined to the IBWSS (International Blue Whiting Spring Survey), covering the Porcupine Seabight. This area is off the core spawning grounds, but according to recent research papers, spawning activity would likely occur, though it could be take place earlier.

Moreover, there are also indications they could belong to a Southern stock. Although the promising results obtained the current year on this area, these do not allow to achieve an idea on the dynamics of this population in areas South the Porcupine bank, nor the spawning activity and their extension or the connectivity between both areas.

In order to get insights on these, WGWISE 2018 recommended IEO should also survey the French slope (Divisions 8abd).

RCG NA response: The proposal is very much welcomed and Spain is encouraged to undertake the study as proposed. When successful the Spanish contribution can be taken into account when drafting future cost-sharing agreements.

5.2.3.2 *Benchmark issues*

The subgroup addressed TOR 3- review the issue list for the 2019/2020 benchmark stocks (by region) and produce an overview of sampling and quality on the stocks to be benchmarked in 2019. Sampling overviews are presented in Annex 8 – Data Quality. It was agreed that there was little of substance for the RCG to do except to identify those responsible. Some specific comments were made as follows:

- Cod 27.e-k – metiers reviewed by WKMET and updated (not necessarily simplified) to reflect current practice.
- Had 27.6b – forward to WG BIOP and MSs to follow up on their analysis (doubts were expressed on degree of age reading).
- Sol 27.7.f-g. - No comments from RCG NA

It was noted after the RCG meeting that there are a number of data compilation workshops in 2019 which were overlooked in this discussion. RCG Chairs have tasked the Data Subgroup for Regional Overviews and the Enduser Subgroup to consider these workshops in their intersessional work.

5.2.3.3 *Feedback on Data calls*

Various data calls were launched over the course of last year. RCG NA collated MS responses to the calls in order to improve future data calls. For the ICES data call, it was agreed at the End-user meeting between ICES and the RCGs March 2018 (Section 5.1.1) that the RCGs would comment on the upcoming data call. The draft 2019 call is similar to the 2018 call. As there appear to be no significant changes the RCG NA decided to collate and use the comments from MS to provide advice to ICES on the future calls. Other data calls were reviewed as well.

5.2.3.3.1 *Response to the ICES stock assessment data call*

The responses were categorised as General/Procedural; Working Group Specific; Data provision and storage. It is suggested that when ICES ask for feedback on specific calls or generic data calls MS relate their issues to these categories.

General/Procedural comments:

- The datacalls have improved this year.
- Be as explicit as possible in the data call – don't leave room for interpretation.
- If the submission template has changed since the previous year this should be highlighted.
- When ICES receives data via email it should be made available on the SharePoint as soon as possible.
- A report to show which countries have actually responded to the data call would be useful.
- A list of current Stock Coordinators provided with the Data Call would be useful.
- Accession: Difficult to navigate – needs folders and naming conventions.
- Last year's feedback sections on "DATRAS Issues" and "Accession & Stock Coordinators" are still relevant.
- The timing of some working groups e.g. WGDEEP, HAWG has been earlier than 2017, preferably the meetings are pushed backwards in time again thus allowing timely delivery of the data. The data provision is heavily dependent on third parties outside the DCF/MS control e.g. FIDES closes at 15th of February at the earliest. Thus MS can only extract their data from that day onwards.
- A workshop to unify the data call, standardize formats and codification might help to align the data provision to WGs and improve efficiency thus supporting timely data provision.

Working group specific comments:

- Data call specification: The requirement to service both the MIXFISH and stock assessment working group has resulted in a data call that is very highly dis-aggregated. Data are usually required by quarter, division, and level 6 metier. This invariably leads to many gaps in the estimates and low sample sizes.
- MIXFISH combines data from WGBIE and WGCSE but data for these groups are aggregated and provided at different levels
- Different grouping of species, areas, gear for the same stock under different groups. E.g. *Lophius piscatorius* and *Lophius budgeassa* (species codes MON + ANK respectively) under WGBIE, but in other groups *Lophius* spp., ANF (combined MON + ANK), but length data is based on species level rather than genus level).
- MIXFISH requests data for rays and sharks through grouping of all species without specifying the relevant area and stock.

Data provision and storage:

- Include survey as well as recreational fisheries data (See RCG NA response to ICES Recommendations in section 5.2.3) in the formal data call, and allow people to either upload it or make it available via DATRAS.
- Intercatch: WG members can only 'see' the most recent data after the stock coordinator has pressed a button to 'extract' the data. The stock coordinator should not have a monopoly on the Intercatch data – all WG members should have access to the most recent data.
- Intercatch: Ability to download the files that were uploaded to Intercatch (or to download everything in the upload Intercatch format) requested.
- Intercatch: Length only data goes into a separate version of InterCatch which you can't then pull into the Age based version of Intercatch. Likewise, you can't transfer the raising scheme from Age based version to the Length version so there is a large overhead in doing the same thing twice to extract a small, but important dataset.

5.2.3.3.2 Response to the ICES WGEF Datacall:

- Intercatch: landings data as well as biological data have to be provided at the same level of aggregation. The current call refers to length at metier level 6, while landings is requested at level 2. Level 6 for biological data is mandatory under the DCF and can be provided at that level.
- On the timing of the data call: Preferably, the WGEF (as well as the WGCEPH) data call is combined with the overall data call, while having its own specific deadline.

5.2.3.3.3 Response to the ICES WGBYC bycatch data call:

- RCG NA noted the comments brought forward by the RCG NS&EA. No additional input was received through RCG NA. Ideally, this data call is combined with the overall ICES data call while having its own deadline. This will allow MS to plan work in a more efficient way, both on a national as well as on regional level in the future.

5.2.3.3.4 Response to the ICES VMS data call:

RCG NA noted the comments brought forward by the RCG NS&EA. No additional input was received through RCG NA.

5.2.3.3.5 Response to the JRC FDI data call:

RCG NA noted the comments brought forward by the RCG NS&EA. No additional input was received through RCG NA. Hopefully, RCG Baltic is in the position to comment on the latest FDI findings as this meeting was held at the same time as RCG NA.

5.2.3.3.6 Response to the RCG RBD data call:

RCG NA noted the comments brought forward by the RCG NS&EA regarding the timing of the data call. The data should be available in due time (one month before the RCG) to allow the relevant subgroups to prepare the data and subsequent proposals. Hence, the data call shall be sent out 3 months prior to the date of the first RCG covered under this data call. Given the tight schedule for MS to deliver data, mainly biological data, consideration could be given to collect meta data (e.g. number of ages collected but not necessarily providing the actual ages at this stage already) thus allowing to populate the database for RCG purposes.

6 ToRs: Data and data quality

This section covers the ToR 5 Data quality (assurance and control) but also encompasses the intersessional work on the impact of the landing obligation (ToR 9 Impact of management measures on data collection) and inevitably includes some cross over with Tor 3 in relation to Enduser interactions.

6.1 Progress since RCG NA 2017

6.1.1 Feedback from intersessional subgroups

6.1.1.1 *Intersessional subgroup on Data analysis*

The Panregional subgroup on data analysis presented the difficulties encountered during the year to cope with the intersessional work. The subgroup members recognized that the subgroup didn't work as such, and the ToRs defined by the LM were not fulfilled. They gave the following reason to explain that:

- The group was founded as an informal subgroup and just a weak commitment was asked from the participants to be in. They volunteered to be part of the subgroup, but the task and the needed time dedication was not defined a priori.
- There was a lack of clear leadership and lack of group communication (for example, the ToRs were never publicised, and a workplan was never designed).
- Most of the participants were involved in fishPi2. This means, on the one hand, that they had an extra workload during the past year. On the other hand, in the scope of the project a lot of work was done to design R tools for analyzing data from the regional data bases. This work is very related to the work of the data analysis subgroup, but it was not designed to answer the ToRs.

The RCG NA recognized that intersessional work has always been a weak point for the RCMs, being easy to plan tasks to be done intersessionally, but very difficult to actually complete them. It was discussed that the management of the subgroup should be similar to any other project (with a defined workplan, task allocation, regular communication among participants, etc), and that a stronger commitment is needed by the participants on the subgroups. To achieve that commitment, it is important that the subgroup is able to define realistic tasks and the time dedication needed. It is also

very relevant to find ways to reflect the relevance of these subgroups, so that participants can explain it at their institutes. It was proposed to include the participation in these subgroups in the national and/or regional WP.

6.1.1.2 *SCRDB*

The RDB is fundamental to the role of the Regional Coordination Groups as a key reference for catch and effort data from the commercial fisheries and the associated raw biological data collected under the DCF. In its current format it has a limited function and requires further development to allow the evaluation and analysis that the RCGs required. Its development is coordinated and governed by, effectively, a panregional subgroup for the Baltic, North Sea and Eastern Arctic and North Atlantic regions. The need for further development and ability to use the data is crucial. This is summarised within this section but more detail on its current status, how the database will be used and its development is provided in Annex 5.

The SCRDB meeting was held Dec 11th – 13th 2017 ICES Secretariat HQ, Copenhagen. In theory, it had a dual group structure (the RCG SCRDB, and ICES SCRDB groups meeting sequentially in the same place with the same chair). In practice, it acted as a single group.

Representatives from the RCG Baltic, the North Sea & Eastern Arctic, the North Atlantic, the Large Pelagic and the Long Distance Fisheries as well all non-EU ICES member countries plus representatives from the EU Commission were invited. Representatives from RCG NS&EA, Baltic and NA attended and Norway and Iceland also participated in the meeting. There was only 1 delegate from RCG NA. The representative from the Commission was not able to come to Copenhagen due to snow in Brussels but participated by phone and email.

The main outcomes were:

- Regional Database (RDB) name changed to Regional Database & Estimation System (RDBES)
- Use of RDB in RCGs presented
- Data Policy updated
 - Circulated for information and to ask NC to approve
- RDBES Development discussed
 - Progress was reviewed and a roadmap agreed
 - Data model circulated and countries asked to try populating it with real data. Results to be discussed during meeting.
 - Next workshops WKRDB-USR Oct 18, WKRDB-POP Feb 19, WKRDB-EST Nov 19
- Proposal for new SCRDB group structure
- New chairs were agreed
 - David Currie and Katja Ringdahl

6.1.1.2.1 *RDB Workshops*

A number of workshops have been held since September 2017 and are further planned to specify the RDBES Data Model:

- 9 Internet meetings
- 2-day Workshop in October
- 1.5 day Workshop in December

- 4 day Workshops WKRDB-MODEL in January
- 4 day Workshops WKRDB-SPEC in April
- A coming 4 days Workshops WKRDB-URS in October
- WKRDB-POP (Feb 2019) and WKRDB-ESTIM (Oct 2019)

The specifications of the data model and hierarchies is finalised and is out for final approval of the countries and RCG BS, NS & EA and NA. ICES have started the development of the RDBES, but are missing the User Requirement Specification of the RDBES so the focus is now on writing the User Requirement Specification document of the RDBES.

6.1.1.2.2 Further steps towards DB development

A roadmap for the development of the RDBES was discussed at the SCRDB meeting in December 2017 and this is summarised in the table below. **Please note that this timeline is subject to change based on the actual development progress of the new RDBES.**

Year	Current Regional Database (RDB)	Regional Database & Estimation System (RDBES)
2017	Data call	In development
2018	Data call	In development
2019	Data call	In development and test data call
2020	No data call. Database frozen.	Data call.
2021	No data call. Database frozen.	Data call. Data used for estimation and assessment of selected stocks.
2022	No data call. Database frozen.	Data call. Data used for estimation and assessment.

A decision has not been taken about how long the existing RDB will be available after the new RDBES has come on-line – in the table above it is assumed it will be frozen (no changes allowed) but still available from 2020 to at least 2022.

In this roadmap the RDB will include data from 2018 and earlier, whilst the RDBES will store data from 2019 and onwards. Once the RDBES is established then it could be desirable to issue an historic data call for the RDBES so that it would also store data from 2018 and earlier – this hasn't been discussed yet.

Ownership and access to the data in either the RDB or RDBES will be governed by the same rules in the updated Data Policy. These are repeated below.

Data Ownership: all national data submitted to either database is owned by the individual countries.

Data Access:

- 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 MS . The EU MS will be obliged to respond within two months from the date of the request.
- iv) An entity requiring detailed or aggregated data from the RDBES, can request access in writing to each Country. 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.

A point to highlight is that the RDBES will store EU MS and non-EU countries data and as described in the Data Policy there are some different rules for these different types of countries (e.g. the Commission can have full access to the EU MS data, but won't have full access to the non-EU country data).

When the RDBES is used to produce estimates for stock assessment then the ICES Assessment Working Group (WG) will need access to the detailed data. Under the proposed Data Policy these groups should be added to the list of groups that require access to the aggregated data (point (i) in "Data Access"), but will also need to write to each EU MS and country to request access to the detailed data (point (iii) in "Data Access"). In this case all members of the WG will have access to the detailed data, but only for a specified purpose i.e. estimation and assessment of specific stocks.

6.1.1.2.3 Funding

The RDBES is a key tool for RCGs to coordinate regional sampling. The European Commission currently pays for the maintenance and hosting of the RDB under an administrative agreement, but not for any development. ICES have provided 2 years funding to begin developing the RDBES, which is the successor to the existing RDB. However the development of the RDBES will not be completed during this time period so further funding for the development must be found.

The RCGs don't receive any funding themselves – the RDBES could be included as part of a regional workplan but that wouldn't imply any funding.

There are 3 main sources of potential funding:

1. European Commission (but there is no money set aside for this),
2. Member States,
3. ICES.

The first step should be to show support from the RCGs i.e. that the development of the RDBES is required and will support regional work and stock assessment. Secondly the ICES Data Centre need to provide more detailed cost estimates - then further progress should be made by talking to the potential funders.

The intensive development of the RDB has been to capture the design of sampling programmes but gearing up to providing the estimates needed by ICES expert groups for assessments – capturing the current raising procedures but to also allow the calculation of statistically derived estimates. At a

practical level the RCGs are interested in the evaluation and optimisation of sampling schemes and the quality of those schemes and the underlying data. To that end the RCG recommends the continued development of the RDBES as a tool for storing and analysing the data. This is dependent on the funding so the RCG recommends a review of the funding and potential sources for the continued development of the RDBES.

Recommendation 3: The RCG NA recommends the development and use of the RDBES to store and analyse sampling data. See section 8.4 for details

Recommendation 5: The RDBES is a key tool for RCGs to coordinate regional sampling and funding should be secured to ensure its further development. See section 8.4 for details

6.1.1.2.4 Review of feedback from MS to SC RDB-ES

There has been a lot of progress on the Regional DataBase and Estimation System, RDBES. It is very complex to specify the data model for the RDBES, because it includes statistical sampling information and it should cover all countries sampling of all species. The data model should have originally been specified in March 2017, but the very dynamic data model has been developed continuously during 2017 and 2018 by the Core Group (a subgroup under the Steering Committee of the RDBES) lead by ICES Secretariat, through a set of web meetings and physical meetings. The data model is close to being finalised for implementation in the RDBES. The data model was initially sent out to WGCATCH and countries for feedback in February 2018. After some changes it was sent to countries through the National Correspondents and ICES Advisory Committee in March. To ensure all countries are included in the specifications of the needs and ensure their data can fit the model, the latest model was sent out in June to the RCGs and MS for feedback. To ensure feedback MSs were asked to answer the the following four questions:

1. Do the countries think their sampling programs/data will fit into a hierarchy in the data model? If not what needs to be added?
2. Does each country think it can populate the data model with data?
3. Do the RCG member states think any ongoing issues from the existing RDB upload logs will be resolved by this model?
4. The countries are strongly encouraged to try to populate the data model with national sample data. Please describe the outcome of populating the model.

The text table below provides a summary of the responses. Only the short answers are listed in the table below to provide an overview.

Questions	1. Short answer. Do the countries think their sampling programs/data will fit into a hierarchy in the data model? If not what needs to be added?	2. Short answer. Does each country think it can populate the data model with data?	3. Short answer. Do the RCG member states think any ongoing issues from the existing RDB upload logs will be resolved by this model?	4. Short answer. The countries are strongly encouraged to try to populate the data model with national sample data. Please describe the outcome of populating the model.
Belgium	Yes.	[Yes since it is possible to use the Fishing Operation with Aggregation Level set to Trip]	We had no RDB upload log issues.	We were able to populate the model with example data (1 trip).
Denmark	Yes.	Yes	We don't have any issues relating to the data model in the upload log	Able to populate fully with at-sea data - just need the last table with individual fish
Estonia	Yes	Yes	We had no RDB upload log issues at present	We populated the model with sample and biological data
France	France should have replied in early Oct. No reply have been received 25 th Oct.			
Germany	Yes.	Yes, because we can define sampling scheme, upper and hierarchy, as well as "helping" auxiliary tables.	Partially yes, since auxiliary tables can serve as "user-defined" parameters and don't need to be "system-defined".	At sea data have been test with no problems.
Ireland	Yes.	Yes.	Yes.	We successfully tested the model by writing scripts to extract our 4S demersal at-sea data into Hierarchy 3.
Lithuania	Yes	Yes	We had no RDB upload log issues.	15th Sep. We will have populate the data model with selected national sample data.
Netherlands	Yes.	mostly yes.	We had no RDB upload log issues.	We were not able to try to populate the data model with national sample data before the deadline for this feedback.
Poland	Yes after own modification.	At-sea - Yes, but with some assumptions. On-shore - No, unless hierarchy 1 is applicable.	We had no RDB upload log issues.	We were able to populate the model with example data (1 trip at-sea sampling).
Portugal	Yes, but there is a sampling design "species focus" for onshore (already being used for horse	Yes, but probably excluding data from the sampling design in answer 1.	This question was not evaluated by the MS yet.	This was not possible to do before the RCG

Questions	1. Short answer. Do the countries think their sampling programs/data will fit into a hierarchy in the data model? If not what needs to be added?	2. Short answer. Does each country think it can populate the data model with data?	3. Short answer. Do the RCG member states think any ongoing issues from the existing RDB upload logs will be resolved by this model?	4. Short answer. The countries are strongly encouraged to try to populate the data model with national sample data. Please describe the outcome of populating the model.
	mackerel and with possibility of extending to more species) that does not fit in any of the hierarchies			
Spain	We think we are able to find a hierarchy for each of our ICES fisheries	We have been able to populate most of the tables and variables		We have been able to populate most of the tables and variables
United Kingdom	Possibly not.	Probably - but see detailed answer.	We have no ongoing upload issues.	Not attempted - see detailed answer to Q2.

Looking at the answers and the feedback in general all the countries are of the opinion, that the latest version of RDBES data model will be able encompass their needs for sample data except United Kingdom Scotland. France have unfortunately not given any feedback so far. United Kingdom Scotland are missing some hierarchies, those hierarchies will be requested and included. It is one of the strong advantages to have a generic RDBES, in which new hierarchies can be added during the development phase fairly easily.

The User Requirement Specification, URS, of the RDBES is not written yet. It was the plan that URS should have been written during the WKRDB-URS the 2-5 Oct. 2018. The Core Group meet at the WKRDB-URS, but the detailed feedback from the countries and the very small Core group of five persons, where only one participated for all 4 days, makes it very difficult to write the User Requirement Specification document. Besides the country feedback, the code lists and the frame for the user roles was written, meaning the RDBES development team at ICES Secretariat can continue their development from the few specifications. But this means the Core Group still have to write the User Requirement Specifications.

6.1.1.3 *Landing obligation: Implications of management measures on data collection and quality*

In 2016 the RCMNA proposed an intersessional task group to continue monitoring the impact of the Landing Obligation (LO) on data collection and catch estimates. This work was extended in 2017 at a pan regional level RCG for the Northern regions for reporting at the 2018 RCGs.

A questionnaire from the RCG NA was amended and circulated in order to capture the practical issues and perceived concerns relating to current and pending discard plans to cover all the species/fisheries/fleets under the obligation in the North Atlantic, Baltic and North Sea. The returned questionnaires were analysed and a full report presented in Annex 10 along with a copy of the template.

General summary on the findings:

Overall, the findings were quite consistent across the three regions, BMS landings were rare and generally no access issues for onshore sampling and a few issues for offshore sampling were reported. Most MS are logging responses for offshore sampling. Only a few MS are logging responses for onshore sampling as there is no perceived issue in this area. The majority of the MS have no perceived effect on the quality of the data. However, there are limited BMS landings recorded and the complexity of the LO is probably leading to errors in the logbooks. It is also possible that MS have not yet modified the scripts which extract data from their national database to the RDB to allow correct encoding of BMS landings - this might mean that BMS landings are being under-reported in the RDB.

Regarding fishing behaviour, very little change has been noticed however not a lot of countries have carried out any analysis. This is also the case for any analysis on the observer effect, nothing has been observed. Many countries have put additional measures in to place to implement the LO, namely amending logbooks, upgrading harbour facilities, changing quota allocation systems, analysing last haul data and having series of industry meetings.

A series of pilot studies concerning the implication of the LO have been carried out by a number of MS; analysing last haul data, selectivity and survivability studies, CCTV studies and as part of the Discardless project. There have also been quite a few studies on potential choke species, namely: plaice in the Baltic Sea, mitigation studies in the Celtic Sea, demersal trips in the North Sea, Cod in the Baltic Sea, selectivity and data enhancement on haddock in area VII, mixed fisheries WG, gadoids in the Celtic Sea, mackerel and hake in Iberian waters, pelagics in the Bay of Biscay. Furthermore, five countries are monitoring *de minimis*.

In general there has been no effect of the LO on recreational fisheries.

Further work plans:

It is considered that it would be beneficial for this work to continue in to the next few years as the Landing Obligation continues to be phased in with full implementation in January 2019. This intersessional group worked well because of the defined work plan and the prompt response of the MS with the questionnaires. The level of time dedicated to this intersessional task was not too onerous on the chairs and subgroup to complete the workplan.

It is proposed to commence the distribution of the questionnaires earlier in the year in order to avoid the holiday period but the RDB analysis will stay with the same timeline.

RCG NA 2018 suggests the Pan-Regional Subgroup on the Landing obligation continues its activities during 2018/2019, co-chaired by Harriet Van Overzee (NLD) and Helen McCormick (IRL), with the following ToRs:

- Evaluate the implication of the landing obligation on national and regional catch sampling programmes
 - Consider providing simple metrics for demonstrating any impact.
- Review and analyse 2018 BMS CS and CL data on the RDB and source and review other available metrics (e.g. refusal rates)
 - Investigate how complete the BMS data is in the RDB. Have codification issues caused errors, can data be uploaded again with correct fractions if present?
 - Compare data with the FDI data regarding BMS landings
- Review ToRs & outcomes of WGCATCH 2018

- Explore other data sources to evaluate the implication of the landings obligation such as last haul data from control agencies and studies on observer effect.
 - Review and maintain a catalogue of any ongoing analysis and exemptions.
- Provide recommendations on how to improve data collection and data quality of the BMS fraction and increase the availability of BMS data in the RDB. Present these recommendations to the next RCG plenary.
- Explore to what extent MS are applying exemptions (i.e. high survivability and de minimis)

6.1.2 Feedback from data related workshops and working groups

6.1.2.1 ICES PGDATA

The ICES Planning Group on Data Needs for Assessments and Advice (PGDATA) met in Nantes, France, 13-16 Feb 2018. PGDATA started a second 3-year programme with renewed terms of reference. After having achieved some practical and concrete objectives in its first 3-year programme, PGDATA entered a round of discussion with ICES on its future, and considered some of the weaknesses that appeared in the first years. The new objectives assigned to PGDATA are to focus on the **development of the Quality Assurance Framework (QAF)** for both fishery-dependent and fishery-independent data, create links between the different expert groups, promote for implementation the statistical improvements and good practices and make them easily accessible to the public.

An ICES-structured approach for a QAF is proposed, taking into account all ICES initiatives in the field of collection, processing and storage of fisheries dependent and independent data, and the work conducted in other fora such as STECF (e.g. EWG 17-04). This framework, also compliant with the principles developed in the European Statistical System, will need to be presented to ICES, discussed and commented in order to come up with a more complete proposal in 2019. The accessibility to recommendations and good practices has been addressed through a restructuring of the ICES Quality Assurance Repository. The proposal makes use of the ICES website development and search facilities, and will need the implication of several ICES working groups to come up with an agreed proposal in 2019. In the longer term, PGDATA would like to establish living documents classified by topics – this would include all recommendations and good practices produced by the wealth of ICES technical workshops and working groups.

The **communication and feedback on data issues with assessment working groups** was given a special focus, acknowledging the previous difficulties, and trying to learn from this experience. An extensive scan of the exploratory figures produced by the assessment working groups in their reports was undertaken and the figures classified by topics. The objective was to demonstrate the large creativity undergoing in this field, to propose a catalogue of what is done for every end-user, and set the stage for a forum like WGCATCH and WGISDAA to take over some ideas and develop generic figures capturing the main information needed for the end users. It is the belief of PGDATA that the exploratory figures used on the entry data for assessment models are the link between data collection and processing, the QAF and assessment & advice.

PGDATA also proposes an **ICES ASC 2019 Theme Session on data collection**, using the same name used during the 2016 ASC to ensure a continuity of work: “When is enough, enough? Methods for optimising, evaluating, and prioritising of marine data collection”. The idea is to prepare a special issue on the findings in a scientific journal.

PGDATA, however, only had a limited number of experts this year and seeks **wider participation** to cover all the tasks mentioned above.

6.1.2.2 *RCG WKMET – improving the derivation of Metiers and documentation*

The Métier workshop was initiated by the RCGs who identified a need for a workshop dedicated to issues related to assigning DCF métiers to transversal data. Nations are currently using a variety of methods, using different auxiliary data and expert knowledge.

Common issues encountered when assigning métiers to transversal data were identified and described, and best practices recommended. It was agreed that a trip can have several métiers, and that métiers should be assigned to fishing operation or fishing sequence. The target species assemblage group is defined as the fishing intention. However, many nations do not have that information directly available and need to estimate it from the landing composition, preferably based on the value of the landings. In the case of the small-scale fleet without logbooks alternative methods need to be adopted for assigning métiers to trips from this fleet. This could be based on a variety of data sources like questionnaires, adapted declarative forms, sales notes, fishing calendars, licences etc. The group worked on reference tables for grouping species into target assemblage groups and worked with the RCG list of approved métiers. A template for métier descriptions was suggested.

The workshop agreed that it would be useful to have a publicly available repository for common reference lists, scripts, documentation and métier descriptions, and it was suggested that a GitHub under the ICES RCGs would be preferable due to the flexibility that it offers. There is a need for harmonisation and standardisation of the procedures and rules used to define the métiers (common approaches and reference tables following DCF standards) in order to improve the interoperability and compatibility across nations.

The Metiers workshop recommended that the list of approved métiers is maintained and publicly available at the ICES website, and that additionally a GitHub sharepoint be set up for other reference lists, documentation and Metier descriptions. However the procedures for creating, updating, and maintaining these lists on an ongoing basis need to be agreed

The ICES Data Centre should be approached and the RCGs can then work with them to define the solution. A key requirement is not the definition of a code list that never changes, but a list that can be maintained in a controlled way without becoming a burden.

The RCG supports this initiative and recommends that a storage solution is found for maintaining variables, reference lists and documentation.

Recommendation 6: A solution to the storage and maintenance of variables related to metiers is required. This needs to be a reference source that (1) end-users, the public and data managers and practitioners can access and refer to, and (2) RCGs can administer and keep updated and maintained. See section 8.4 for details

6.2 RCG NA 2018 Outcomes

6.2.1 RDB Data

6.2.1.1 Upload logs

13 member states (MS) out of the 15 who submitted data to the RDB, submitted upload logs to the RCG chairs and ICES secretariat covering the NS&EA and NA regions. Only France and Sweden did not provide upload logs. Some upload logs were incomplete as some MS did not cover both data types (CE/CL - catch data and CS – Sample data).

Of the 13 member states, 8 were unable to upload all their data. Only 3 had issues with the landings and or effort data and the issues were simply missing metiers and areas in the reference lists. These issues could be resolved for the next data call in consultation with the RCG Chairs and the RDB administrators. 5 MS were unable to upload all their sample data for more diverse reasons. These ranged from data not being ready yet (e.g. QC procedures pending) to size parameters (e.g. individual weight data and skate wing weights) and size groups not being appropriate within the limits of this version of the RDB.

For those data fully uploaded MS were also able to provide further useful information and this included references to derived weights and lengths where actual weights and total length data were not available at the time of sampling.

The submissions are extensive but could be better. Sadly, when we know gaps are there we need a reference to how complete all the data is. Member States need to be more vigilant and submit these as part of the data call and Chairs may need to be more vigilant in chasing MS for missing Upload logs when they receive the Accession receipts from ICES.

The results of these simple tables need to be considered before making assumptions about the data available on the RDB and considering how these data are used. Unless these tables are completed and available and issues accounted for, any conclusions that come from the data on the current RDB are undermined.

Table 1 Upload log submissions by data type. 1= presence. 0 = absence

	Data type	
	CL, CE	CS
Belgium	1	1
Germany	0	1
Denmark	1	0
Estonia	1	1
England	1	1
Spain	1	1
Ireland	1	1
Latvia	1	1
Lithuania	1	1
The Netherlands	1	1
Poland	1	0
Portugal	0	1

Scotland	1	1
Northern Ireland	1	0

6.2.1.2 *Feedback to MS on data anomalies*

- At the time of the RCG all countries had uploaded landings and effort except Portugal. Portugal uploaded their data soon after.
- All countries have uploaded length sample data, except France. Some countries with minimum catches had no sample data to upload these include Estonia, Latvia, Lithuania. Northern Ireland has uploaded their data as UK and Wales data is included with English data.
- All countries appear to have uploaded age sample data except Estonia which had none to upload. Northern Ireland appears to have uploaded only half of the number of species compared with last year and as the UK and Wales data were included with the English data.
- From the number of species uploaded for all years it looks like all data have been uploaded for all the uploading countries.

6.2.1.3 *Overview of sampling and quality on the stocks to be benchmarked in 2019*

The data analysis subgroup of the RCG NA planned to follow up the work done in 2017 to explore the RDB information which can facilitate the evaluation of data at data compilation workshops and/or benchmarks.

However, the code developed in 2017 could not be located and not all past contributors could be contacted so they were essentially unavailable for the meeting. The subgroup decided that there was no sense in developing new code, when it already exists and which, again, would need to be stored somewhere and potentially mislaid. Instead, it was preferred to highlight the problem. This work is of panregional interest. All RCGs can benefit from the work done at each RCG and there needs to be continuity over the years. Scripts must be available to allow collaborative development, and unique storage in personal computers should be avoided. To this aim, it is recommended that an open platform is set up to share, develop and store the R scripts developed in the scope of RCG.

Alternative ideas on how to provide the benchmarks with useful information about the sampling were discussed. The RDB contains an output of sampling metadata information with data on the number of fish measured, number of trips and unique vessels in length, age, weight and maturity sampling. This output was unknown by the majority of participants and was found very informative. It was decided to send it to the Inter-benchmark process (IBP) on herring to be held the 19 November 2018. An Intersessional subgroup on data quality with the specific task of facilitating the production of regional overviews of fisheries and sampling, will also ask the benchmark for feedback about whether this information is suitable for them and proposals of new information (tables/graphs) which could be included.

Additionally, a description of the fisheries was made, by running the same script used in the RCG NS&EA. This is an example of how RCGs can take advantage of collaborative work to make a cost effective use of the resources. This description can be found in Annex 8. It is important to note that the data have not been checked in detail due to lack of time during the meeting. Some graphs could also be improved but they do provide an overview of the fisheries in the North Atlantic and they are an example of what can be done with the data uploaded in the RDB.

6.2.1.4 *Update of WorkPlans and Annual reports. The use of the RDB to answer data calls, AR, etc – develop output (R scripts) Table 1a automatic? Commission recommendation should be completed automatically.*

It would be beneficial for MS if as many of the DCF Annual Report tables as possible can be automatically populated. The ability of the new RDBES to populate these tables will be investigated. For each table it should be discerned whether:

- a) it can be populated using the proposed RDBES data format
- b) it might be possible to populate the table with some modifications to the data format
- c) it will not be possible to populate the table.

It was not possible to make progress on this task during the meeting so a recommendation has been made to progress this task.

Recommendation 4: Evaluate the ability of the RDBES to populate the DCF National Report tables. See section 8.4.

6.2.2 **Documentation of quality procedures (examples from Table 5A)**

The EU-MAP (Commission Implementing Decision 2016/1251 on the Multiannual Plan for data collection¹) contains in Annex, Chapter II on data collection methods, paragraph 1 that "*Data collection methods and quality shall be appropriate for the intended purposes defined in Article 25 of Regulation (EU) No 1380/2013 and shall follow the best practices and relevant methodologies advised by the relevant scientific bodies.*"

The Template for the Work Plan for data collection (Commission Implementing Decision 2016/1701²) includes two tables on quality procedures: *Table 5A* for biological data and *Table 5B* for socio-economic data. *Table 5A* is intended to state whether documentation in the biological data collection process (design, sampling implementation, data capture, data storage and data processing) exists in the MS and to identify where this documentation can be found. MS report metadata only in their annual reports (i.e. whether they have or have not implemented at the date of reporting the quality procedures referenced in the Table by answering "yes"/"no").

Examples from Table 5A

2018 was the first year in which MS reported on their data collection (i.e. reporting year 2017) on the basis of a new work plan and annual report template following the entry into force of the DCF

¹ [COMMISSION IMPLEMENTING DECISION \(EU\) 2016/1251](#) of 12 July 2016 adopting a multiannual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors for the period 2017-2019, OJ L 207, 1.8.2016, p.113.

² [COMMISSION IMPLEMENTING DECISION \(EU\) 2016/1701](#) of 19 August 2016 laying down rules on the format for the submission of work plans for data collection in the fisheries and aquaculture sectors, OJ L 260, 27.9.2016, p. 153.

Regulation 2017/1004. In September 2018, the reports of 5 MS (DE, ES, IE, PT and the UK) members of the NA RCG had already been adopted by the Com and made available on the DCF website: <https://datacollection.jrc.ec.europa.eu/ars/2017>.

The compilation of the above mentioned 5 MS Table 5A from their 2017 annual report on data collection shows that the work of documenting quality procedures is in progress. Many of the steps mentioned in this Table are in place. The sampling design is documented in most sampling programmes. Non-responses, Quality checking, data accuracy and imputation methods are documented in a lower extent. Links to the relevant documentation are provided by some MS. These links make reference to the sampling documentation hosted in a MS website, and to ICES WK reports where the sampling plan was described. EU MS have until the end of the current EU-MAP (year 2019) to implement data quality procedures (for both biological and socio-economic data).

6.2.3 Publishing confidential data

Maintaining confidentiality of published personal or sensitive data is not a novel requirement and is common-place in many situations (e.g. economics and statistical agencies) – there is also a body of literature published on the subject. The RCG believes it would be best to adopt a simple, clear system that is easy to understand and implement.

The FDI group is currently considering similar issues and we should review their discussions and solution once it is published. In the meantime the following rules can be considered. Each unit of confidential data published must contain **at least 3 distinct individuals** - this is a reasonable balance between the public interest in publishing the data and the confidentiality rights of the data subjects. To this end:

- 1) Data providers should not suppress any data themselves
- 2) If the data request defines that data should be pre-aggregated (e.g. VMS data aggregated to c-square level) then the data providers should be requested to supply the number of unique “individuals” in each aggregated unit (e.g. the number of distinct vessels per c-square). If the data request asks for data on a detailed level (e.g. individual fishing trips) then this is not necessary.
- 3) The data will then be sent to the data requester (e.g. ICES) in a secure manner, and stored in a secure location with restricted access. The authorised end user (e.g. a working group) will then be given access to the data, and can use it for the agreed purpose. The data should be deleted once this purpose is completed.
- 4) Publication of this data (including maps/charts/tables derived from that data) must use one of the following techniques:

- a. Suppression

Suppress any data that does not include **at least 3 different individuals**. Suppression can either be done by suppressing the unit or publishing the unit but suppressing the sensitive values (e.g. effort, value). If suppressing sensitive values then care must be taken to ensure any published totals can't easily be used to infer the suppressed value (e.g. if the value of a single unit is suppressed but the total value is also published then the suppressed value could easily be calculated).

- b. Aggregation

Aggregate the data (spatially, temporally or both) such that each aggregation contains **at least 3 different individuals**. After aggregation if there are aggregated units that still contain less

than 3 individuals than another level of aggregation can be applied, or those aggregated units should be suppressed.

When aggregating it is not always possible to simply add up the number of distinct individuals in the underlying data to calculate the number of unique individuals in the aggregated unit – this is the case when the same individuals can be present in a number of the original units. An example would be temporally aggregating VMS data to an annual basis when it was originally supplied on a monthly level – the aggregator will not know whether the same vessel was active for all 12 months, or whether there were 12 different vessels active. In this example the data could also be aggregated by country (assuming that individuals can only have a single country per aggregated unit) such that each annual aggregation must contain data from at least 3 vessels from the same country, or data from at least 3 different countries, or both.

Multiple different aggregations of the same data should also not be published since it might inadvertently reveal the confidential data.

7 New co-chairs and next meeting.

RCG NA decided to run in 2014 to a co-chairs system to help with the expected increase in intersessional activities. There were no volunteers in 2017 so Jon Elson agreed to continue his role as co chair of the RCG NA with Leonie O’Dowd for 2018. Based on the decision to merge the North Atlantic with the North Sea and Eastern Arctic RCG in 2019 Leonie agreed to do a third year to help with the transition, co-chairing the combined group with the only ongoing Chair of the RCG NS&EA, Els Torelle. Lucia Zarauz has agreed in principal to stand in for Leonie when she meets the end of her 3 year term in September 2018.

In 2019 the combined group will be meeting in June in Ghent, Belgium.

Historic dates and venues:

Dates	Venue	Chair(s)
16-20 September 2013	Sukarrieta, Spain	Kelle Moreau, Belgium
22-26 September 2014	Horta, Azores, Portugal	Kelle Moreau, Belgium Jose Rodriguez, Spain
14-18 September 2015	Hamburg, Germany	Jose Rodriguez, Spain Estanis Mugerza, Spain
12-16 September 2016	Lisbon, Portugal	Estanis Mugerza, Spain, Jon Elson, UK
04-08 September 2017	Galway, Ireland	Jon Elson, UK Leonie O’Dowd, Ireland
10-14 September 2018	Vigo, Spain	Jon Elson, UK Leonie O’Dowd, Ireland

8 Agreements, Resolution and Recommendations

8.1 Introduction

The key outputs of the RCG NA 2018 work are grouped into agreements, resolutions and recommendations. Agreements summarise the decisions that were made by RCG NA with full consensus of the participating member states. Resolutions describe the specific work tasks that were agreed to be carried out in subgroups intersessionally either on a pan regional or regional level. Recommendations are to external parties such as end-users, Commission/STECF.

8.2 Agreements

Agreement	RCG NA merging with RCG NS EA and change of annual meeting structure
Reference	RCG NA-2018-A1
When	Vigo, September 2018
What	The RCG NA agrees to merge with the RCG NS EA in 2019 and hold two joint annual meetings. A technical meeting in June is followed by a formal NC meeting in September to review/discuss proposals and reach agreements.
Who Supporting Documentation	Belgium, Denmark, France, Germany, Ireland, Netherland, Portugal, Spain, UK, Section 3.2.7

Agreement	NA Rules of Procedures 2018
Reference	RCG NA-2018-A2
When	Vigo, September 2018
What	The RCG NA agrees to roll over the Rules of Procedures drafted in Galway, September 2017 and revised intersessionally in December 2017. The existing Rules of Procedures will be reviewed when the RCG NA merges with the RCG NS&EA in 2019.
Who Supporting Documentation	Belgium, Denmark, France, Germany, Ireland, Netherland, Portugal, Spain, UK, Section 3.1.2 and Annex 6 Rules of Procedure

Agreement	RDB Steering Group Structure
Reference	RCG NA-2018-A3
When	Vigo, September 2018
What	The RCG NA agrees to adopt the new RDB steering group structure with two representatives from the RCG NA - Dave Currie and Alastair Pout. RCG representation from the merged RCG will be reviewed in 2019.
Who Supporting Documentation	Belgium, Denmark, France, Germany, Ireland, Netherland, Portugal, Spain, UK, Section 3.2.9

Placeholder until 29 of September, 2018

Agreement	RDB Data Policy
Reference	RCG NA-2018-A4
When	Vigo, September 2018
What	The RCG NA agrees to adopt the new RDB ES data policy as circulated to all NCs on Friday 31 August 2018
Who	Belgium, Denmark, France, Germany, Ireland, Netherland, Portugal, Spain, UK,
Supporting Documentation	Section 3.2.8

8.3 Resolutions for intersessional work programme

Subgroup Heading	Regional Sampling Plans
Title	Update of Risk Assessment for bycatch in the North Atlantic
Specific Tasks 2018-2019	<ol style="list-style-type: none"> 1. Update bycatch risk assessment for the North Atlantic 2. Contrast with fisheries overviews from RDB, 3. Review NA Pilot studies for bycatch to identify existing additional monitoring 4. Identify gaps in monitoring coverage of high risk fisheries
Who	Spain, Ireland, Netherlands
When	Intersessionally for 2019 June Meeting
Anticipated output	Gap analysis and support for prioritisation of Bycatch sampling as part of NA regional sampling plan
Data requirements	Completion of inventory for bycatch pilot studies Up to date NA Fisheries sampling overviews from the RDB
Related Recommendations	NA
Supporting documentation	Section 4.2.3
Intersessional Subgroup	Regional Sampling Plans
Title	Towards a regional sampling plan for the freezer trawler fleet exploiting pelagic fisheries in the Northeast Atlantic
Specific Tasks 2018-2019	<ol style="list-style-type: none"> 1. Scope and issue a data call in support of intersessional analysis of freezer trawler fishing activity and historical catch sampling conducted for stock assessment by the relevant nations. 2. Conduct an analysis of the freezer trawler fleet behaviour and evaluate the potential suitability for a regional sampling plan 3. Carry out a workshop to consider project outputs and further develop methodologies for the evaluation of regionally coordinated sampling schemes for the freezer trawler fleet.
Who	France, Germany, Ireland, Netherlands, UK to supply data
When	Intersessional for 2019 June Meeting

Anticipated output	Draft regional sampling plan for the international freezer trawler fleet operating in European waters
Data requirements	To be reviewed, data call will be issued after the review of data requirements
Data call required (yes/no)	Yes
Related Recommendations	To be reviewed
Supporting documentation	Section 4.2.2 Regional Plans

Subgroup Heading	Data Quality
Title	RDB Data Analysis to support RCG work
Specific Tasks 2018-2019	<ol style="list-style-type: none"> 1. Finalize the script automatically to complete table 1A of the National Plans, so that it can be used in the next EU-MAP 2. Prepare the summary of sampling metadata information which is already provided by InterCatch, and send it to the Inter-benchmark process (IBP) on herring (<i>Clupea harengus</i>) in the Gulf of Bothnia (IBPCLuB 2018) to be held the 19 November 2018. Ask for feedback 3. Establish a system to share, develop and store the R scripts developed by this subgroup.
Who	Spain (Chair) , France, Ireland,
When	Intersessionally for 2019 June Meeting
Anticipated output	<ol style="list-style-type: none"> 1. Provide Table 1A for next EU-MAP 2. Get feedback from a benchmark workshop 3. Improve the organization and efficiency of subgroup work
Data Requirements	IC output on sampling metadata
Related Recommendations	NA
Supporting documentation	Section 6.2.1.3

Subgroup Heading	DCF Implementation
Title	Development of a Draft Regional work plan
Specific Tasks 2018-2019 identified in the RCG NA 2018	<ul style="list-style-type: none"> • To draft a regional work plan with limited elements covering the aspects of procedures, methods, quality assurance and quality control for collecting and processing of data and regionally coordinated sampling strategies. • Develop the format and content for proposed submission for the following work plan elements as identified during the RCG NA 2018 annual meeting and including the following: <ul style="list-style-type: none"> • Procedures: <p>Page of eligible meetings and participation by Member State; List of subgroups and their intersessional tasks in the same table below.</p>

- Methods:
Standardised sampling methods for the freezer trawler fleet on small pelagics
- Quality Assurance: + Control:
RDBES Quality assurance, SISP for surveys, documentation.
- Cost sharing of surveys:
Surveys already going into cost sharing agreement: Blue whiting for the North Atlantic Region.

Who	France (Chair), Ireland, MS involved in subcomponents
When	Intersessionally in 2018/2019 for draft RWP to be presented at RCG NA annual meeting 2019.
Anticipated output	Submission proposal for limited elements of regional work plan. Testing of process for regional workplan submission including coordination and agreement among MS, development of suitable templates and submission to the Commission.
Data Requirements	To be reviewed
Related Recommendations	NA
Supporting documentation	Section 3.2.4 and FishPi1 WP1 report

Subgroup Heading	DCF Implementation
Title	Revision of EU-MAP
Specific Tasks 2018-2019	<ol style="list-style-type: none"> 1. To review current EU-MAP legislation and propose required amendments for EU-MAP 2020 and beyond with particular focus on issues relating to regional coordination; 2. To review tables and propose amendments where required 3. To consider the overlap between PGECON and RCGs and identify crosscutting issues.

Who	1 per member state, covering different expertise and regions
When	Intersessionally 2018/2019 with one physical meeting
Anticipated output	Proposed amendments for EU-MAP 2020
Data Requirements	Not current
Related Recommendations	NA
Supporting documentation	Section 3.2.2

Subgroup Heading	Data Quality
Title	Implications of the Landing Obligation
Specific Tasks 2018-2019	<ol style="list-style-type: none"> 1. Evaluate the implication of the landing obligation on national and regional catch sampling programmes <ul style="list-style-type: none"> ○ Consider providing simple metrics for demonstrating any impact.

2. Review and analyse 2018 BMS CS and CL data on the RDB and source and review other available metrics (e.g. refusal rates)
 - Investigate how complete the BMS data is in the RDB. Have codification issues caused errors, can data be uploaded again with correct fractions if present?
 - Compare data with the FDI data regarding BMS landings
3. Review ToRs & outcomes of WGCATCH 2018
4. Explore other data sources to evaluate the implication of the landings obligation such as last haul data from control agencies and studies on observer effect.
 - Review and maintain a catalogue of any ongoing analysis and exemptions.
5. Provide recommendations on how to improve data collection and data quality of the BMS fraction and increase the availability of BMS data in the RDB. Present these recommendations to the next RCG plenary.
6. Explore to what extent MS are applying exemptions (i.e. high survivability and de minimis)

Who	Ireland, Netherlands,(co-chairs), Denmark, Finland, Sweden, Spain –Basque Country, Germany
When	Ongoing intersessionally
Anticipated output	Continued overview of implication of LO, inventory of studies, Impact Metrics
Data Requirements	RDB data Call
Related Recommendations	NA
Supporting documentation	Section 6.1.1.3

8.4 Recommendations

Review and amendment of proposed control regulation to ensure DCF data requirements are met	
RCG NA 2018 Recommendation 1	The RCG NA recommends that the draft Control regulation is reviewed and amended where required to allow retention of personal data for more than 5 years for scientific purposes, to fulfil data requirements under the DCF.
Justification	Articles 110, 111, 112, 113 of the draft regulation. There are strong concerns about the stipulation that Personal data can only be retained for 5 years –under the GDPR there are allowable derogations from the normal Data Subject rights when data is used for scientific purposes.

	<p>The proposed full anonymisation of VMS and log book data after 5 years will heavily restrict the utility of this data for the purpose of scientific analysis under the DCF.</p> <p>Time series of longer than five years are required for analysis and the provision of scientific advice to support the CFP.</p>
Follow-up actions needed	<p>MS to coordinate review and comments on articles 110, 111, 112, 113 and amend where appropriate, to ensure full data functionality to implement DCF.</p> <p>MS to make coordinated submission during legislative negotiations based on review.</p>
Responsible persons for follow-up actions	Commission, Member States
Time frame (Deadline)	2018/2019

Proposal for Fishgig 2 WP X Training	
RCG NA 2018 Recommendation 2	<p>The RCG NA recommends that fishPi2 WP8 focusses training on the implementation of statistically sound sampling at two levels:</p> <ol style="list-style-type: none"> 1. At the technical level to support laboratories to progressively modify their existing sampling programme towards 4S; 2. At the management level to introduce the concept, requirements and implications of 4S sampling to managers responsible of the implementation of the DCF.
Justification	<p>Existing training programmes on statistical sound sampling focus on the theoretical aspects. Laboratories require applied training to evaluate their sampling programmes in relation to statistical robustness and to identify the necessary steps to evolve existing sampling programmes towards 4S.</p> <p>Improved background knowledge on the concept, requirements and implications of 4S sampling allows Managers responsible for the implementation of the DCF to make more informed decisions on resource allocation.</p>
Follow-up actions needed	Training course to be developed under WP8 to cover recommended aspects.
Responsible persons for follow-up actions	fishPi2 WP 8
Time frame (Deadline)	2018/2019

Use and development of the Regional Database and Estimation System (RDBES).

RCG NA 2018 Recommendation 3	The RCG NA recommends the development and use of the RDBES to store and analyse sampling data.
Justification	<p>It has been recognised for many years that there was a need to have a new version of the Regional Database (RDB) – this new database is known as the Regional Database and Estimation System (RDBES) and is currently in development. The RDBES will accommodate upload of statistical sampling information and statistical estimations, as well as acting as a database. There are many benefit of the RDBES:</p> <p>It will support the Regional Coordination Groups with relevant sampling data for coordination</p> <p>Raise data quality by using common quality checks across all countries' data</p> <p>Ensure only approved standardised statistical methods are used for estimating data</p> <p>It is important that the RDBES have only approved estimation methods and it is transparent regarding the processing and estimation of data.</p>
Follow-up actions needed	1. SCRDB should steer the development and use of the RDBES and ensure MS are giving feedback about the development
Responsible persons for follow-up actions	SCRDB
Time frame (Deadline)	2018

Use of the RDBES to populate DCF National Report tables.	
RCG NA 2018 Recommendation 4	Evaluate the ability of the RDBES to populate the DCF National Report tables
Justification	<p>It would be beneficial for MS if as many of the DCF Annual Report tables can be automatically populated. The ability of the new RDBES to populate these tables will be investigated. For each table it should be discerned whether a) it can be populated using the proposed RDBES data format, b) it might be possible to populate the table with some modifications to the data format, or c) it will not be possible to populate the table.</p> <p>Where work to populate a table has already been started (e.g. populating Table 1A using Eurostat data) this should also be considered.</p>
Follow-up actions needed	<ol style="list-style-type: none"> 1. Analysis of each table will be performed and the ability of the RDBES to populate it will be documented 2. Any changes to the RDBES data format which will facilitate population will be considered

Responsible persons for follow-up actions	Henrik Kjems-Nielsen will perform the initial analysis. SCRDB to discuss at their next meeting in December
Time frame (Deadline)	December 2018

Funding of RDBES development	
RCG NA 2018 Recommendation 5	The RDBES is a key tool for RCGs to coordinate regional sampling and its further development should be continued.
Justification	The RDBES is a key tool for RCGs to coordinate regional sampling. The European Commission currently pays for the maintenance and hosting of the RDB under an administrative agreement, but not for any development. ICES have provided 2 years funding to begin developing the RDBES, which is the successor to the existing RDB. However the development of the RDBES will not be completed during this time period so further funding for the development must be found. There are 3 sources that this funding could come from: 1) Direct funding from the European commission, 2) Funding from MS, 3) Funding from ICES. These funding sources aren't mutually exclusive and should all be investigated.
Follow-up actions needed	<ol style="list-style-type: none"> 1. ICES to provide a cost estimate for the remaining RDBES development work 2. RCG to consider MS funding of RDB in conjunction with discussions about MS funding an RCG secretariat 3. RCG NA to endorse the proposed pilot study from the RCG NS
Responsible persons for follow-up actions	Henrik Kjems-Nielsen will produce the cost estimates. RCG recommendations will be submitted to the Liaison meeting
Time frame (Deadline)	2018

Storage and maintenance of metiers variables	
RCG NA 2018 Recommendation 6	A solution to the storage and maintenance of variables related to metiers is required. This needs to be a reference source that (1) end-users, the public and data managers and practitioners can access and refer to, and (2) RCGs can administer and keep updated and maintained.
Justification	The Metiers workshop recommended that the list of approved métiers is maintained and publicly available at the ICES website, and that additionally a GitHub sharepoint be set up for other reference lists, documentation and Metier descriptions. However the procedures for creating, updating, and maintaining these lists and documents on an ongoing basis needs to be agreed.

	The ICES Data Centre should be approached and the RCGs can then work with them to define the solution. A key requirement is not the definition of a code list that never changes, but a list that can be maintained in a controlled way without becoming a burden.
Follow-up actions needed	<ol style="list-style-type: none"> 1. RCG Chairs to meet with ICES Data Centre to define a solution 2. RCG Chairs to map the process, identify the resources and agree actions and deadlines.
Responsible persons for follow-up actions	RCG Chairs, ICES data centre.
Time frame (Deadline)	March 2018

To endorse the need for multispecies data collection for marine recreational fisheries pilot surveys.	
RCG NA 2018 Recommendation 7	The RCG NA recommends that: marine recreational fisheries surveys collect data on all species caught rather than the solely species defined in the DCF.
Justification	Member states are interpreting the species requirements the pilot studies of marine recreational fisheries surveys differently. There is limited additional resource required to collect data on all species caught and it is not possible to assess the impact without data, so the RCG NA recommends that multispecies pilot surveys are done.
Follow-up actions needed	1. Clarification of the requirement for pilot studies is needed and proposal for inclusion of multispecies surveys in the revision of the DCF.
Responsible persons for follow-up actions	RCG NA RCG NS WGRFS STECF
Time frame (Deadline)	2019

To agree means and processes for inclusion of marine recreational fisheries data into the RDBES.	
RCG NA 2018 Recommendation 8	The RCG NA recommends that: marine recreational fisheries data are included in the RDBES as soon as is practically possible. A proposal of a preferred option is needed that assesses the range of technical solutions, the associated resources, and impact on existing development. On this basis, an agreement of how to move forwards including timelines should be agreed by ICES.

Justification	<p>MRF data needs to be included in the RDBES as a matter of urgency to increase efficiency of uptake and use by end users. This is likely to become more of an issue over the coming years as MRF data are included in more stock assessments. The initial proposal of a simple approach of including raised estimates and a short assessment of quality of the data is not difficult to implement. This would be easily possible given the right priority in time for the 2019 data call, with a longer timescale for upload of historical data sets.</p> <p>The RCG NA supports the WGRFS recommendation. However, it is necessary to consider the potential technical solutions, associated resources, and impact on implementation of commercial fisheries data, before a solution can be agreed. The WGRFS, RCG NA and ICES Data Centre need to work closely together to develop this document. Funding can then be investigated and an implementation plan approved by ICES.</p>
Follow-up actions needed	<ol style="list-style-type: none"> 1. WGRFS to provide ICES Data Centre with the list of fields and values associated, along with user requirements by 21 September 2018. 2. ICES Data Centre to provide a document with potential options with associated costs and timescales for implementation by 1 October 2018. 3. ICES Data Centre and WGRFS to agree a solution and deliver a proposal to ICES by 14 October 2018. 4. ICES agreed way forwards for inclusion of marine recreational fisheries data in RDBES.
Responsible persons for follow-up actions	<p>RCG NA</p> <p>RDBES SG</p> <p>WGRFS</p>
Time frame (Deadline)	2018

To support the need for further inclusion of recreational caught fish in stock assessments.	
RCG NA 2018 Recommendation 9	The RCG NA recommends that: the importance of recreational fisheries removals is reviewed and included in stock assessments where recreational catches are found to be large.
Justification	Catches by recreational anglers can represent a significant proportion of the total removals. Marine recreational fisheries comprised of between 3 and 43% of removals of some key European fish stocks. Yet, recreational catches are only included in assessment for western Baltic cod, Northern and Biscay sea bass, and Baltic salmon. This may impact on managing fisheries towards sustainability targets like MSY.

	To ensure that marine recreational catches are included in appropriate assessments it is necessary to include in cod, sea bass and pollock stock assessment. In addition, it is important to embed recreational fisheries data in the benchmark process, so should be included in the data call and a justification for treatment of recreational fisheries included in the assessment report. Finally, as pilot studies are delivered, it would be prudent to have a STECF workshop to assess the impact of a broader ranges of stocks.
Follow-up actions needed	<ol style="list-style-type: none"> 1. Request ICES regional assessment groups include recreational catches for cod, sea bass, and pollock. 2. A process for embedding recreational fisheries in stock assessment should be developed by WGRFS to be include in ToRs for all benchmark assessments. 3. STECF to consider a workshop in September 2020 to review the impact of recreational fisheries based on the outcomes from pilot studies. A data call would be needed in advance of this workshop.
Responsible persons for follow-up actions	RCG NA, RCG NS&EA, WGCSE, WGNSSK, WGBIE, WGRFS, STECF
Time frame (Deadline)	2019

To review the role of regional cooperation for surveys of marine recreational fisheries in 2019.	
RCG NA 2018 Recommendation 10	The RCG NA recommends that: the potential for regional cooperation in marine recreational fisheries surveys is reviewed by WGRFS based on the outcomes of the regional cooperation projects fishPi2, STREAM, and SECFISH.
Justification	Regionalisation is central to deliver the CFP and is part of the EU MAP (2016/1251/EU). However, it is unclear how regionalisation should be implemented, so that European Commission have funded several projects to support delivery of regional cooperation that included a specific topic on recreational and small-scale fisheries. Four projects were funded three of which cover recreational fisheries biological and socio-economic data collection (fishPi2, SECFISH, & STREAM). These projects will report in May 2019, so it is important to review the outcomes from these projects and develop recommendations for regional cooperation in marine recreational fisheries survey. This should be done by survey experts at the WGRFS and passed to the RCGs for review.

Follow-up actions needed	<p>1. WGRFS to review outcomes of regional cooperation project and propose potential options for regional cooperation in future surveys in June 2019.</p> <p>2. RCG NA to review outcomes at the technical meeting in June 2019 and develop recommendations.</p>
Responsible persons for follow-up actions	<p>RCG NA</p> <p>RCG NS</p> <p>WGRFS</p>
Time frame (Deadline)	2019

9 Annexes

Annex 1 – Participants, ToRs and realised agenda

List of participants

Name	Country	email	Participation 2018
Els Torreele	Belgium	els.torreele@ilvo.vlaanderen.be	partial
Joel Vigneau	France	Joel.Vigneau@ifremer.fr	full
Camille Dross	France NC	camille.dross@agriculture.gouv.fr	skype for governance
Jens Ulleweit	Germany	jens.ulleweit@thuener.de	partial
Christoph Stransky	Germany NC	christoph.stransky@thuener.de	skype for governance
David Currie	Ireland	david.currie@marine.ie	full
Helen McCormick	Ireland	helen.mccormick@marine.ie	full
Leonie O’Dowd	Ireland NC	leonie.odowd@marine.ie	full
Andrew Campbell	Ireland	andrew.campbell@marine.ie	partial
Sieto Verver	Netherlands	sieto.verver@wur.nl	partial
Harriett Van Overzee	Netherlands	harriet.vanoverzee@wur.nl	partial
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Ruth Fernandez	ICES	ruth.fernandez@ices.dk	partial
Henrik Kjems-Nielsen	ICES	henrikkn@ices.dk	partial
Oana Surdu	Commission	Oana.Surdu@ec.europa.eu	full
Jørgen Dalskov	Denmark NC	jd@aqua.dtu.dk	skype for governance

Terms of Reference

1. Review progress since 2017 RCG's and 2017 Liaison meeting (14th report).

- Feed-back from Liaison meeting and broad summary of RCG related activities during 2017, including subgroups established.

2. Governance model for the regional coordination group.

- Discuss the role(s) of RCGs in the DCF environment (EU MAP 'regional approach based on end user needs') and their relations with other 'DCF groups' (for e.g. STECF, PGECON)(there was a similar point in the TORs last year under 'data quality' section)
- Feedback on Rules and Procedures for RCGs and proposed timing for adoption
- Present the outcomes of different EU projects (MARE/2016/22 grants Fish Hub) - Based on outcome from fishPi2 and STREAM regarding intersessional groups, how to proceed? Which ones to stay ? Pan regional vs regional? ToRs?
- Information on DCF legal framework and related legal acts: adoption of AR template; upcoming work on EU-MAP after 2020 preparation.
- Next steps and actions

3. End-user interactions and identification of end-user needs

- Feedback of end-user needs from ICES/GFCM, JRC, STECF, other end users to the RCGs. Mapping of end user needs and information on end user meeting on the margins of the next Liaison meeting (1/10).
- Produce an overview from the RDB on regional fisheries
- Review issue list for the 2019/2020 benchmark stocks (by region) and produce an overview of sampling and quality on the stocks to be benchmarked in 2019
ICES to provide benchmarked stocks; SUBGROUP 3 to provide quality indicators for these stocks?
- Review of 2018 (2019) data calls and feedback from the RCGs to ICES/JRC/GFCM
- Next steps and actions

4. Regional plan

- Feedback from EU projects (fishPi2 WP1, STREAM); Clarification regional plan vs regional sampling plan. What has already been established and can be used in setting up regional plans?
- Regional sampling plans for marine habitat and ecosystem monitoring, feedback from WKPETSAMP
- Feedback from intersessional work on establishing regional sampling plan
- Next steps and actions

5. Data quality (assurance and control)

- Feedback from the data sub group (ToRs listed in LM report)
- Relevant feedback from data workshops
- Further steps towards DB development,
- Upload logs
- Feedback to MS on data anomalies
- Documentation of quality procedures
 - what's already in place?
 - examples from Table 5A
- Update of Work Plans and Annual reports.

- Table 1a automatic? Commission recommendation should be completed automatically
- The use of the RDB to answer data calls, AR, etc. – develop output (R scripts)
- Metiers and other variables, feedback from metier work group WKMET
 - Clarification on how to store the variables (updated metier, stock names, harbour codes etc.).
- Next steps and actions

6. Surveys

- Feedback from the intersessional group on cost sharing
- Feedback from STECF meeting (EWG 18-04). Discuss proposal of EWG 18-04 to use stocks in Tables 1A and 1C of EU MAP as a starting point for the DST. Does the RCG want to include additional stocks?
- Review 2018 regional coordination (MEDITS, MEDIAS)
- Next steps and actions

7. Diadromous species

- Review progress since last year's report.
- Review data transmissions
- RDB development
- Next steps and actions

8. Recreational Fisheries

- Review progress since last year
- Review progress of Pilot Studies
- Role of RCG – how can regional coordination support pilot studies and sampling plans?
- Next steps and action

9. Impact of management measures on data collection

- Feedback from the intersessional group on Landing obligation
- Next steps and actions

10. Incidental by-catch of birds, mammals, reptiles and fish

- Review progress of pilot studies
- Feedback from GFCM
- Next steps and actions

11. Next venue and chairs

12. AOB

Realised Agenda

Regional Coordination Group North Atlantic (RCG NA)

Instituto Español de Oceanografía, Vigo (Spain)

10-14 September 2018.

Schedule:

Mon	1400-1800
Tue	0900-1800
Wed	0900-1800
Thu	0900-1800
Fri	0900-1300

Lunch	13:00 -14:00
Coffee	10:30-11:00, 15:30-1600

Monday 10th September

1400 Welcome and introductions

- Welcome and logistics
- Introductions
- TOR's and adoption of agenda
 - Intro to sessional subgroup work (1. Regional Plans (incl. RecFish; BYC; Salmon & Eels); 2. End Users; 3. Data Quality); task leaders/rapporteurs
- Format of the report
- Selection process for new RCG chair(s)
- Notification of AOB

1430 ToR1. Review progress since 2017 RCG's and 2017 Liaison meeting (14th report).

Brief review of progress since 2017 RCG

- fishPi2 Overview (ToRs All) *Mark James*
- Liaison meeting, recommendations
- Relevant feedback from ICES EWGs, Wks, STECF (ToR3)
 - Timed slots;

1600 Coffee break

- Feedback from ICES (ToR 3) *Ruth Fernandez*
- Feedback from RCG 2017 Intersessional subgroups (ISGs) and Wks by ToR
 - ToR3 End User Interaction
 - Feedback from RCG Chairs; plan of subgroup work.
 - ToR5 Data quality
 - RDB Data call (*Henrik*); SC-RDB (*David C.*); WKMET (*Matt E.*); Data analysis ISG (*Alastair*); FishPi2 (WP2-4); plan of subgroup work.

Tuesday 11th September

0900 – 1030 Feedback from RCG 2017 (ISGs) and WKs by ToR (contd.)

ToR6 Surveys

Feedback from STECF EG 18/04 Survey Evaluation *Venetia*

Feedback from Cost sharing ISG; Next steps and actions

ToR5 Data quality contd.

RDB Data call (*Henrik*); SC-RDB (*David C.*); WKMET (*Matt E.*); Data analysis ISG (*Alastair*); fishPi2 (WP2-4); plan of subgroup work.

1030 Coffee break

1100 – 1300 Feedback from RCG 2017 (ISGs) and WKs by ToR (contd.)

ToR7 Diadromous/Anadromous species

Feedback of progress; Next steps and action

ToR 8 Recreational Fisheries

Feedback from WGRFS; Next steps and action

ToR10 Incidental Bycatch

Feedback from WGBYC; WKPETSAMP Next steps and action

- ToR4 Regional plans
 - Feedback Regional Sampling ISG; fishPi2 WP1. Plan of subgroup work.
- ToR9 Impact of Management measures
 - Feedback from Landing Obligation ISG, Next steps and actions

1300 Lunch

1400 – 1600 Subgroup tasks

1600 Coffee

1630 – 1800 Subgroups tasks

Wednesday 12th September:

0900 – 1030 Feedback from Subgroups in plenary

1030 Coffee

1100 – 1300 Subgroup tasks

1300 Lunch

1400 – 1600 Subgroup tasks

1600 Coffee

1630 – 1800 Feedback from Subgroups in plenary

Thursday 13th September:

0900 – 0930 Plenary TOR 2. Governance model for the regional coordination group.

Future DCF Legal framework; AR template; EU-MAP 2021

Presentation by the Commission

Discussion to include setting up of subgroup on future DCF (relates to NS EA decision)

0930 -1300 Plenary TOR2 Governance model for the regional coordination group

Approvals/Decisions required

- **RCG Governance:** FishPi2 WP1 Agreement on Statements and proposal for subgroups
- **RCG Governance:** Subgroup Components of Regional Work Plans (+Brainstorm)
- **RCG Governance:** Working of the intersessional Subgroups (North Sea Proposal)
- **RCG Governance:** Setting up a RCG Secretariat (North Sea Proposal) Agree or not, would member states put in resources
- **RCG Other:** Proposal for grants/ RDBES
- **RCG Other:** Criteria for financing (Group Brain Storm)
- **RCG Governance:** Merging of the North Sea and North Atlantic RCG plenary and timing of meetings
- **RCG Governance:** Next Venue and Next chair?
- **RCG Governance:** Recommendations (Plenary)
- **RCG Other:** Fishgig Training- proposal on training

1300 Lunch

1400 – 1600 Subgroup work

- Governance Subgroup for NCs

Approvals/Decisions required

- **RCG Governance:** Rules of Procedures - updates required for 2018
- **Data Governance:** RDB steering Committee structure
- **Data Governance:** RDBES feedback
- **Data Governance:** Endorsement of RDB Data Policy

1600 Coffee

1630 – 1800 Plenary – Recommendations cont. & Feedback from Subgroups

Friday 14th September:

0900 – 1030 Finalise outcomes and draft text.

- Draft text
- Agree recommendations
- Next venue
- New chairs

1030 Coffee

1100 – 1300 Finalise outcomes and draft text contd.

- Draft text

- Agree recommendations
- Next venue
- New chairs

Goodbyes

Annex 2 – Review progress since 2017 RCGs and 2017 Liaison meeting (14th report).

This annex contains a list of the relevant recommendations that came from the 14th Liaison meeting 2017 and the RCG NA 2018s:

RCG NA 2017

Collate survey information from MS for evaluation of EU-MAP Table 10	
RCG NA 2017 Recommendation 2	The RCG NA recommends that the Commission and STECF collate relevant survey information from all MS to facilitate the evaluation of the surveys listed in Table 10, as well as to collect information for inclusion in the revised version of Table 10.
Justification	<p>During RCG NA in collaboration with ICES, it became apparent that more as well as detailed information was required to facilitate the evaluation of the mandatory surveys listed in Table 10. The purpose of this evaluation is twofold:</p> <ul style="list-style-type: none"> • First and foremost, to revise and update the list of mandatory surveys in Table 10. Inclusion of new surveys and exclusion of currently listed surveys is to be done on pre-defined criteria. • Second, updating Table 10 allows for the inclusion of information facilitating future work of the RCG, e.g. in the light of cost-sharing. <p>It is well known that Table 10 is out-dated, hence, updating Table 10 should be done on the most up-to-date information, only available to the MS involved. By collating the information through the MS, this up-to-date information on surveys can be gathered as well as additional information for future inclusion in Table 10.</p>
Follow-up actions needed	<ol style="list-style-type: none"> 1. Commission to consult with and take into account any response from ICES and other RCGs relating to this particular task 2. Commission to send out the designated spreadsheet to all MS giving sufficient time for MS to respond. 3. MS to respond to the request 4. Commission to collect and process all information prior to the EWG
Responsible persons for follow-up actions	Commission, NC
Time frame (Deadline)	<p>31st November for the templates to be circulated.</p> <p>Deadline for a response 1 month prior to STECF EWG on Evaluation of surveys.</p>
Feedback from RCG NA 2018	Stock and survey information compiled by RCG a pan-regional subgroup in consultation with MS and delivered to STECF EWG 18-04 (scoping meeting for survey review).

Internal recommendations covering intersessional work by subgroups (regional and pan-regional) includes recommendations to other RCGs.

Establish and maintain a pan regional RCG data end user subgroup	
RCG NA 2017 Recommendation 6	RCG NA recommends establishing a data end user subgroup. To work closely and intersessionally with ICES to improve communication; establishing common references for standard processes and information and identifying effective processes for meeting end-user needs.
Justification	Setting up this subgroup will facilitate the role of the RCG to support end users. The subgroup will act as a point of contact for data end users, a framework for feedback and allow the RCG to prioritise its activity relating to future data collection, storage and transmission functions.
Follow-up actions needed	<ol style="list-style-type: none"> 1. RCG chairs to establish end-users subgroup (Initial members RCG chairs). 2. RCG Chairs in consultation with end-users to draft ToRs and deliverables. 3. RCG subgroup to report regularly to members.
Responsible persons for follow-up actions	Chairs of RCGs, end-users (ICES, STECF, and other RFMOs).
Time frame (Deadline)	Ongoing.
Feedback from RCG NA 2018	End user meeting between ICES and RCG chairs was held in Copenhagen in March 2018. This subgroup will continue.

RCG Baltic 2017

RCG Baltic 2017. Request to ICES to update the master stock database with the data presently used in the stock assessments	
RCG Baltic 2017 Recommendation 1	The RCG Baltic recommends that the ICES secretary is updating the master stock database to include the information on the data presently used in the stock assessments (e.g. maturity, age, length, weight, landings, discard, surveys, etc.). An example is given in Annex XX.
Justification	One of the tasks in the RCG is to meet end-user needs and to get an overview of the data used in stock assessment. The RCG will need an updated overview list containing the data used. Presently the only way to get an overview is to go through all the assessment reports.
Follow-up actions needed	The recommendation is forwarded to the LM and ICES.
Responsible persons for follow-up actions	ICES
Time frame (Deadline)	Prior to the first RCG in 2018.

Feedback from RCG NA 2018	Discussed at end-user meeting and ICES agreed to provide the requested information.
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RCG Baltic 2017. Request to WGBIFS to provide data and to WGISDAA to assess efficiency of the surveys BIAS and BASS within a cost-benefit framework	
RCG Baltic 2017 Recommendation 3	The RCG Baltic recommends that the ICES approach WGBIFS to provide data to WGISDAA. WGISDAAA could then review the two surveys BIAS and BASS with respect to coverage and numbers of stations. What is the CV around the estimate used for assessment with the present coverage and how would the CV be affected by increased coverage (same number of days at days but improved coverage) or decreasing coverage (less days at sea)? What other methodological modifications could be considered to increase survey efficiency and reduce the CV around the estimate?
Justification	As the RCGs have a survey cost sharing task, the proper coverage of a given survey is getting more important. It would therefore be very beneficial to know how many stations are required for a proper stock assessment in a cost benefit framework. As the central Baltic herring is suggested for benchmark, the surveys used for this stock is suggested for a review.
Follow-up actions needed	The recommendation is forwarded to the LM and ICES to approach the chairs of WGBIFS and WGISDAA.
Responsible persons for follow-up actions	ICES; contacts should be done at the RCG chair for the Baltic.
Time frame (Deadline)	Prior to the RCG Baltic in 2018.
Feedback from RCG NA 2018	RCG NA would like to be informed on the outcomes of the exercise.

RCG NS&EA 2017

Common naming of survey	
RCG NS&EA 2017 Recommendation 1	The NS&EA RCG recommends the use of a single survey name and acronym for each survey for use in Regulation documents, work plans, assessments Working Group reports and advice sheets. These survey acronyms could/should take the form of '(Region_)Survey_(Quarter_)Member-state' e.g. NSEA_IBTS_Q1_NED. This will help end users to easily identify the surveys.
Justification	Presently it is very difficult to get an overview of the survey used in assessment and thereby give an input to update the mandatory survey list in the regulation (EU) 2016/1251 do the many different acronyms used for the same survey.

Follow-up actions needed	MS, ICES EWG, ICES secretary, STECF
Responsible persons for follow-up actions	ICES secretary, STECF
Time frame (Deadline)	January 2018
Feedback from RCG NA 2018	RCG NA elaborated on the naming convention in relation to the survey evaluation process. All interested parties agreed to the above mentioned convention. For the country codes, the ISO 3-letter Alpha code should be used. The region should not be a fixed part of the survey name. Further details in Section 5.2.1

Review of survey tables	
RCG NS&EA 2017 Recommendation 2	<p>The RCG NS&EA recommends that member states review the information detailed in the AWP check table xx of this report, in order to identify any errors or omissions with any found to be reported back to the RCG NS&EA by 1.11-2017.</p> <p>a. All MS all regions to review acronyms and descriptions in columns A to C (member state, acronym and region).</p> <p>b. MS to comment on proposed Survey IDs and amend where there are gaps and to choose and enter their preferred Survey ID in column AD. Altering columns A to C will affect the proposed IDs. MS need to be mindful that shared surveys will already be tied to some common acronym</p> <p>c. The RCG NS&EA recommends that ICES check the stock table in this rapport table xx for socks used in assessment</p> <p>d. MS to check stock table for MS participation in column G” Member state(s) responsible for survey(s)”</p>
Justification	The RCG NS&EA has tried to produce a table giving all information on surveys presently used in assessment and conducted by all MS in the region. This table needs to be confirmed by the MS and ICES as the data information is rather diverse.
Follow-up actions needed	MS / ICES
Responsible persons for follow-up actions	Marie Storr-Paulsen DTU Aqua
Time frame (Deadline)	1/11 2017

Feedback from RCG NA 2018	See comment: RCG NA 2017 Recommendation 2
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Update of advice sheet	
RCG NS&EA 2017 Recommendation 3	<p>The RCG NS&EA recommends that additional input data information is provided in table 5 (Basis of the assessment - Input data) on ICES advice sheets. Details of each survey used in the assessment should include the survey acronym (see Recommendation 1 above) and the current age-range and year-range included in the assessment.</p> <p>Ex. on a presently sufficient information from an advice sheet:</p> <p>Commercial catches (international landings, ages from catch sampling by métier), two survey indices (IBTS Q1 & Q3; ages 1 to 5); maturity data assumed fixed through time; time-varying natural mortalities from the SMS multispecies model (ICES, 2015).</p>
Justification	Data used by stock can easily be found in the updated advice sheet is this is consistently done for all stocks
Follow-up actions needed	ICES secretary
Responsible persons for follow-up actions	ICES secretary
Time frame (Deadline)	August 2018
Feedback from RCG NA 2018	Discussed at End user meeting, see minutes Annex 7, and taken up by ICES. Ongoing.

Annex 3 – Subgroup discussions on governance

The subgroup on regional plans addressed several ToRs, including a ToR transversal to all subgroups, namely ToR 2 – “**Governance model for the regional coordination group**” and more specifically the task “**Discuss the role(s) of RCGs in the DCF environment (EU MAP 'regional approach based on end user needs') and their relations with other 'DCF groups' (for e.g. STECF, PGECON)**”.

The subgroup discussed this topic and highlights a set of points below.

Firstly it is recalled that:

- 1) The **RCGs** (Regional Coordination Groups) differ from the previous format of these meetings (**RCMs** – Regional Coordination Meetings) in that the RCGs are expected to be more active in promoting coordination among MS, but that changes in mode of action are needed to reach this expectation;
- 2) The main objective of the RCGs is expressed in the regulation (EC No 2017/1004) and can be summarised in simple words as: providing more robust data to support better data for end users (and consequently a better assessment and management of fisheries resources).

In this context, the RCGs need to overcome a series of difficulties that are impairing (or may in the future impair) the progress towards this objective, such as:

- a) Anticipate future possible scenario where one (or more) well argued regional sampling plan is (are) presented but countries will not want to implement it nationally. This is easy to imagine in a scenario where the regional sampling plan proposes higher sampling for a country (than in the national work plan), but can also be imagined for a scenario where the regional sampling plan proposes lower sampling for that country (than in the national work plan), since the country may want to continue a time series of that species/area, national interest in the species/area, need to maintain expertise on associated tasks, etc.
- b) The currently accepted vision in the RCGs is that a regional work plan is composed of several “building blocks”, with regional sampling plans being one of them (not yet defined and under development, e.g. in project fishPi2) and several others (some already existing and others to be developed). Among these building blocks can be for instance sharing of samples, and sharing of tasks. Task sharing can apply to sampling aspects, e.g.: one country reading all otoliths of a given species/area based on samples from several countries (instead of each country reading its own otoliths); or a country not only sampling national landings but also landings by foreign flag vessels; etc. Moreover, task sharing can also apply to data handling aspects to better distribute effort among MS, and (as a region) reach the same objectives with less summed effort/cost, e.g.: one country assuming the task filling part of Table 1A (based on FIDES) for all countries instead of each country developing its own way of carrying out the same exercise for its own data alone, with the benefit of having a standardised method (but possible losing national expertise on errors, etc.). A more balanced distribution of sampling effort between MS (so, sharing of sampling effort) may also be needed, which is more likely to be addressed in the definition of the regional sampling plans (such as what is being done in FishPi2).
- c) There is a need to provide more space for the RCG to consider the more technical and much needed aspects, for instance the meeting recommendations/relevant aspects related to data/sampling highlighted by assessment groups (and other data users) and then to follow up on those issues highlighted. Perhaps, one means to achieve this is the splitting of the RCGs

Portugal	197	203	196	328	315	335	329	295	
Scotland		110	102	108	98	93	90	97	102
Spain						103	102	107	122
Wales		79	76	69	61	65	64	71	65

The overview of the number of data records in the commercial landings uploaded to the RDB is shown below.

Vessel flag country (CL)	2009	2010	2011	2012	2013	2014	2015	2016	2017
Belgium	17741	18754	20777	23233	21237	24063	22910	23489	27173
Channel Islands							834	891	1185
Denmark	46	88	74	83	127	187	95	177	156
England		33292	34668	34633	56945	53320	79248	82820	77804
Estonia	131	158	153	112	236		247	221	275
France		321167	314575	240682			333865	492106	286603
Germany		234	385	278	508	313	395	415	449
Ireland									26953
Lithuania	6	12	33	108		71	59	28	6
Netherlands	709	1141	1242	1145	836	466	1124	902	112
Northern Ireland		3324	2728	2789	5216		8446	9911	9808
Poland									7
Portugal	16155	18593	18711	120908	120171	138780	134976	62820	
Scotland		9819	9100	9391	15125	14055	25696	27971	27817
Spain						132407	130289	132896	126336
Wales		2987	2950	2575	3455	3736	4593	4501	4201

Effort data

The overview of the number of metiers in the commercial effort uploaded to the RDB is shown below.

Vessel flag country (CE metiers)	2009	2010	2011	2012	2013	2014	2015	2016	2017
Belgium	4	4	4	4	6	6	6	5	5
Channel Islands							8	7	10
Denmark	6	4	3	3	4	5	4	4	5
England		101	92	102	97	94	80	80	87
Estonia	2	2	2	2	2		1	1	2
France		51	52	53			171	134	164
Germany		6	6	5	5	4	7	6	8
Ireland	24	25	24	24	23	19	17	16	21
Lithuania	1	2	3	4		1	1	1	1
Netherlands	9	12	8	15	8	3	6	6	5
Northern Ireland		29	26	24	26		26	25	21

Poland									1
Portugal	19	20	18	18	19	17	17	16	
Scotland		67	58	63	55	53	46	46	46
Spain						37	35	35	34
Wales		32	36	37	31	28	29	29	32

All countries have uploaded effort data for 2016, except Portugal. The numbers of metiers compared with the previous year indicate that all data have been uploaded for all other countries.

Length samples

The overview of the number of species in the length samples uploaded to the RDB is shown below.

Sampling country (HL)	2009	2010	2011	2012	2013	2014	2015	2016	2017
Belgium	10	24	10	10	14	14	14	13	14
Denmark		1	2	1	2	1	3	2	4
England	111	114	106	136	111	100	117	115	116
Estonia	1	1	1	7	15			6	
France				1					
Germany	4	10	3	4	46	19	10	20	10
Ireland									108
Latvia			4						
Lithuania			10	6					
Netherlands	13	10	19	8	10	11	5	6	15
Northern Ireland								57	
Portugal	213	214	235	224	233	228	140	221	255
Scotland		22	26	25	126	102	118	111	93
Spain	21	29	21	26	23	221	218	191	213
United Kingdom	54	65	58	70	60	60	57		53
Wales								10	

All other countries have uploaded length data except France. Wales and Northern Ireland data are uploaded but inconsistently – either included with English data or uploaded as UK data.

Age samples

The overview of the number of species which have been age measured and uploaded to the RDB is shown below.

Sampling country (CA)	2009	2010	2011	2012	2013	2014	2015	2016	2017
Belgium	7	7	7	7	3	4	4	4	5
Denmark			2	1	1	1	1	1	1

England	13	14	16	20	17	16	14	16	17
Estonia								4	
France				13				18	13
Germany	2	3	3	2	7	2	4	1	3
Ireland									12
Netherlands	5	5	5	4	5	6	5	5	5
Northern Ireland								5	
Portugal	7	6	7	7	7	5	4	6	5
Scotland		10	10	11	12	12	11	10	10
Spain	3	3	6	4	5	15	19		18
United Kingdom									4
Wales								4	

Annex 5 – Regional Database Development

DataBase and Estimation System development

The need for the development of the RDBES

Fundamental data for a key function of the RCG North Atlantic is held within the existing Regional DataBase, RDB, which is hosted and maintained by ICES Secretariat. The RDB has not been developed since it was given to ICES Secretariat in 2012 to support the RCG North Sea and Eastern Arctic, the RCG North Atlantic and the RCG Baltic Sea, but many maintenance improvements have been made to be able to use the strength of the RDB. The RDB is not only a database, is it also an estimation system, which can estimate discard and biological information. But because the existing RDB cannot store any statistical sound sampling information, the countries have not wanted use the estimation part of the RDB. Therefore there has been is a strong demand for developing a new Regional DataBase and Estimation System, RDBES, in which the statistical sound sampling information can be quality checked and stored and statistical sound estimations can be executed and documented. This is in line with the text in DCF 2016/1701, article 5 Quality assurance and quality control. Under point 3. “Where data are to be collected by sampling, Member States shall use statistically sound designs that follow guidelines for good practice provided by the Commission, the International Council for the Exploration of the Sea (ICES), STECF or other expert bodies to the European Commission“. Therefore it is important to be able to quality check, store and use the statistical information collected during sampling. The RDBES data model will meet previously identified needs in terms of database structure and sampling design content that have been preventing full usage and correct interpretation of the data on the existing RDB. The development of the Regional DataBase and Estimation System, RDBES, started in the spring 2017 and the Steering Committee of the RDB, SCRDB, established a Support Core Group, which should specify the needs, so ICES Secretariat could development the new RDBES according to the needs. The Core Group have since worked on specifying the data model for the sampling of the commercial fish species, which should be able to support all countries sampling of all species. The new data model and hereby the database part of the RDBES will be by far more generic and complex that the existing RDB’s database. As an example the existing RDB handle one way of sampling species where the new RDBES will be able to handle so far 32 different ways of sampling and more can be added. The intention is that the RDBES should be finished for the commercial species around summer 2019, but because of

the complexity of all the countries different sampling methods and the sampling of many different species, the data model specifications and the development is delayed.

Main reasons for using the RDBES

Having a single system hosting the different regional databases appears as the best solution in term of harmonisation of procedures and from a cost-benefits point of view. The RDBES is also a tool that would allow improving the standardisation of quality among countries, and it would also allow responding to different calls without extra work when first developed.

There are many advantages of using the RDBES when it is implemented:

- Support the Regional Coordination Groups with harmonised sampling data for coordination
- Higher data quality by using common quality checks across all countries' data
- Ensure only approved standardised statistical and ratio methods are used for estimating data
- Reduces the workload for the countries in estimating data because the RDBES should contain all needed methods
- Document data to detailed data level and a transparent use of estimation methods
- One data call for upload of data to the RDBES for the RCGs and the ICES stock assessment expert groups, because the estimated data will be used for the ICES stock assessment
- The data handling is as efficient and easy as possible

Funding is needed

ICES Secretariat is funding the development of the RDBES, but the funding is ending after summer in 2019, therefore it is important to find funding for further development.

Development of the RDBES system

Even though there is not a completely finalised data model for the RDBES, the development of the database development of the RDBES have been ongoing, that means that during this year it has been updated with continuous changes. It is not optimal, but ICES Sec. need to make progress on the development of the RDBES even though there is not a final data model and User Requirement Specifications. During 2018 ICES Sec. has substantially developed the system, e.g., all import all tables with fields and relations were created in a test RDBES using the model in the entity framework; using Angular, the most modern client side framework, and REST, server side services were programmed in MVC. NET Core and Angular authentication was implemented. At the moment simple sample data test files for all the hierarchies can go through a simple data quality control and be imported into the test RDBES.

Presentations at the RCG NA

During RCG NA 2018 a presentations on the overall structure and status of the Regional DataBase and Estimation System (RDBES).

The RDBES system structure

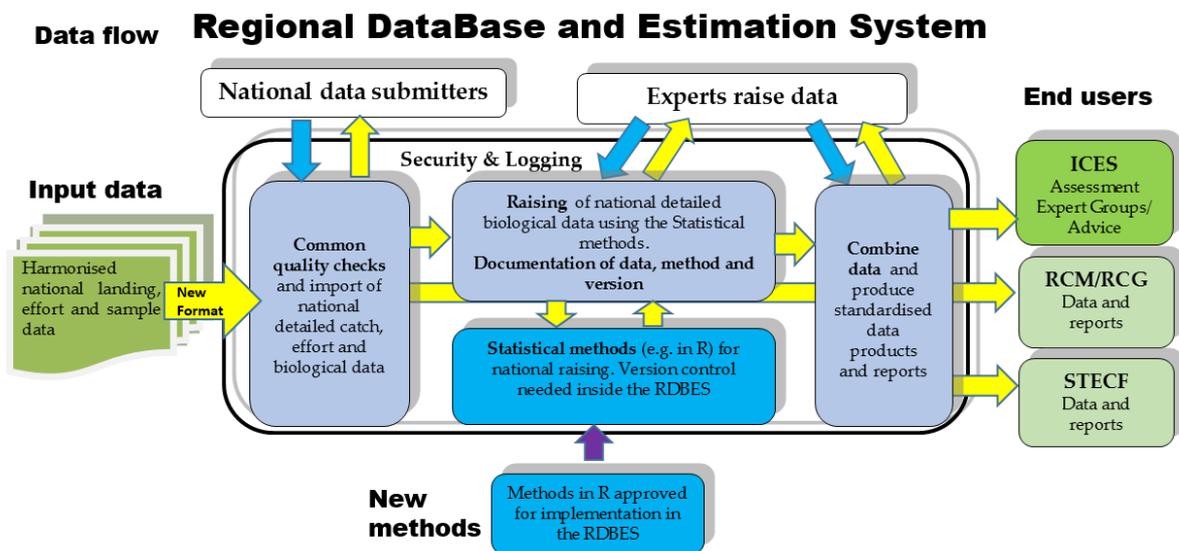
The following is written focusing on the three RCGs which are using the existing RDB. WGCATCH, PGDATA, WKMERGE, WKPICS, SGPIDS, WKRDB and the fishPi 1 and 2 project recommend to collect and estimate data using statistical methods. The RDBES will therefore accommodate design based statistical data and statistical estimation methods. The raising/estimation of data should be based on approved statistical methods. Approved statistical methods are available in R, these methods should so far be encapsulated into the RDBES using version control. Having the raising methods defined in R

would make the raising more transparent and easier for the experts to update, if needed. It should be possible to download both the data and the methods from the RDBES, so the experts easily can reproduce the estimations in the RDBES and further develop the methods.

When a group of experts have developed a new statistical raising method or updated an existing method, the group should approach the WGCATCH or a group of statistical raising experts, which have the task to test and approve raising methods. When the method has been approved, the method will be encapsulated into the RDBES, using the RDBES's version control of methods. The method can then be used to estimate/raise uploaded data, but the method cannot be manipulated/edited, and the raised data will be transparent and fully documented, regarding the data, the method and the version that was used.

To be able to document both the uploaded and the estimated data, the RDBES should log all processes regarding the data. According to the Data Policy of the RDB/RDBES the data are restricted, that will be taken care of by the security in the RDBES, where all users have to be known and given access to data and processing.

The figure below gives an overview of the flow of data in the RDBES from data uploads and the interaction with the national experts to the two main end users RCGs and ICES, but data could also be downloaded/exported for data calls for other relevant end users e.g. STECF or ICCAT.



The RDBES system structure

RCG Large Pelagic, recreational fisheries, diadromous and PETS by-catch species

The focus for the development of the RDBES is to be able to support the three RCGs (BS, NS & EA and NA), which participate in specifying their needs and for now the focus is on the commercial species. But in parallel work with the RCG LP is ongoing. Five selected important and representative stocks have been selected for testing the RDBES data model, and a web meeting have been set up and the

results should be presented at the Steering Committee of the RDBES, SCRDBES, and the 4th December 2018 at ICES Sec.

At the RCG NA this year there was a subgroup looking into the recreational fisheries (with an overlap from WGRFS), they are also interested in using the RDBES for their data.

The Sub Group on Diadromous, SGD, which is an established pan RCG (BS, NS & EA and NA) sub group, with an overlap from WKEEL, WGTRUTTA and WGBAST, which this year meet at the RCG NS & EA are also interested in using the RDBES for salmon, sea trout and eel.

The Expert Groups on PETS by catch WGBYC and WGPETSAMP are also interested in using the RDBES for their database.

There seem to be an understanding of the benefits of using the common RDBES platform for harmonising data across countries with quality checks across all countries' data for higher quality and standardisation with transparency and documentation as main drivers.

Annex 6 – Rules of Procedures

Rules of Procedure for the North Atlantic Regional Coordination Group

1. Scope

- 1.1. These Rules of Procedure are valid for the Regional Coordination Group (RCG) for the North Atlantic in the framework of the Regulation (EU) 2017/1004 of the European Parliament and of the Council on the establishment of a Union framework for the collection, a management and use of data in fisheries sector and support for scientific advice regarding the Common Fisheries Policy and repealing Council regulation (EC) No 199/2008 (recast).
- 1.2. These Rules of Procedure are established based on the Article 9(5) of the above mentioned Regulation. These Rules of Procedure are established 8th September 2017 by the Member States of the Regional Coordination Group coordinating their data collection activities in the North Atlantic for 2018/2019: Belgium, Denmark, France, Germany, Ireland, the Netherlands, Portugal, Spain and the United Kingdom.

2. Working language

- 2.1. The working language of the RCG is English.

3. Terms of Reference for the RCG

- 3.1. The RCG may agree the Terms of Reference for the RCG taking into account necessary contributions and information.

4. Meetings of the RCG

- 4.1. To perform its duties, the RCG shall hold one meeting annually unless agreed otherwise by the RCG. An annual meeting shall consist of plenary sessions and may include work in subgroups.
- 4.2. The RCG may hold additional meetings to the annual meeting. The duration, form, meeting venue, terms of reference and other relevant elements for such an additional meeting may be agreed at the RCG annual meeting, the Liaison meeting or by correspondence initiated by the RCG Chairperson(s). The venue of the RCG annual meeting will rotate between Member States coordinating their data collection activities in the same marine region unless otherwise agreed by the RCG.
- 4.3. No later than two months before the annual or additional meeting, the Member State organizing the annual or additional meeting shall be responsible for providing details of accommodation, travel and other organizational information relevant for the meeting.
- 4.4. In accordance with Article 7.2(c) of Reg. 2017/1004, the National Correspondent for each Member State coordinating the data collection activities in the same marine region and the European Commission shall coordinate the participation in a RCG meeting and shall inform the RCG chairs who will then inform the hosting country within an agreed deadline.

- 4.5. The European Commission shall participate at all Annual Meetings and may attend any other meetings.
- 4.6. Member States not listed in point 1.2., that are interested in coordinating their data collection activities in the North Atlantic may nominate a national correspondent or an expert to participate at an RCG meeting.

5. The chairperson(s) responsibilities

- 5.1. The chairperson(s) of the RCG shall promote effective and productive work and working methods of the RCG. The chairperson(s), an institution or a person indicated by the chairperson shall be responsible for making the documents and information available in time and shall take all necessary action to that effect.
- 5.2. The chairperson(s) is responsible for preparing agendas for the RCG meetings.
- 5.3. The RCG chairperson(s) shall be responsible for uploading to a shared platform and disseminating all documents and other information related to the meeting. The RCG is currently assisted in this task by ICES.

6. Agenda and submission of documents

- 6.1. A draft agenda for the annual RCG meeting shall be made available no later than one month in advance of the meeting. A draft agenda shall be approved at the beginning of the meeting. The approved agenda may be supplemented during the meeting.
- 6.2. This draft agenda will indicate the day(s) of the meeting when the decisions are to be made.
- 6.3. Other documents than the draft regional work plans for the RCG meetings shall be made available no later than two weeks in advance to the RCG meetings. Documents made available later than two weeks in advance to the RCG meetings, may be dealt at the meeting in case of consent of all the national correspondents present at the RCG NA annual meeting.

7. RCG subgroups

- 7.1. To carry out its duties as set out in the Article 9 of the Regulation 2017/1004, the RCG may agree to establish permanent or temporary bodies, task groups, subgroups or other arrangements (hereafter called *subgroups*). The RCG will appoint the lead(s) and any other role(s) or working practices necessary and provide terms of references. The RCG may give this mandate to the subgroup(s).
- 7.2. These subgroups will carry out their duties during and between the RCG meetings, as appropriate and as agreed by the RCG. The subgroup lead or a person nominated by the lead shall keep the RCG informed of the progress of such work and any issues arising at intervals agreed at the RCG.

8. Draft regional work plans and RCG endorsement

- 8.1. Member States coordinating their data collection activities in the region will endeavour to agree on a draft regional work plan under Article 9 of Regulation 2017/1004, by consensus at the RCG annual meeting.
- 8.2. All relevant Member States shall ensure the participation of appropriate expert(s) in preparing draft regional work plans. The European Commission may participate at all stages.
- 8.3. Member States shall take all necessary steps to ensure that they are represented by a person mandated to take a decision on the draft regional work plan.

- 8.4. When the RCG NA endorses the draft regional plan by consensus, it will be submitted to the Commission for approval.
- 8.5. A draft regional work plan, where a decision is expected to be made in accordance with the draft agenda of the RCG annual meeting, shall be circulated to the national correspondents two months in advance of the meeting.
- 8.6. A decision on a draft regional work plan may, if necessary, be made by written procedure. The chairperson of the RCG will coordinate the written procedure through National Correspondents. The procedure should be completed within an agreed timeframe.
- 8.7. In the event that a member states participant at the meeting does not have sufficient mandate to approve unscheduled changes to a regional work plan made at the meeting then the written procedure referred to in section 8.5 will be used.
- 8.8. The chairperson of the RCG shall notify the RCG of the decision within two weeks after the written procedure has ended.

9. Procedure for recommendations

- 9.1. The RCG may give non-binding recommendations only. The aim of the recommendation is to orientate further work to be carried out on all issues related to the scope of the Regulation 2017/1004.
- 9.2. If to progress, the RCG requires input by external bodies outside the participation at the RCG, the RCG shall use a process of recommendations to other RCGs, institutes, RFMOS, MS, end-users and/or other external bodies and shall agree a list of recommendations at the annual meeting to be forwarded to the Liaison Meeting.
- 9.3. The recommendations should provide, but are not limited to, clear and understandable stand-alone guidance on the recommended work to be carried out, its justification, a foreseen time frame for fulfilment and to the extent possible, person(s) or institution(s) responsible for the follow up of such recommendation.

10. Cooperation between RCGs and the European Commission and other relevant bodies

- 10.1. RCGs and subgroup chairs shall endeavour to cross reference the ToRs of other RCGs and their subgroups and/or other relevant Expert Groups.
- 10.2. The chairperson of the RCG and/or other person(s) mandated by the RCG may participate and represent the RCG in any coordination with other RCGs and the commission under Article 9(6) of Regulation 2017/1004 and will keep the RCG informed within an agreed time frame.
- 10.3. The chairperson of the RCG and/or other person(s) mandated by the RCG annual meeting may participate and represent RCG in other relevant regional bodies, arrangements or meetings and will keep the RCG informed within an agreed time frame.

11. Observers

- 11.1. In accordance with the Article 9(7) of the Regulation 2017/1004, RCG shall invite as observers relevant end users of scientific data, including appropriate scientific bodies as referred to in Article 26 of Regulation (EU) No 1380/2013, regional fisheries management organizations, Advisory Councils and third countries, when necessary.
- 11.2. If an independent organisation or individual seeks to attend an RCG meeting as an observer, they must make a formal request to the RCG Chairperson(s) in two months in advance with justification. The RCG Chairperson(s) will consult members for a final decision.

- 11.3. The RCG shall decide by consensus and no later than four weeks prior to the annual meeting which observers shall be invited to attend RCG and subgroup meetings.
- 11.4. International Council for the Exploration of the Sea (*ICES*) has a standing invitation to participate in all annual RCG NA meetings and may be invited to participate in RCG subgroup work.
- 11.5. After a written confirmation from the RCG chairperson(s), observers may attend the meeting. The attendance may be subject to conditions, for example – exclusion from particular discussions and presentations.
- 11.6. Observers are bound by the conditions set by the RCG. If one or more of these conditions are violated repeatedly or seriously by the observer their continued attendance may be re-evaluated. The observer/organisation shall be informed of this, including the results of the re-evaluation, by a letter from the RCG chairperson(s) after consulting and with the consent of the RCG National Correspondents.
- 11.7. Observers may be invited to provide written contributions or presentations.

12. Election of the RCG chairperson(s)

- 12.1. One term for a chairperson covers the period of two years. A chairperson may serve no more than two consecutive terms. The role will rotate between Member States coordinating their data collection activities in the same marine region unless otherwise agreed by the RCG.
- 12.2. The Chairperson may be agreed by the MS present at the RCG annual meeting or elected by a simple majority.
- 12.3. RCG may decide to have co-chairperson(s). The same procedures and conditions as to the chairperson(s) elections apply.

13. Reporting from a RCG meeting

- 13.1. The chairperson(s) of the RCG or a person appointed by the chairperson(s) shall be responsible for drawing up a report from a RCG meeting. The draft report shall contain, but is not limited to, recommendations from the RCG, the decisions taken, a summary of the RCG intersessional progress and RCG discussions, future work directions, the intended work to be carried out before the next meeting, the list of foreseeable RCG meetings and list of participants, their contact information, role and institution.
- 13.2. The draft report shall be uploaded to the shared platform for dissemination to all participants within two months of the RCG annual meeting. The final report will be published on the JRC website as appropriate.

14. Amending rules of procedure

- 14.1. These Rules of procedure may be reviewed and amended at the RCG annual meeting by consensus of all member states present and endorsed by all National Correspondents of the RCG, or in a written procedure by all National Correspondents replying within one month after the RCG meeting in which the amendment had been agreed.

Annex 7 – Enduser Needs

Data enduser meeting between RCG chairs & ICES Secretariat 13 March 2018

Minutes on the Meeting of Chairs of the Northern and Long Distance RCGs (BALTIC, NS&EA, LDF and NA) and ICES secretariat on end-users needs.

ICES, Copenhagen

13th of March 2018

Introduction

Background to the pan regional RCG subgroup on end user needs

In the legal text of the DCF recast (EC) No 2017/1004 and EU-MAP (2016/1251/EU), multiple references are made to data collected at regional level based on “end user needs” (see chapter III and V of EU-MAP (EU) 2016/1251). This requires close collaboration between RCGs, tasked with the regional coordination of data collection and end users of the scientific data. In March 2017, the chairs of the Northern RCGs (BALTIC, NS&EA and NA) initiated a dialogue meeting with ICES as their main scientific end user to establish a framework that facilitates the feedback between data collection and data requirements. The objectives for this initial meeting was to:

- start formalising a framework of communication between data providers (RCGs) and data end users (ICES);
- see how best to improve on current interactions and communications with RCGs and ICES including using established mechanisms;
- Use the above to draft ToRs and intersessional work for the RCGs.

Following the meeting in 2017, it was agreed that the chairs of the RCGs continue this dialogue as a pan regional and intersessional subgroup with the following ToRs as presented in the 2017 Liaison report:

Pan Regional subgroup on end user needs	
Initial ToRs	<ul style="list-style-type: none">• To work closely and intersessionally with ICES to improve communication; establishing common references for standard processes and information and identifying effective processes for meeting end-user needs.• Act as a point of contact for data end users, a framework for feedback and allow the RCG to prioritise its activity relating to future data collection, storage and transmission functions.
Work plan 2018/next steps	<ul style="list-style-type: none">• RCG chairs to establish end-users subgroup (Initial members RCG chairs).• RCG Chairs in consultation with end-users to draft ToRs and deliverables.• RCG subgroup to report regularly to members.
Responsible persons for follow-up actions	Chairs of RCGs, end-users (ICES, STECF, other RFMOs)

Objectives and ToRs of 2018 meeting

The objective of the meeting between the RCG chairs and ICES was to continue the process between ICES and the RCGs to improve the dialogue and feedback between data providers (RCGs) and data end users (ICES) and specifically to review the agreed actions from the 2017 meeting on benchmark process, data calls and surveys and agree on next steps.

ToRs

1. Review progress since 2017

To see how best to improve on current interactions and communications with RCGs and ICES including using established mechanisms particularly in reference to:

- a) STECF mandatory survey list
- b) Benchmark process
- c) Data inventory
- d) Data calls

2. AOB:

- a) SharePoint
- b) RDB data call

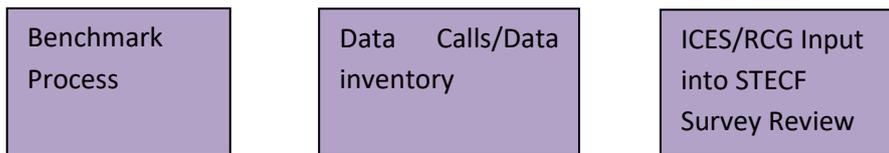
RCG chairs met on the 12th March 2018, to finalise the terms of reference and agenda for the meeting with ICES on the 13th.

Participants

Name	Email address	Affiliation
Maria Hansson	maria.hansson@slu.se	RCG Baltic Co-chair
Marie Storr-Paulsen	msp@dtu.aqua.dk	RCG North Sea and Eastern Arctic (RCG NS&EA) co-chair
Els Torreele	Els.Torreele@ilvo.vlaanderen.be	RCG NS&EA co-chair
Joel Vigneau	Joel.Vigneau@ifremer.fr	PGDATA chair
Sieto Verver	sieto.verver@wur.nl	RCG Long distance fisheries chair
Jon Elson	jon.elson@cefas.co.uk	RCG North Atlantic (RCG NA) co-chair
Leonie O'Dowd	leonie.odowd@marine.ie	RCG NA co-chair
Christoph Stransky	christoph.stransky@thuenen.de	STECF rep
Lotte Worsøe Clausen	Lotte.worsoe.clausen@ices.dk	ICES secretariat
Neil Holdsworth	NeilH@ices.dk	ICES secretariat
Rui Catarino	rui.catarino@ices.dk	ICES secretariat
Ruth Fernandez	ruth.fernandez@ices.dk	ICES secretariat
Henrik Kjems-Nielsen	henrikkn@ices.dk	ICES secretariat (afternoon)

Progress 2017 and next steps in 2018

In, 2017 at the first meeting between ICES and the RCG chairs, three main mechanisms were identified to improve the feedback between data end-users and data providers:



Review of 2017 progress and next steps in 2018 focussed on these three mechanism.

Benchmark Process

2017 agreed actions: ICES are reviewing the benchmark cycle with reference to the number of stocks, potential bottle necks. RCGs to be included after the 'evaluation' cycle.

RCG to provide an inventory of relevant data collected under DCF to data compilation workshops (DCW). Template to be designed by RCGs.

Outcome: Data Summaries were produced by RCGs in 2017, See Annex 14 RCG NS&EA report (Whiting) and Annex 8 RCG NA report (Lophius spp) for draft Stock Data Summaries. The following limitations were highlighted when interpreting data summaries for benchmark purposes:

- Data is only presented for EU countries
- Not raised and potentially incomplete (Upload logs)

Irrespective of these concerns, RCGs can play an important role in assisting with the data evaluation process for benchmarks by highlighting issues with the data, for example retrospective differences.

2018 Next steps:

- ICES will provide the RCGs with a list of stocks to be benchmarked and data compilation workshops timetabled for 2018/2019.
- ICES is developing an Issue list database which will be live and available to the RCGs.
- RCGs to provide feedback on the process as well as the stocks to be benchmarked.
- Issue list to include a column categorising the data needs and justification (e.g. moving from category 3 to category 1 stocks)

Data usage categories:

- Used
- collected, needed but not currently used
- not used
- not collected yet

- ICES will include a mandatory field in the issue list on future data needs. RCG can use this information to prioritise future data collection and identify data sampled but not used. Link this to the ACOM Benchmark scoping process. At RCG annual meeting, RCGs can provide feedback on the Issue list directly through the database.
- Data summaries- RCGs through the data group, continue to develop data summaries for stocks to be benchmarked and present at 2018 RCG annual meeting. Agree on minimum data products for benchmark workshops. Consider information in the data summaries, which RCGs can provide to ICES to assist with the data evaluation. Can the intersessional data group be tasked with this and develop a package with the tasks, code and references to data. This should form a recommendation for the intersessional work of the group. ICES can provide a

time table for the data compilation workshops and deadlines for the data summaries. If these data or plots are to be provided they will need to be quality assured. FishPi 1 developed scripts for data cleaning or checking, these should be used.

- Stock Annex: Currently free text, standard table to include more details on data parameters (longer term).

9.1.1.1.1.1 Assessment Data Call and Data Inventory:

RCG/ICES to compare Fisheries assessment data call (Excel sheet) to ICES stock list database and the NWPs Table 1ABC, DATRAS+, RDB (and National DBs).

Feedback to ICES for information on potential gaps, help form a process of prioritising data needs and manage expectations.

- It needs to be considered how EELS and SALMON fit into this process. They are not included in the current ICES assessment data call above but there will be a data call in September. This should and can still be compared with the AWP and need to be considered within this process.

2018 Next steps:

- Data Call Review: the assessment working groups will develop the data calls for next year at the working groups, and comment on the previous data calls. This information will be compiled by ICES and send to the RCGs for their annual meeting.
- RCG will review the data call at their annual meeting and feedback to ICES, deadline is Liaison meeting so information can be incorporated into data call for following year.
- RCG scan also compile list of issues MS encountered when responding to the data call. RCG chairs will ask MS to collate any concerns and issues in time for the RCG meeting and compile at the meeting to feedback to ICES.
- Data needs vs Data availability: ICES is developing a data call module for stock coordinators to identify data variables and communicate with data provider. Use the data call module, rather than the SID to provide feedback on data needs vs data availability.
- Data call database includes surveys and could include a reference to what parameters are coming from the surveys as well as where the data is stored. This could then be used as a template to be crosschecked by the assessor as feedback on what data was used. Only refers to the current year so doesn't account for triannual data. Need comment and why it has not been used.
- Feedback on format- use existing format on the data call data base but add column to state what data parameters are used from surveys.
- Assume all data parameters requested by stock coordinator will be used in assessment and advice, and that stated requirements are not wish lists. Data submitters can comment on data request- i.e. is it collected, should it be collected.
- Salmon and Eel: Need a formal process for capturing what data has been provided. Do ICES track data transmission for these groups including WGBAST, WGEEL, WGDIAD. Can ICES provide WGBAST and WGDIAD with the same sort of templates used historically to track what data was provided and used. The historic tables used by Assessment EGs to track the data that's used should be reviewed and changed if necessary to be fit for the purpose. Can the

Eel and Salmon subgroups do this at the RCGs (RCGMED/NorthSea). RCGs should provide and work with ICES to put something in place.

Surveys:

2017 agreed actions and outcome:

- ICES to provide coding for inventories from DATRAS (and other survey DBs) and RDB with ref to DCF AWP. A survey list was produced from the ICES secretary and delivered to the RCG.
- RCGs to compare Annual Work plan survey names with DATRAS names - WGCHAIRS. STECF review group of surveys December 2017 – ToRs still to be finalized but preparation is required. ICES working Document to be reviewed by RCG Surveys subgroup.
- ICES provided RCG with summary on which surveys are used in ICES, their codes/names and which stocks they are used for.
RCGs designed spreadsheet to compare table 10 surveys with national work plan and ICES surveys
Spreadsheets were send out to National correspondents to check surveys included in national work plan and related to table 10, how they should be named, what additional surveys should be included.
RCG re updated information on which surveys are used for which stocks based on ICES advice sheets.
- RCG made an inventory on what MS has listed in annual work plan, and when possible match to table ten.
- RCG proposed naming convention: this ensures the consistency between table 10 and ICES,
- ICES agreed with some tweaks (e.g. international coding) will include this in the “Vocabulary” to ensure consistency with advice sheets and DATRAS.

2018 Next steps:

- Short-term steps ahead: RCGs will provide tidied up version to ICES for quality check - ICES will quality check the information on what surveys are used as basis of advice.
- Requirements for Table 10 surveys: All data on table 10 will need the data housed in international Databases, i.e. ICES databases (DATRAS/Acoustic/Egg & Larvae, UWTV – under review).
- STECF survey review and scoping meeting: As the survey review still requires extensive preparation, change review meeting into scoping meeting to prepare for the review, agree on evaluation criteria, what information should be used in the review and what information should be presented in table 10. The outcome of the scoping meeting would allow commenting by different parties such as ICES, and consultation with Member States, i.e. National Correspondents before actual review meeting. Survey evaluation criteria need to be carefully considered as they now need to address the following question: “why should DCF surveys be mandatory”. The information linked to surveys and reflected in table 10 also need to be carefully considered in the light of mandatory surveys and legal requirements of task/cost sharing. The criteria for grouping and/or categorising surveys in table 10 also needs to be considered

AOB:

Recipients of Data calls: ICES provide the National Correspondents and ACOM with the data calls problems arose in some Institutes that were not copied in. Some data calls were not received by the right recipients. E-mail receipts have been set up and the Data calls tool is now on the SharePoint.

ICES SharePoint support for RCG Intersessional work: ICES agreed to set up SharePoint and GitHub for RCG intersessional subgroup work. RCG members can get access to ensure platform for intersessional work of various regional and pan regional subgroups.

Recommendations database: The ICES recommendation database can be used for the RCG-ICES recommendations. RCG Chairs can put it in or ICES secretariat will put it in the DB.

RDB data call: No change although highlight and improve on the text in relation to BMS fraction and Unregistered discards. Upload logs should be used to register whether BMS fraction has been uploaded or is not available. Include references to the links on the ICES website. JE to prepare and circulate a draft data call for release mid-April with a deadline of mid-June.

Access to RDBES: JRC have requested access. EC can have access to the data but all other requests should come via NCs to member states rather than through RCGs or ICES. This also applies to requests from scientists at JRC. DATRAS is open access. Open access means that the data can be used incorrectly. Data protection could be an issue. Would prefer a portal so that we can provide aggregated data at a certain safer level (even raised).

GITHUB for RCG: How to maintain metier lists when RDB access. ICES SharePoint on the RDB already has a list but has to be maintained by the administrators. RCGs could control the list on GITHUB. Metier lists and other code lists are available and accessible to the public on ICES website. Metier workshop could create a GITHUB for storing documents with links to the ICES website and page with code lists.

Agreed Actions

To do	When?	Responsible for action	comment
Finalize and send out notes from the end-user meeting	March	Jon? Leonie? to send the draft notes to be reviewed by all RCG chairs	
Finalize the master list of surveys	March?	Rie and Jon to send a clean list of surveys to ICES and incorporate the comments already done by ICES	long term goal for standardisation of the survey naming not covered here. To be put in text from end user meeting.
ICES to check if the stocks match the surveys used in advice (no time for in depth checks)	April	ICES	
Finalise the ToRs RCG 2018 meeting. By correspondence or skype?	April?	NN	

To do	When?	Responsible for action	comment
Send out the RDB data call and put it on the ICES data call portal (Henrik check if possible)	Former data call to be launched mid-April. Deadline for submission 15 June 2018	Jon sending to all NC	
Nomination of participants by the NC. RCG chairs to send info to the NCs within a region to ask for the list of participants.	Send out to all NCs 1 May, Response by 1 June?	RCG Chairs	
Invite the chair of WGBAST (Stefan Palm) to participate in the RCG NS&EA to make sure that salmon issues are covered in this RCG	1 May	Rie and Els	
Send out the agenda to RCG participants, including the days NC need to participate	30 June? (RoP 1 month before the meeting)	RCG Chairs	
Send out info from the organizer about Venue, travel info, social dinner	30 June? (RoP 1 month before the meeting)	RCG Chairs	
Info on the desired preparation of output graphs (sampling overviews, maps etc. based on suggestions from PGDATA) from RDB for the stocks to be benchmarked 2019.	30 June?	RCG Chairs assigning the task to appropriate expert (s) / RCG	
Drag out the "issue list" from ICES webpage and sent to participants. To be reviewed during the meeting. Make sure that benchmark stocks are covered	Mid-August?	RCG Chairs	

To do	When?	Responsible for action	comment
Feedback on issue list to ICES. The feedback from the RCG to be written in the database in the comment field. To be tagged with the RCG name. Don't leave blank. Write "RCG XX_checked_No comment".	during RCG meeting	RCG Chairs to get access to the issue list- Will make live comment on the data base	
Info on data calls to be sent to RCG	Before RCG meeting	Rui to all RCG chairs	
Feedback on data calls to ICES to be put in an annex. To be used for data call coming year	After RCG meeting (Sept/Oct)	RCG chairs	
The recommendation related to ICES shall be put into the ICES rec database after the Liaison meeting.	October	One appointed RCG Chair to send to ICES Secretariat (Eirini G)	
Contact the chairs of the different groups to provide 1 slide with major outcome regarding data quality (WKTRANS, WKMET, PGDATA, WGBIOP, WKBIOPTIM2, WKPETSAM, STECF, FishPi2)	August		Do we still want this? I would suggest that RCG chairs send out the reference to all relevant reports and tell participants to read the relevant reports before the meeting. Feedback from intersessional work to be presented in RCG and will be planned in the agenda. Relevant person to do it will be contacted by the Chair.
Finalizing of the report	2 months after the meeting	RCG chairs	

Annex 8 – Data Quality

Regional overviews

In this annex we provide an overview of the main fishing types, demersal, pelagic and flatfish, and the distributions by species, landing location and flag fleet.

The locations are the harbour codes mapped to the UNLOCODES. The data is the commercial landings data uploaded by all MS in the RDB in 2017.

The data have not been checked in detail due to lack of time during the meeting. Some graphs could also be improved. But they provide an overview of the fisheries in the North Atlantic and they are an example of what can be done with the data uploaded in the RDB.

North Atlantic - Total landings

The locations are the harbour codes mapped to the UNLOCODES. The data is the commercial landings data uploaded by all MS in the RDB in 2017.

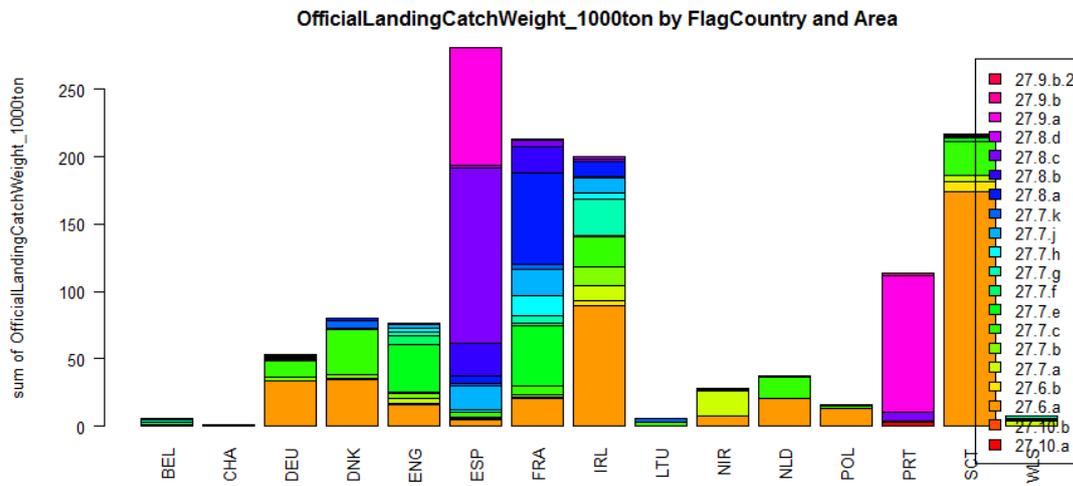


Fig. 001. Total weight (*1000 ton) of official landings from the North Atlantic during 2017: Distribution by flag country and area. Data source: RDB (extract 24/09/2018).

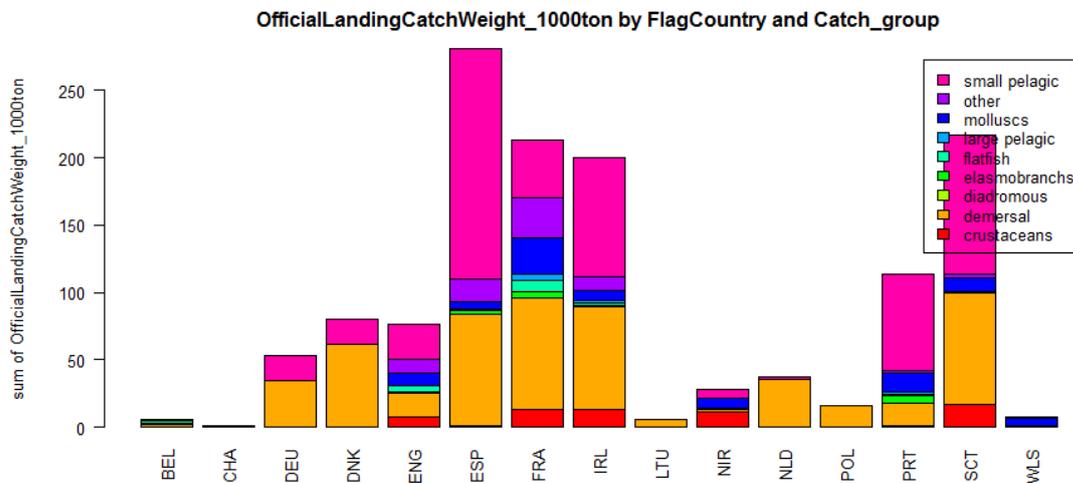


Fig. 002. Total weight (*1000 ton) of official landings from the North Atlantic during 2017: Distribution by flag country and species group. Data source: RDB (extract 24/09/2018).

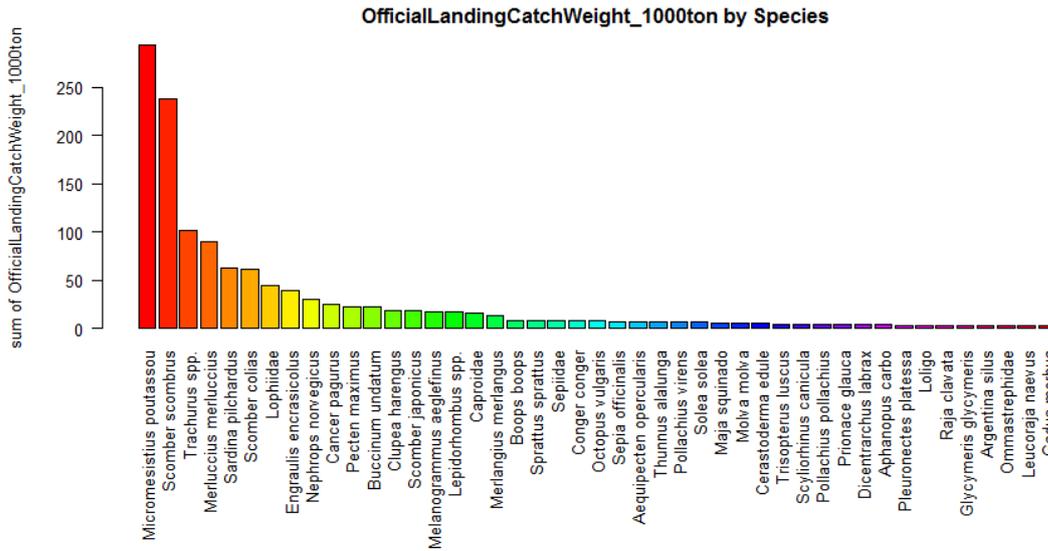


Fig. 003. Total weight (*1000 ton) of official landings of the main species (95% of landings) landed from the North Atlantic during 2017. Data source: RDB (extract 24/09/2018).

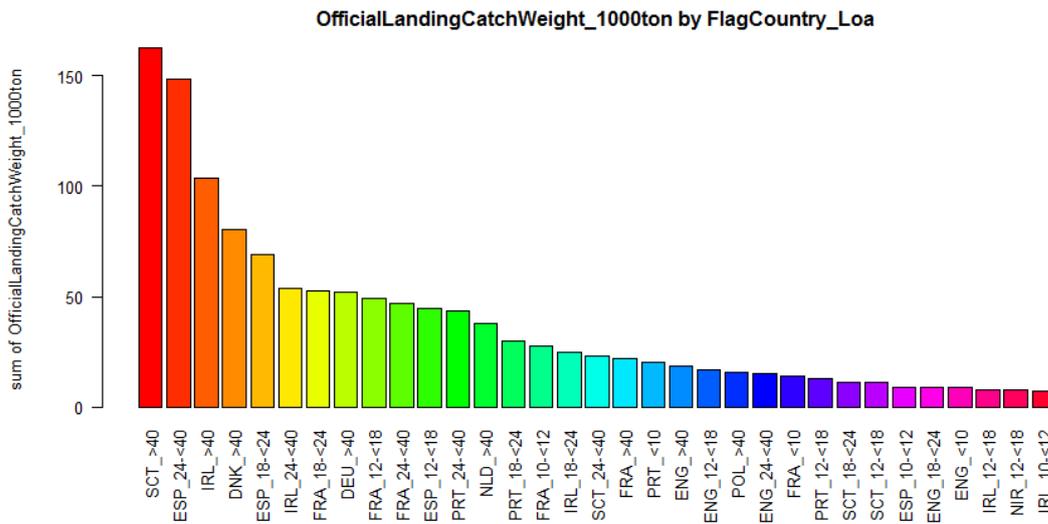


Fig. 004. Total weight (*1000 ton) of official landings of the main fleets (95% of landings) landing from the North Atlantic during 2017. Data source: RDB (extract 24/09/2018).

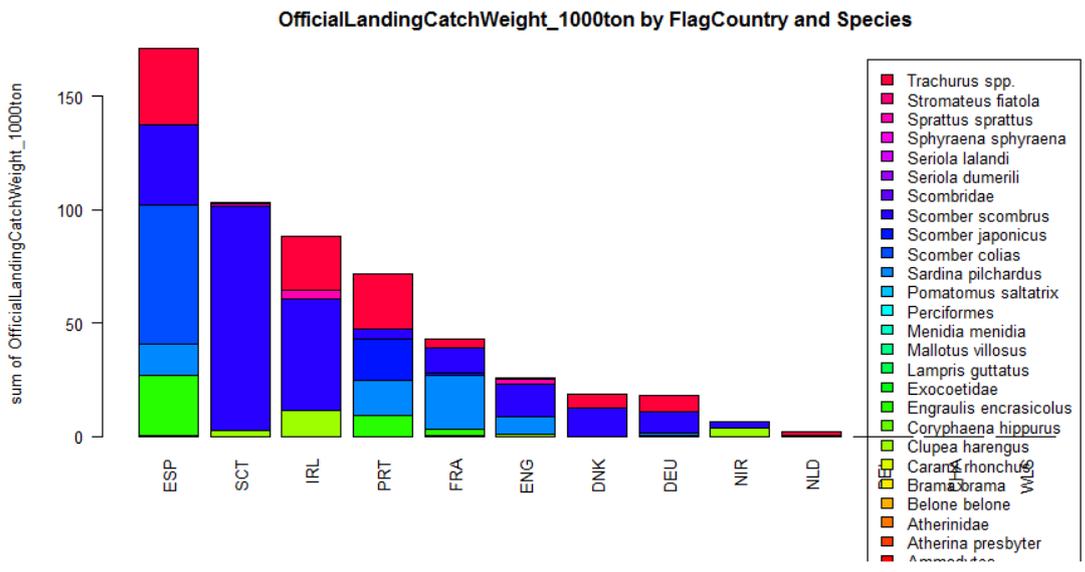
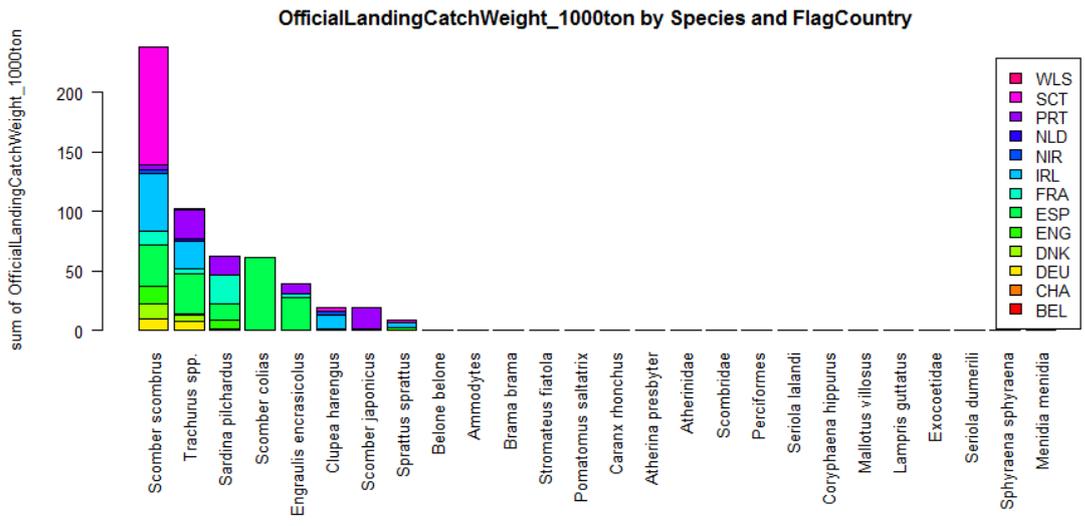


Figure 007 and 008. Pelagic species landed from the North Atlantic during 2017: Distribution by FlagCountry. Data source: RDB (extract 24/09/2018).

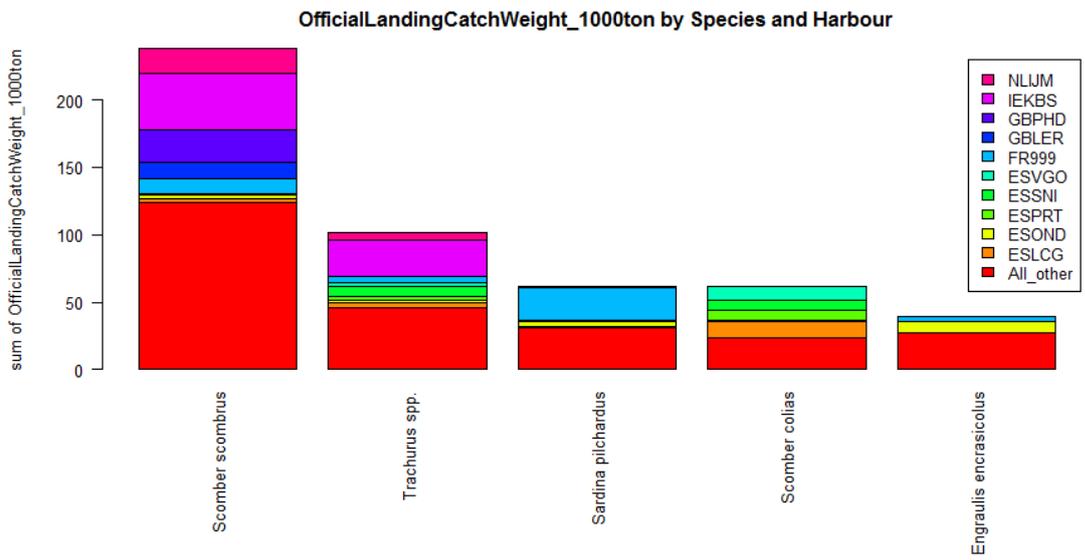
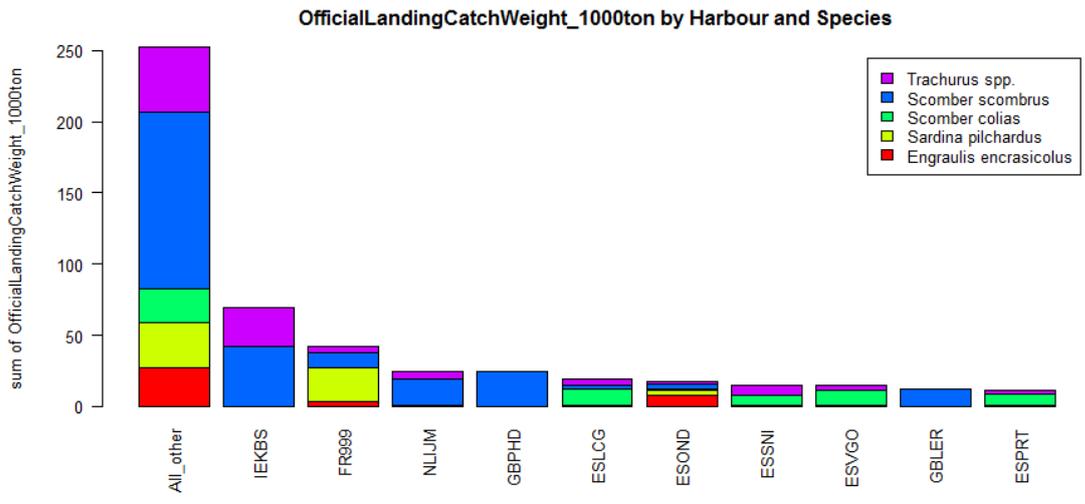


Figure 009 and 010. Main (top 5) pelagic species landed from North Atlantic areas during 2017: Distribution by Top 10 harbour. Data source: RDB (extract 24/09/2018).

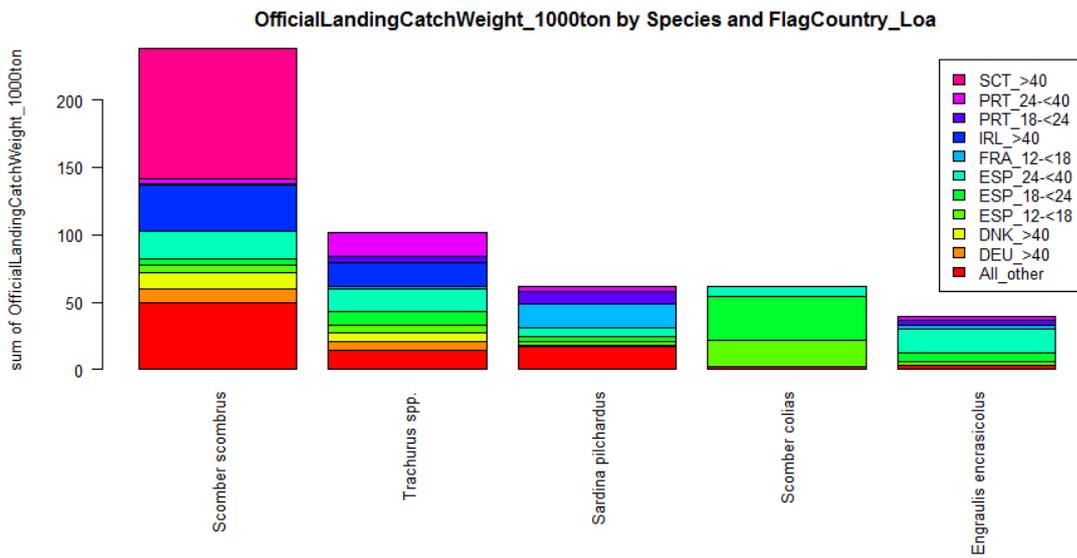
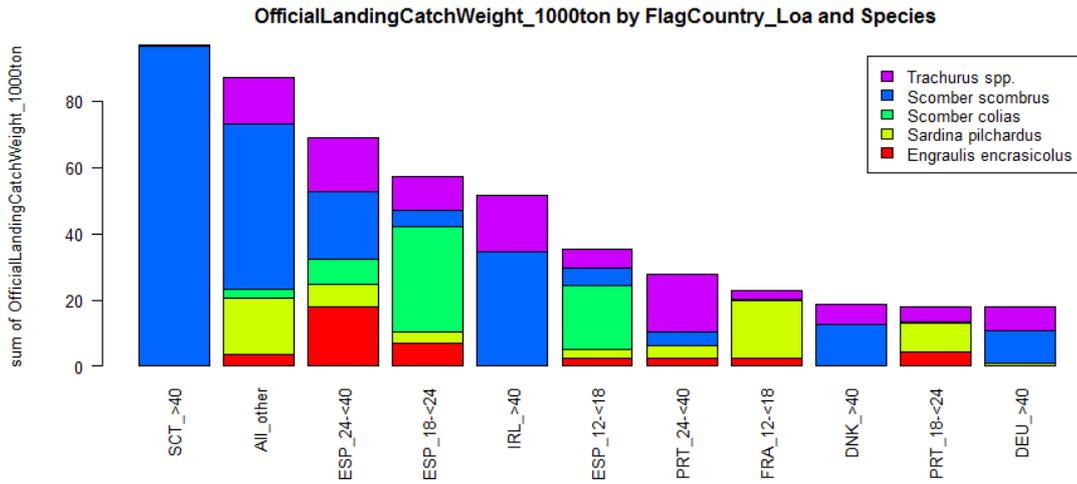


Figure 011 and 012. Main (top 5) pelagic species landed from North Atlantic areas during 2017: Distribution by Top 10 fleet. Data source: RDB (extract 24/09/2018).

North Atlantic – Demersal

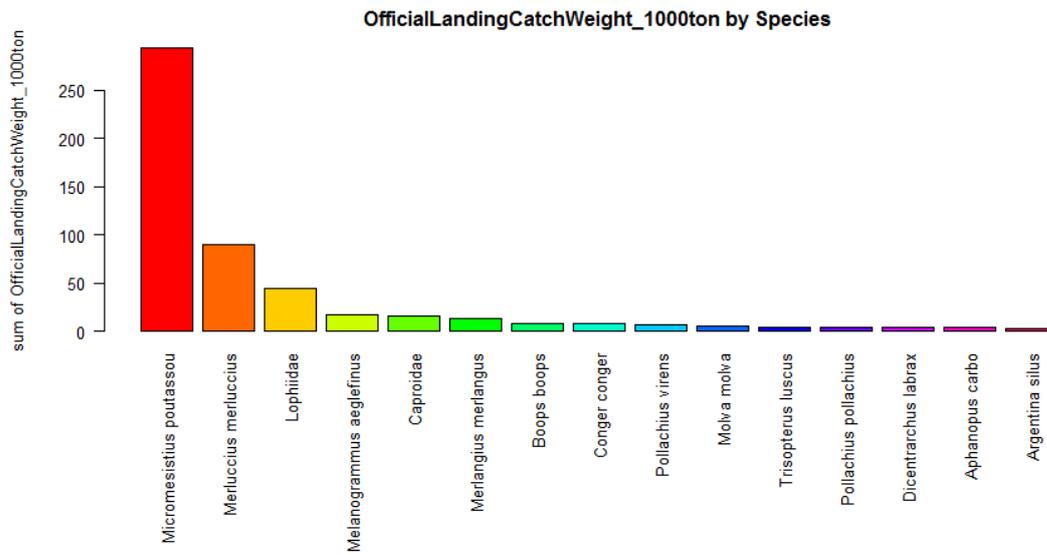


Figure 013. Main (top 95% in weight) demersal species landed from North Atlantic Areas during 2017. Data source: RDB (extract 24/09/2018).

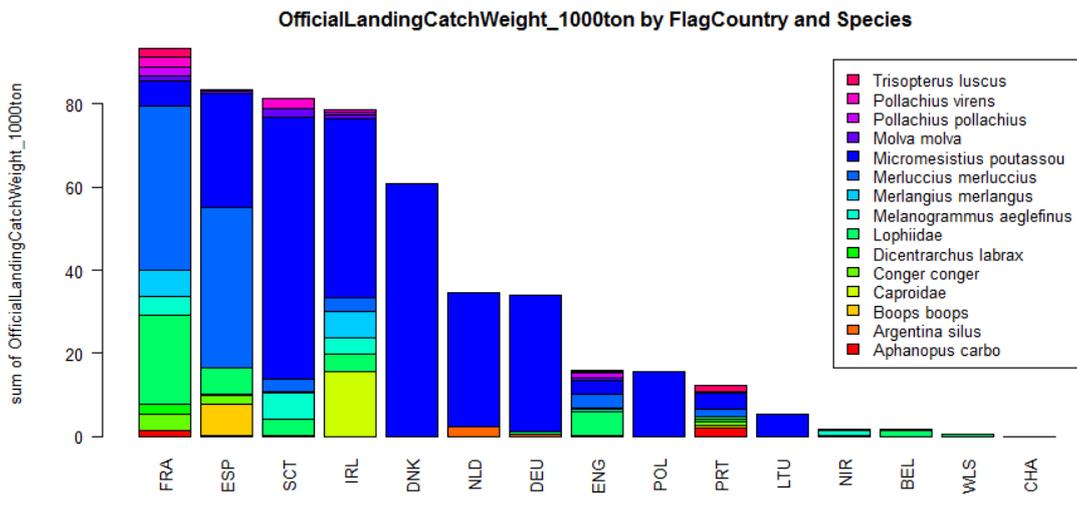
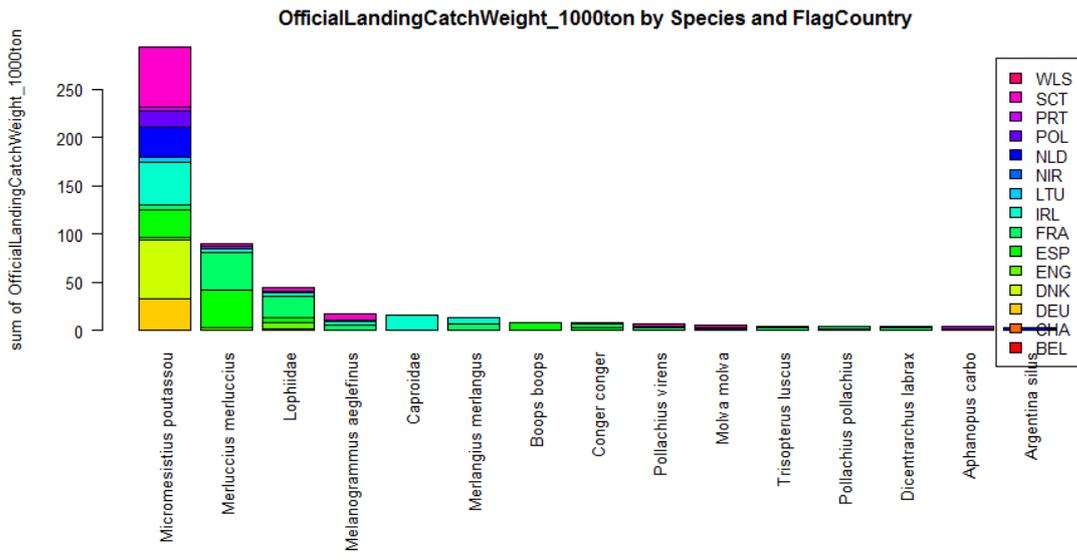


Figure 014 and 015. Main (top 95% in weight) demersal species landed from North Atlantic areas during 2017: Distribution by FlagCountry. Data source: RDB (extract 24/09/2018).

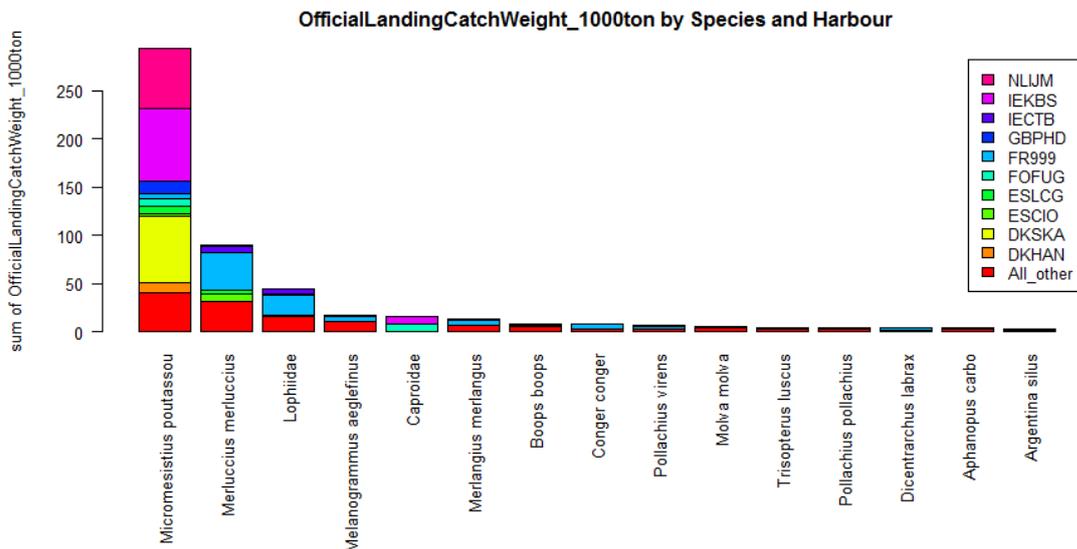
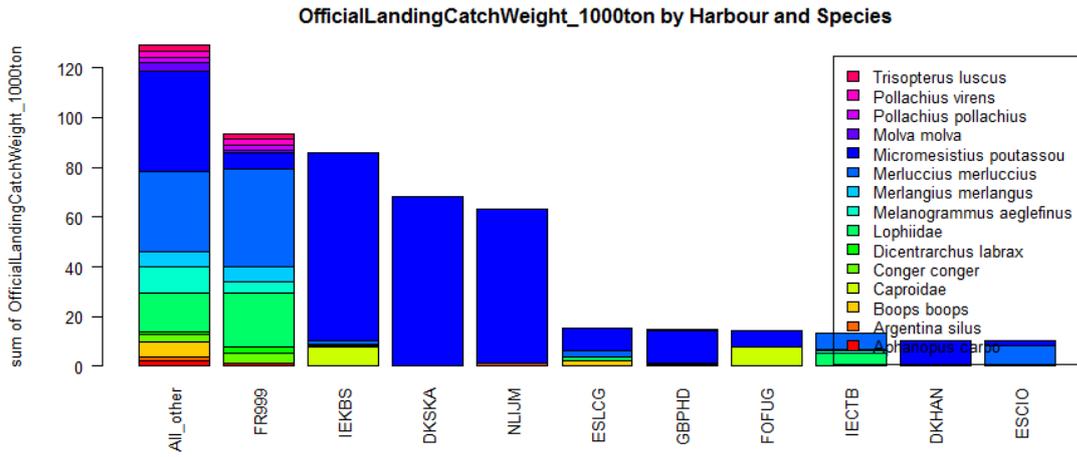


Figure 016 and 017. Main (top 95% in weight) demersal species landed from North Atlantic areas during 2017: Distribution by top 10 harbour. Data source: RDB (extract 24/09/2018).

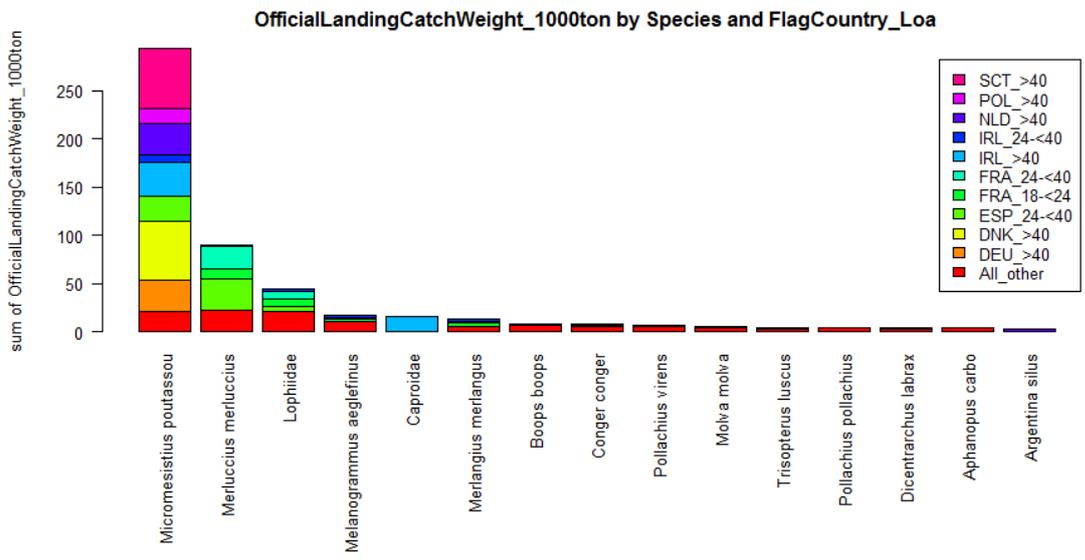
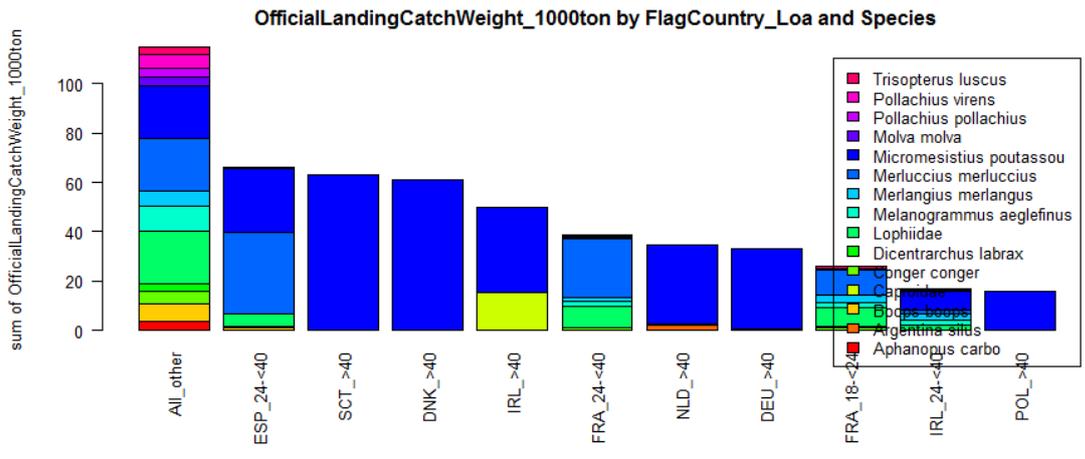


Figure 018 and 019. Main (top 95% in weight) demersal species landed from North Atlantic areas during 2017: Distribution by Top 10 fleet. Data source: RDB (extract 24/09/2018).

North Atlantic – Flatfishes

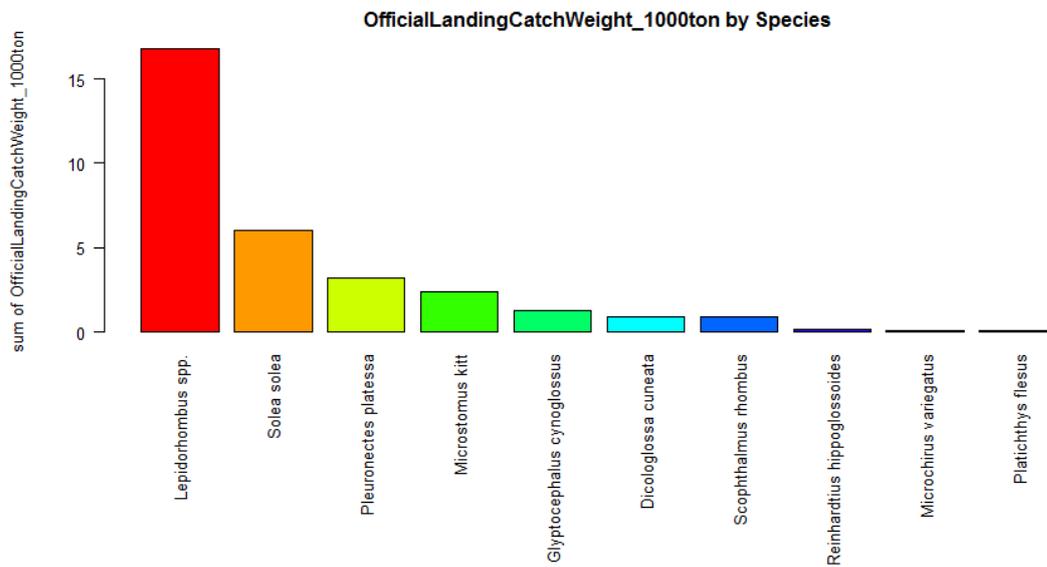


Figure 020. Main (top 99% in weight) flatfish species landed from North Atlantic Areas during 2017. Data source: RDB (extract 24/09/2018).

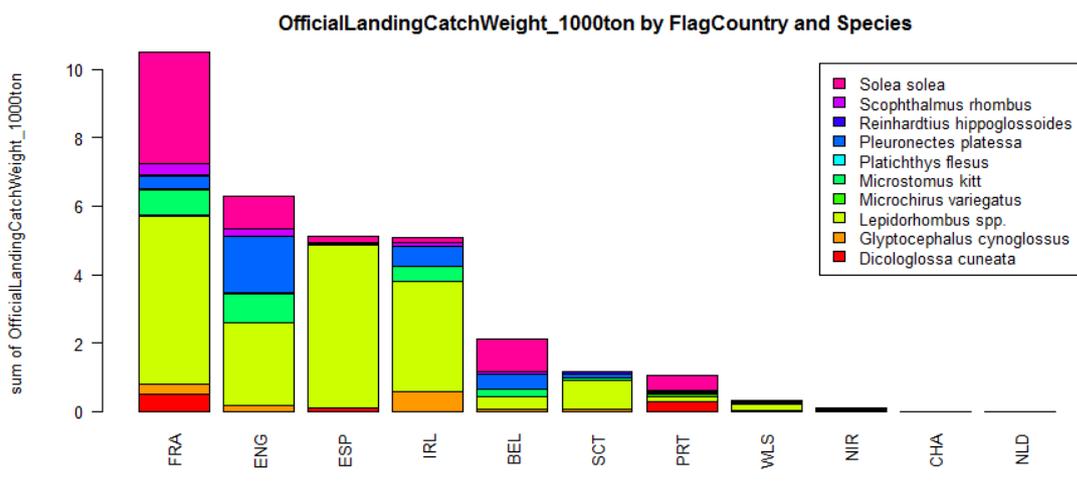
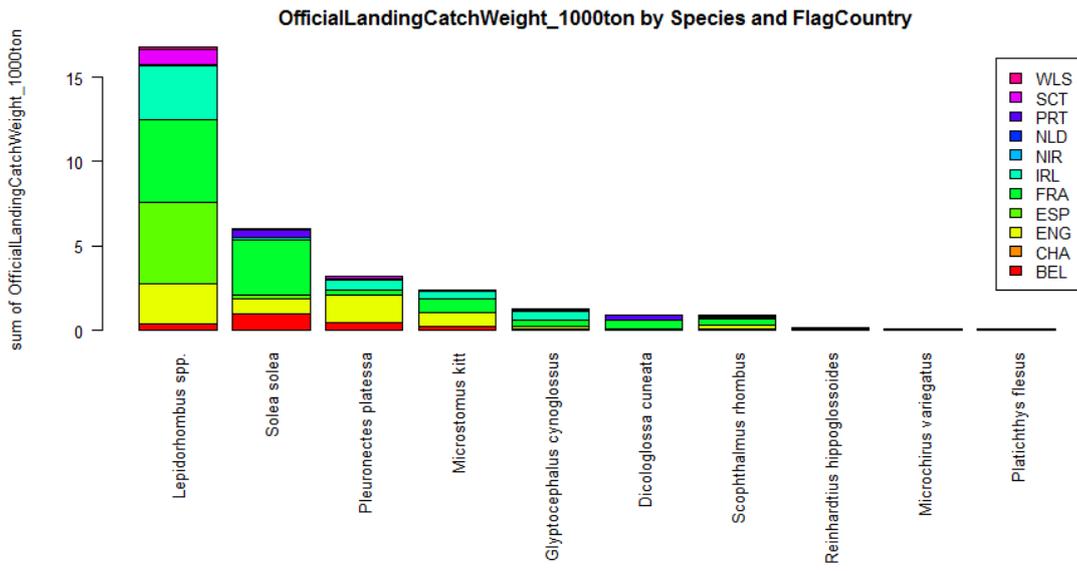


Figure 021 and 022. Main (top 99% in weight) flatfish species landed from North Atlantic Areas during 2017: Distribution by FlagCountry. Data source: RDB (extract 24/09/2018).

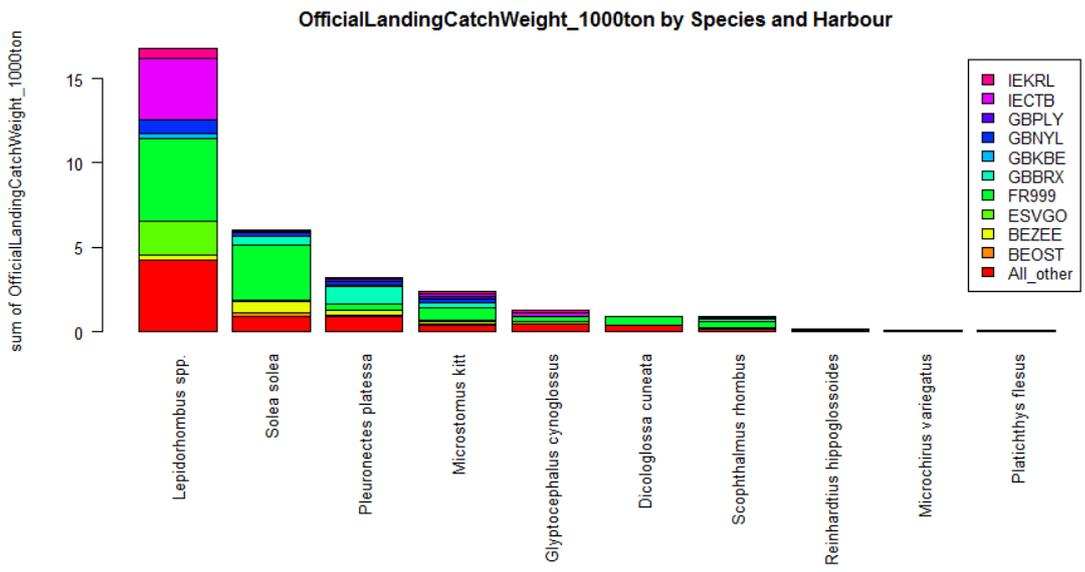
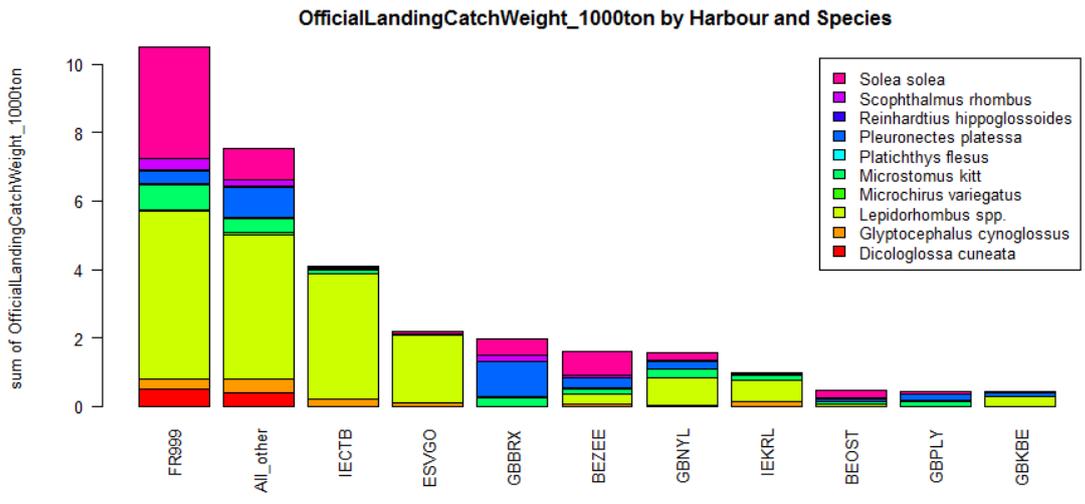


Figure 023 and 024. Main (top 99% in weight) flatfish species landed from North Atlantic areas during 2017: Distribution by Top 10 harbour. Data source: RDB (extract 24/09/2018).

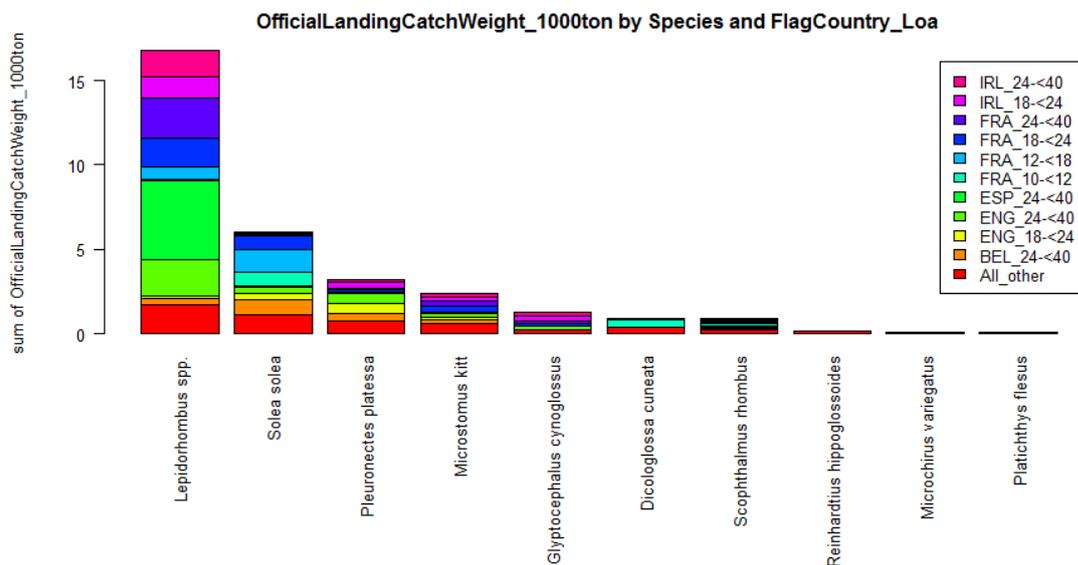
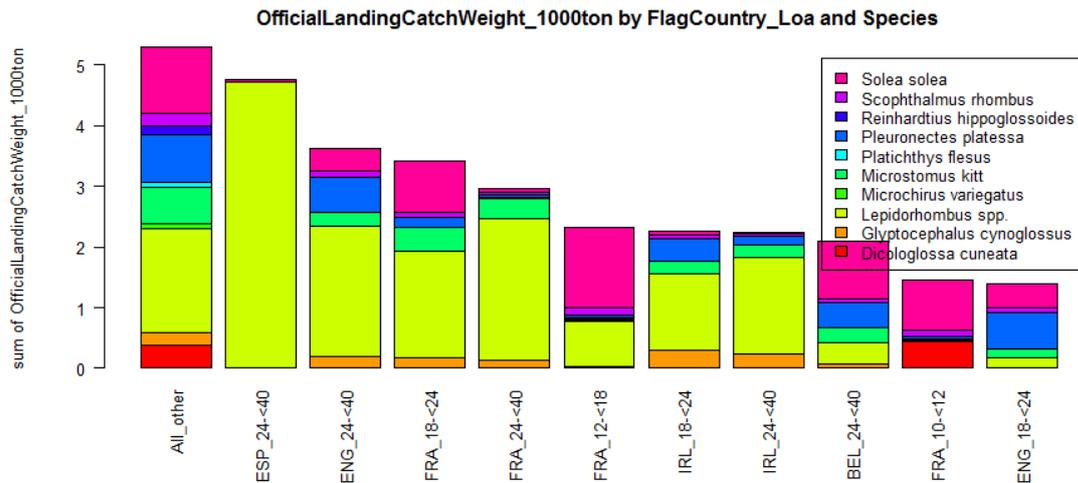


Figure 025 and 026. Main (top 99% in weight) flatfish species landed from North Atlantic areas during 2017: Distribution by Top 10 fleet segment. Data source: RDB (extract 24/09/2018).

Annex 9 – Governance

A comment on proposed changes to the Control Regulation from a DCF viewpoint

Background

Data collected under fisheries control regulations is essential for scientific analysis of fishing activity and is routinely used by Member States (MS) for this purpose. Indeed, this is recognised in article 55 of the proposed regulation:

“The data collected by Member States is also of great value for scientific purposes. It should be clarified that scientific bodies of Member States and Union scientific bodies may be provided access to the data collected in accordance with Regulation (EC) No 1224/2009 , in particular to vessel position data and fishing activity data.”

Generally, the data required by the Data Collection Framework will be a combination of sampled data (e.g. biological data or socio-economic data) and transversal data (census data about the activities of the fishing fleet including Fishing Logbooks, VMS, and Sales Notes data). The sampled data is collected directly under the DCF legislation but the transversal data is collected under the current Control Regulation (EC No 1224/2009). The DCF Recast (EC No 2017/1004) states that

“...in order to avoid duplication, where the data concerning fisheries are collected and managed in accordance with the rules laid down in other Union legal acts, such as Council Regulation (EC) No 1224/2009 (9) ... this Regulation should only lay down the rules for the use and transmission of such data.”

This means that where data is required by the DCF but is already collected by the MS under different legislation it should not be collected again but it should be shared within the MS for the purposes of the DCF.

The data required by the DCF is normally requested from MS by data calls – although these data calls typically request aggregated data **it is necessary to combined the sampled and transversal data at a detailed level before these aggregations can be calculated.** This means detailed transversal data is required for scientific analysis. It is also necessary to be able to identify the vessel that the transversal data relates to so that different sources of data (e.g. biological sampling) can be linked to the correct commercial fishing trip. This means the detailed transversal data must also contain its vessel indicator.

The detailed, transversal data used for scientific research must be stored and accessed securely and have its confidentiality respected - in particular it won't be made publically available at a detailed level, only at an anonymised, aggregated level.

GDPR

Detailed commercial fisheries data usually allows the indirect identification of living people via the vessel identifier – this means it falls within the scope of the General Data Protection Regulation (GDPR)³. Transversal data is usually initially collected for the purposes of fisheries control and compliance, and it is then used for the secondary purpose of scientific analysis and research.

Recital 156 of the GDPR allows for derogations, under appropriate safeguards, of the usual Data Subject rights (such as the right to object) when processing personal data for scientific research purposes. The further processing of personal data for scientific research purposes is to be carried out when the controller has assessed the feasibility to fulfil those purposes by processing data which do not permit or no longer permit the identification of data subjects, provided that appropriate safeguards exist.

So the further processing of commercial fisheries personal data initially collected under the Control regulation for scientific research is compatible with GDPR as long as the Data Controller has carried out an assessment to show that it is not feasible to do the same research with anonymised data.

³ REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)

Comment on Proposed Changes

There are 2 articles in the proposed changes to the Control Regulation which will have a **severe, negative impact on the scientific analysis of fisheries data**.

Article 110.4

“Vessel position data may be provided to and used by scientific bodies of Member States and scientific bodies of the Union in order to perform scientific research and provide scientific advice if this data no longer contains the reference to the vessel identification numbers and does not allow for the identification of natural persons.

Data listed in paragraph 1(a)(ii) and (iii) may be provided to scientific bodies of Member States, scientific bodies of the Union and Eurostat.”

The effects of the proposed Article 110.4 would be that vessel position data such as that produced by Vessel Monitoring Systems (VMS) would no longer be of scientific use. VMS data itself only contains position, speed, direction, and bearing information but under the current Control regulations it can be linked to Logbooks data using the vessel indicator – this makes it possible to analyse vessel fishing operations and effort on a very fine spatial and temporal scale⁴. It should be noted that any publications resulting from this analysis are anonymised (typically by aggregating data) so that no individual vessel is identifiable. If VMS data was only made available in an anonymised format, then these types of spatial analysis would no longer be possible.

The data referred to in paragraph 1(a)(ii) and (iii) is defined as “(ii) fishing activity data, in particular fishing logbooks, landing declarations, transshipment declarations and prior notifications; (iii) data from take-over declarations, transport documents and sales notes;”.

Whilst it is welcome to have a clear statement that this data may be provided to scientific bodies it doesn't include the other data in paragraph 1(a)(iv) “*data on fishing effort.*”

The proposed changes could have a seriously negative impact on fisheries science. The following re-wording (changes in italics) would remove this problem whilst still respecting to the confidentiality of the personal data.

“Vessel position data may be provided to and used by scientific bodies of Member States and scientific bodies of the Union in order to perform scientific research and provide scientific advice – *however any publications of the research or advice based on the data (such as reports, graphs, and tables) must ensure that the vessel position data is suitably anonymised such that they do not allow for the identification of natural persons.*

⁴ ICES. 2016. Interim Report of the Working Group on Spatial Fisheries Data (WGSFD), 17–20 May 2016, Brest, France. ICES CM 2016/SSGEPI:18. 244pp.

ICES. 2017. Interim Report of the Working Group on Spatial Fisheries Data (WGSFD), 29 May – 2 June 2017, Hamburg, Germany. ICES CM 2017/SSGEPI:16. 42 pp.

Other data listed in paragraph 1(a) and (b) may be provided to scientific bodies of Member States, scientific bodies of the Union and Eurostat.”

Article 112.3

“Personal data contained in information referred to in Article 110(1) and (2) shall not be stored for a period longer than 5 years, except for personal data that is necessary to allow the follow up of a complaint, an infringement, an inspection, a verification or an audit or on-going judicial or administrative proceedings, which may be retained for 10 years. If the information listed in Article 110(1) and (2) is retained for a longer period of time, the data shall be anonymized.”

This proposed change would have the severely detrimental effect of limiting the scientific analysis of fisheries data to a 5 year (or in a few cases 10 year) window. As previously stated it is a requirement for scientific fisheries analysis to have access to detailed transversal data containing the vessel identifier – the lack of this data after 5 years would effectively mean that most analyses would not be possible after this time period.

Fisheries are dynamic and change over time so it is essential to have a long time-series of fisheries data to allow scientists to model and understand these changes. Older data is irreplaceable since it can't be collected again – **deleting or completely anonymising this data would be an act of sabotage which would have long-term implications for the understanding of fisheries**. The following rewording (changes in bold italics) would remove this problem this whilst still respecting the confidentiality of the personal data.

“Personal data contained in information referred to in Article 110(1) and (2) shall not be ***used for operational control purposes*** for a period longer than 5 years, except for personal data that is necessary to allow the follow up of a complaint, an infringement, an inspection, a verification or an audit or on-going judicial or administrative proceedings, which may be retained for 10 years. ***The information listed in Article 110(1) and (2) can be retained for a longer period of time under the following circumstances:***

- a) ***The full, detailed data may be transferred to scientific bodies of Member States and scientific bodies of the Union and used for scientific research purposes as long as it is necessary – however any publications of the research or advice based on the data (such as reports, graphs, and tables) must ensure that the data is suitably anonymised such that they do not allow for the identification of natural persons***
- b) ***The data may be retained by the control agency if it anonymized.”***

Relevant articles from proposed regulation

Brussels, 30.5.2018

COM(2018) 368 final

2018/0193 (COD)

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Council Regulation (EC) No 1224/2009, and amending Council Regulations (EC) No 768/2005, (EC) No 1967/2006, (EC) No 1005/2008, and Regulation (EU) No 2016/1139 of the European Parliament and of the Council as regards fisheries control

{SEC(2018) 267 final} - {SWD(2018) 279 final} - {SWD(2018) 280 final}

https://eur-lex.europa.eu/resource.html?uri=cellar:6d8cdc8b-63f7-11e8-ab9c-01aa75ed71a1.0001.02/DOC_1&format=PDF

(78) Articles 110 and 111 are replaced by the following:

"Article 110

Access to, storage and processing of data

1. Member States shall ensure the remote access at all time and without prior notice, for the Commission or the body(ies) designated by it, of the following data in a non-aggregated form:

(a) fishing activity data:

- (i) vessel position data;
- (ii) fishing activity data, in particular fishing logbooks, landing declarations, transshipment declarations and prior notifications;
- (iii) data from take-over declarations, transport documents and sales notes;
- (iv) data on fishing effort.

(b) other control data:

- (i) data on sightings;
- (ii) data relating to fishing activity in the context of fisheries agreements referred to in paragraph 1 of Article 3;
- (iii) data on entries into and exits from fishing areas,
- (iv) data from fishing licences and fishing authorisations;
- (v) inspection reports;
- (vi) data on engine power;
- (vii) control observers reports;
- (viii) national control action programmes;
- (ix) list of national officials.

(c) the electronic database for the purpose of the verification of the completeness and the quality of the data collected as referred to in Article 109;

(d) the national register of infringements as referred to in Article 93.

2. The Commission or the body designated by it may collect data, where necessary including personal data, in order to fulfil their duties under the rules of the common fisheries policy, in particular for carrying out inspections, verifications, audits and enquiries, or under the rules of agreements with third countries or international organisations.

3. Member States shall grant access to Commission officials or staff of the body designated by the Commission to the data referred to in paragraph 1.

4. Vessel position data may be provided to and used by scientific bodies of Member States and scientific bodies of the Union in order to perform scientific research and provide scientific advice if this data no longer contains the reference to the vessel identification numbers and does not allow for the identification of natural persons.

Data listed in paragraph 1(a)(ii) and (iii) may be provided to scientific bodies of Member States, scientific bodies of the Union and Eurostat.

5. Member States shall establish, implement and host the relevant fisheries data bases containing the data referred to in paragraph 1. Access to these data bases shall be granted by means of secured access with control of access and specific user profiles, solely for the purpose of reporting, statistics, inspections and the investigation of infringements.

(79) *Article 111*

Exchange of data

1. Each flag Member State shall ensure the direct electronic exchange of relevant information with other Member States, and where appropriate, the Commission or the body(ies) designated by it, in particular:

(a) vessel position data when its vessels are present in another Member State's waters;

(b) fishing logbook information when its vessels are fishing, landing or transshipping in another Member State's waters;

(c) landing declarations and transshipment declarations when such operations take place in another Member State's ports;

(d) prior notification when the intended port is in another Member State;

(e) sales notes, transport documents and take-over declarations when one or more of those operations take place in another Member State;

(f) inspection and surveillance reports;

(g) the national register of infringements.

2. Each coastal Member State shall ensure the direct electronic exchange of relevant information with other Member States and, where appropriate, the Commission or the body(ies) designated by it, in particular by sending:

(a) sales notes' information to the flag Member State when a first sale originates from another Member State's fishing vessel;

(b) take-over declaration information when the fish is placed in storage in a Member State other than the flag Member State or the Member State of landing;

(c) sales notes and take-over declaration information to the Member State where the landing took place;

(d) transport documents to the flag Member State, Member State of destination and transit of the transport.

- (e) inspection and surveillance reports;
- (f) the national register of infringements."

(*) Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1)."

(80) the following Article 111a is inserted:

"Article 111a

Uniform conditions for the implementation of provisions on data

For the purpose of implementing Articles 110 and 111, the Commission may, by means of implementing acts, lay down detailed rules on

- data quality, compliance with deadlines for submission of data by operators, validation of the data, including cross-checks, analysis, verification,
- exchange of data between Member States,
- access to the data by the Commission or body designated by it,
- access to the data by scientific bodies of the Union and Eurostat,
- interoperability and standardisation of databases
- data listed in Article 110(1) and (2), including additional specific safeguards for processing of personal data and security rules applicable to the databases.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 119(2)."

(81) Article 112 is replaced by the following:

"Article 112

Protection of personal data

1. Data referred to in Article 110(1) with the exception of data referred to in paragraph 1(b) (viii), and in Article 110(2) may include personal data.

2. The Commission may process personal data to which it has access pursuant to Article 110(1) and (2) for the following purposes:

- (a) monitoring of fishing opportunities including quota consumption;
- (b) validation of data;
- (c) monitoring of fishing activities carried out by Union fishing vessels, or fishing activities of vessels within Union waters;
- (d) monitoring Member States' controls of fishing activities and in the supply chain;
- (e) inspections, verifications, audits and enquiries;
- (f) preparation of, and compliance with international agreements and conservation measures;
- (g) policy evaluations and impact assessments;
- (h) scientific research and scientific advice;

(i) enquiries pertaining to complaints and infringements.

3. Personal data contained in information referred to in Article 110(1) and (2) shall not be stored for a period longer than 5 years, except for personal data that is necessary to allow the follow up of a complaint, an infringement, an inspection, a verification or an audit or on-going judicial or administrative proceedings, which may be retained for 10 years. If the information listed in Article 110(1) and (2) is retained for a longer period of time, the data shall be anonymized.

4. Member States shall be regarded as a controller as defined in Article 4(7) of Regulation (EU) 2016/679(*) in relation with the processing of personal data which they collect pursuant to this Regulation.

5. The Commission shall be regarded as a controller as defined in point (b) of Article 3(2) of Regulation (EU) 2018/2018 of the European Parliament and of the Council(**) in relation with the processing of personal data which it has collected pursuant to Article 110(1) and (2) of this Regulation.

6. The Commission or body designated by it and the Member State authorities shall ensure the security of the processing of personal data that takes place pursuant to the application of this Regulation. The Commission or body designated by it and the Member State authorities shall cooperate on security-related tasks.

7. In particular, the Commission shall adopt the necessary measures, including a security plan, a business continuity plan and a disaster recovery plan, in order to:

(a) physically protect data, including by making contingency plans for the protection of critical infrastructure;

(b) prevent the unauthorised reading, copying, modification or removal of data media;

(c) prevent the unauthorised input of data and the unauthorised inspection, modification or deletion of recorded personal data;

(d) prevent the unauthorised processing of data and any unauthorised copying, modification or deletion of data;

(e) ensure that persons authorised to access the relevant fisheries data bases have access only to the data covered by their access authorisation, by means of individual user identities and confidential access modes only;

(f) ensure that it is possible to verify and establish to which bodies personal data may be transmitted and what data has been processed in the relevant fisheries data bases, when, by whom and for what purpose;

(g) prevent the unauthorised reading, copying, modification or deletion of personal data during the transmission of personal data to or from the relevant fisheries data bases or during the transport of data media, in particular by means of appropriate encryption techniques;

(h) monitor the effectiveness of the security measures referred to in this paragraph and take the necessary organisational measures related to internal monitoring to ensure compliance with this Regulation.

8. Member States shall take measures equivalent to those referred to in paragraph 7 as regards security in respect of the processing of personal data by the authorities having a right to access any of the relevant fisheries data bases.

(*) Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1).

(**) Proposal for a Regulation of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC (COM (2017)8 final, 10.1.2017)"

(82) Articles 114 and 115 are replaced by the following:

"Article 114

Official website

"For the purpose of this Regulation, each Member State shall set up and keep up-to date an official website for operators and the general public, containing as a minimum the information listed in Article 115.

Article 115

Content of the website

On their websites, Member States shall publish without delay, or provide a direct link to, the following information:

(a) the names and addresses of the competent authorities responsible for issuing fishing licences, and fishing authorisations referred to in Article 7;

(b) the list of designated ports for the purpose of transshipment specifying their operating hours, as referred to in Article 20;

(c) one month after the entry into force of a multiannual plan, and after approval by the Commission, the list of designated ports, specifying their operating hours as referred to in Article 43, and within 30 days thereafter, the associated conditions for recording and reporting the quantities of the species under the multiannual plan for each landing;

(d) the decision establishing the real-time closure, and defining clearly the geographical area of the affected fishing grounds, the duration of the closure and the conditions governing fisheries in that area during the closure, as referred to in Article 53(2);

(e) the contact point details for the transmission or submission of fishing logbooks, prior notifications, transshipment declarations, landing declarations, sales notes, take-over declarations and transport documents as referred to in Articles 14, 17, 20, 23, 55, 62, 66 and 68;

(f) a map with the coordinates of the area of temporary real-time closures as referred to in Article 54, specifying the duration of the closure and the conditions governing fisheries in that area during the closure;

(g) the decision to close a fishery under Article 35 and all necessary details;

(h) a list of the fishing restricted areas and corresponding restrictions

(i) a list of registered weighers specifying the port and the weighing facility in accordance with Article 59a."

Annex 10 – Intersessional Pan Regional Subgroup on the Landing Obligation

Landing Obligation: Report of the Intersessional Subgroup on the implications of Management Measures on Data collection September 2018

Intersessional Pan Regional Subgroup on the Landing Obligation

It is clear that discards will continue under various forms of exemptions (high survivability, de minimis, prohibited species etc) and for all species/stocks without TAC. This obliges continued observer programs under the DCF and adds to the complexity of interpreting official catch records and observer data collected onshore and offshore. In 2016 the RCMNA proposed an intersessional task group to continue monitoring the impact of the landing obligation on data collection and catch estimates.

STECF PLEN 17-01 stated that there would appear to be a “lack of reporting by vessel operators of fish discarded under exemptions, discards of fish currently not subject to the landing obligation and catches of fish below MCRS”. This statement is validated by the lack of data coming from the control agencies on both registered discards and BMS landings. STECF PLEN 17-01 also states that “if the data situation does not improve and the true quantities being caught as reported do not reflect the actual removals, they may have a significant impact on the quality of scientific advice”.

It was therefore decided to continue this work but at a pan regional level working intersessionally.

A questionnaire from the RCM NA (Appendix I) in order to capture the practical issues and perceived concerns relating to current and pending discard plans was amended to cover the species/fisheries/fleets under the obligation in the North Atlantic, Baltic and North Sea. This was circulated to all MS on 07/05/2018 with instructions to complete them for review by 29/06/2018. The subgroup thereafter analysed the filled questionnaires and RDB data and summarised the findings in a report and presentation before the start of the RCG’s.

Initial ToRs- Implication of the Landing obligation:

Pan Regional subgroup on Implication of the Landing obligation

- Evaluate the implication of the landings obligation on national and regional catch sampling programmes
- review and analyse 2017 BMS CS and CL data on the RDB and source and review other available metrics (e.g. refusal rates)
- contribute to and review ToRs & outcomes of WGCATCH 2017
- Explore other data sources to evaluate implication of the landings obligation such as last haul data from control agencies.

The text below summarises the key findings to date from the submitted responses. Responses were received from all countries except France. Multiple responses were received from some countries who broke them down by area/region (SWE-Baltic, N Sea) (UK- ENG, WALES, NI and SCO) (ESP and Basque Country) or by Species (FIN- Salmon, Cod, herring Sprat) therefore when compiling the answers some were combined where applicable.

ToR 1 and 4: Review of questionnaires

Overview of métiers on exemptions at a national level

The EU landing obligation is phased in across fisheries and species from 2015 to 2019. Under the landing obligation, all discards of regulated commercial species have to be landed. In all areas except for the Baltic, the landing obligation is gear specific rather than stock specific resulting that the species included in the landing obligation has changed during its implementation. There are some exemptions (for fish with high survivability, and a specific *de minimis* discard allowance under certain conditions) to the landing obligation which are defined in the regional discard plans covering the North Western Waters, South Western Waters, North Sea, Baltic Sea, Mediterranean Sea and Black Sea. These catches are not counted against the quota, but must be documented in the logbook. Since October 2014 The EC has adopted several discard plans through so-called delegated acts in preparation of the implementation of the landing obligation (https://ec.europa.eu/fisheries/cfp/fishing_rules/discards_en). MS were asked in the questionnaire to provide an overview of metiers on exemptions at national level. As this question was interpreted differently by the various MS, a general overview of the submitted responses cannot be given at present. Therefore, an overview of all exemptions that are applicable for the North Sea, Western Waters and the Baltic Sea in 2018 (and if applicable onwards) based on the EC delegated acts is provided in Appendix II. In future it would be interesting to investigate which MS are applying which exemptions.

Q1. *Has the MS successfully adapted or implemented their onshore sampling programme to capture all landings categories? (including BMS)*

Summary: Yes; 10, No; 3, Not tested; 0 & NA; 4

Generally, it is stated that sampling sheets are generic and will record BMS landings as another category or that this category has been added so it can be registered separately. Databases allow the introduction of new categories.

Overall, the filled questionnaires indicate that landings of BMS are rare. The ability to sample BMS differs somewhat between MS. SWE has included Cod BMS in the Baltic in the sampling protocol; this catch fraction is sampled in a similar way as a size category. However, the challenge is to raise the Cod BMS and discard data to avoid "double counting". GER also occasionally samples Cod BMS in the Baltic. LTU comment that all landings are available on the designated landing sites. UK_Eng_Wales, NL and POL have reported that it is difficult to sample BMS landings, if present, as it is not possible to determine its origin (i.e. vessel, trip) and/or due to lack of access to BMS landings onshore.

Q2. *Has the MS successfully adapted or implemented their offshore sampling programme to capture all catch categories? (Including BMS)*

Summary: Yes; 13, No; 3, Not tested; 0 & NA; 1

MS can register BMS as a separate fraction on the sampling sheets. BMS can be stored in the Databases. BMS sampling is captured in most offshore sampling procedures as a separate catch category. In other words, sampling procedures allow to sample BMS. However, landings of BMS fish are rare. Some countries (ESP) have not observed any changes in the fleet behaviour but they are ready to collect data in the required format. In GER BMS information from the Baltic comes from the logbooks only, while SWE samples Cod BMS at sea in a similar way as other size categories. Similar to

the onshore sampling programme, SWE note that the challenge is to raise the collected data and avoid “double counting”.

Q3. *Has there been issues getting access to vessels and all components of the catch and landings (incl. BMS landings)?*

Summary Onshore: Yes; 6, No; 9, Not tested; 0 & NA; 2

For those responding with a yes it was either related to lack of storage space for the BMS landing on shore, loaded directly on to lorries, high refusal rates to sampling places (POL), mixing of BMS landings by species and by vessels (NL, UK_Eng_Wales) or it being a rare event with little landings (DK, UK_SCO)

Summary Offshore: Yes; 4, No; 11, Not tested; 2 & NA; 0

For those with a yes response it was related to high refusal rates thus making it difficult to get on board vessels (POL), difficulty in accessing certain fleet segments (IRL, SWE Baltic) and one country responded (ESP) saying yes but this was related to no BMS landing being found in the samples.

Q4. *Has the MS commenced the logging of responses when trying to source sampling events/observer trips?*

Summary Onshore: Yes; 8, No; 4, Not tested; 2 & NA; 3

Protocols vary from full logging of all phone calls (POL), to partial logging (IRL) where there are issues in one area; In general, sampling ashore does not seem to be an issue. Countries that answered no stated that they do not have any problems therefore no need to log the responses.

Summary Offshore: Yes; 12, No; 4, Not tested; 1 & NA; 0

All countries have a system for recording the responses and the time stamps vary from 2005 (DK) being the earliest implemented to April 2018 (UK_NIR). For those countries not logging they have stated that there are no problems. In one instance (LTU), this process has not been tested.

Q5. *Is there any evidence of an effect on the quality of data?*

Summary Discard: Yes; 3, No; 9, Not tested; 6 & NA; 1

Summary Landings: Yes; 1, No; 12, Not tested; 3 & NA; 3

Summary Control data: Yes; 4, No; 8, Not tested; 5 & NA; 1

For half or more of the MS there has not been any evidence of an effect of the landing obligation on the quality of data.

The effects observed on the quality of discard data, tested or not, relate in general to refusal rate, more pronounced observer effects and confusion relating to the complexity of landing obligation with all the exemptions. The latter also affecting the observers work at-sea. In respect to the quality of control data, the main concerns are the very limited amount of BMS and discards recorded, incompleteness of data and in some countries the logbook has not until recently been able to hold all

the information required. Further, there are concerns that the complexity of the landing obligation leads to errors in the logbooks.

Another overall conclusion is that very few countries have made any analysis of the effects, at least only a few mention any analysis. Some (DEN SWE) have tested the registered amount of BMS landings against their observer programme; the general conclusion is that the registered amounts are much lower than expected. A single country (BEL) has used last haul data from the control agency to analyse if the refusals in their discard programme causes bias.

Q6. *Is there any evidence of a change in fishing behaviour? Technical (fishing gear, sorting processes) and tactical (fishing grounds and seasons)?*

Summary: Yes; 5, No; 8, Not tested; 3 & NA; 1

Again, the overall conclusion is that the landing obligation has not resulted in any changes in fishing behavior and none has made adjustments to account for the ones observed in their programme.

The few changes observed relate to implementation of more selective gears.

Also again, it seems that very few countries have carried out any analysis.

Q7. *Is the MS doing any analysis for any observer effect?*

Summary: Yes;5, No; 9, Not tested;1 & NA; 1

Nine MS have not analysed a potential observer effect on the fishing behaviour when it comes to discarding. Reasons for this is partly because on board observing is not applicable either because of exemptions in landing obligation, de minimis rule, there are practically insignificant amounts of discarding or only harbour/self-sampling is applicable. Some MS reported that the observer effect is being analysed and a few also reported the general outcome or conclusions from the analysis. ESP has carried out some bias analysis, LAT reported that a simple analysis of observer effect has been performed and the result showed that fishermen didn't change fishing grounds in the trips with observers on the board. POL analysed VMS and logbook data in order to check whether there is any observer effect. The results showed that there is a good overlap of the spatial pattern of trips with and without observers on board. POR mentioned a preliminary study on the comparison of observer effect during offshore sampling, but for the period before the Landing Obligation (2012-2015)

SWE in the Baltic have tested but not thoroughly. However, discarding continues as usual in most observer trips and comparisons with logbooks sales slips from observed vessels do in most cases not show large differences between observer/non observer trips. SWE (North Sea) have not tested observer effect. However, they note that no BMS landings were observed on board while discards were very low in the observer trips. This suggests a possible change in fishing behaviour which needs to be tested further. While UK_Eng_Wales have also not tested observer effect, regular reviews of the observer coverage have not provided any visual evidence of an observer effect.

Q8. *What additional measures has the MS put in place to implement the LO /regional discard plan?*

Summary: Yes; 8, No; 6, Not tested; 0 & NA; 2

In order to improve the reporting of discards, logbooks have been amended to include the new capture categories. Also funding has been granted (IRL and UK_Eng_Wales) for improving the harbour facilities for handling, processing and storing extra landings resulting from the landing obligation. SWE has changed quota allocation system, quota allocated individually to vessels and are to some extent transferrable during the year. GER has attempted to get access to data from the last-haul project and the ESP_Basque has carried out some selectivity and survival studies. LTU have arranged meetings with fishers and fish trade stakeholders in matters of implementing the landing obligation as well as provide consultation by electronic communication devices

Q9. *Is or has the MS been involved in Pilot studies concerning the implications of the LO i.e. last haul data, video monitoring, reference fleets*

Summary: Yes; 12, No; 3, Not tested; 1 & NA; 0

12 of the responses indicated that there has been some studies relating to the landing obligation, these have been in the form of the analysis of last haul data, (DEN, GER, POL, SWE) others refer to survivability and selectivity studies, (Esp_Basque, NLD, UK Eng-Wales) the remaining countries have commenced or are commencing using CCTV (DEN, NLD, and the UK_Eng_Wales and SCO). Other countries (POR) have conducted studies, but before the landing obligation and more recently the Azores mention the use of the Discardless project

An example of a data sheet and protocols from EFCA for last haul data from the Baltic is presented in Appendix III

Q10. *Has the LO had any implication on recreational fisheries?*

Summary: Yes; 1, No; 11, Not tested; 1 & NA; 2

The vast majority of MS answered no or not tested to this question, one MS (LAT) mentioned that they commenced a pilot study in 2018 of relative share of catches of recreational fisheries compared to commercial fisheries. Another country mentioned that it has caused confusion amongst the anglers in the Baltic region (GER)

Q11. *Has the MS carried out trials or desk studies on potential choke species?*

Summary: Yes; 9, No; 6, Not tested; 2 & NA; 0

Definition: A choke species is a species for which the available quota is exhausted (long) before the quotas are exhausted of (some of) the other species that are caught together in a (mixed) fishery (Zimmermann et al., 2015).

Numerous countries have carried out published desk studies:

- GER (Baltic): see Zimmermann et al. 2015. Handling of and possible solutions for choke species withing the reformed CFP- Example of plaice in teh Baltic Sea IP/B/PECH/IC/2015-124.
- North Sea: Demersal species in the North Sea (mixed fisheries study) in frame of the ICES WGMIXFISH and EU project DRuMFISH (also other regions).
- IRL (Celtic Sea): Fishing trials were conducted in the Celtic Sea in 2014 and 2015 to assess possibile mitigation of choking by adapting fishing behaviour. Results were mixed but in

general showed that skipper modification of fishing activities (timeings and location of tows) were unlikely to reduce choking. <http://www.bim.ie/our-publications/fisheries/> BIM Desk study

- NLD (North Sea) WMR is partner in a project that is executed in cooperation with the demersal industry. For a number of demersal trips in the North Sea all quoted discards are registered. First results indicate that rays is a choke species.
- SWE mentions that it is not a big problem with choke species in the Baltic (directed cod fishery with few species under LO in the bycatch) NS&EA Mostly through the Scheveningen group.
- UK Cefas have worked with seafish to create a model to identify and rank potential choke stocks based on a bioeconomic model used in previous publications (in press). Selectivity experiments and data enhancement work using CCTV cameras looking at area VII haddock to review the extent of the issue and potential for mitigation. More selective gear will help but are not the only answer.
- DEN have completed some work in connection with the mixed fisheries working group, ESP had looked at Gadoids in Celtic Sea, mackerel and hake in Iberian waters and the Basque country have conducted studies on pelagic species caught by trawlers in the Bay of Biscay.

A more detailed report on work carried out in the North Sea is attached in Appendix IV

Q 12. *Are MS monitoring de minimis (and if so, how)*

Summary: Yes; 5, No; 4, Not tested;3 & NA;4

The majority of the countries are monitoring de minimis in some form. In the at sea sampling programme in BEL, the crew is sorting the catch into the different catch categories on a haul by haul basis. In case a fraction of the catch of a species is defined as de minimis by a crew member, the observer will treat this fraction as de minimis too. Information related to total weight, length and age distributions of this de minimis fraction will be collected and stored in the ILVO SmartFish database. In IRL the species will be sampled as part of the discard estimate sampled on observer trips however they do not record if this is de minimis or high survival or illegal discards. In POR a more detailed analysis is carried out; monthly evaluation of logbook data of discards declared by the vessel owners versus the corresponding accumulated catches of the species under de minimis.

SWE in the Baltic, LAT and ESP rely on records in the logbooks.

ToR 2: RDB Analysis

Baltic Sea

Analysis for the Baltic focused on the demersal species in the RDB (i.e. cod and plaice). Most countries have reported BMS landings of cod and plaice (Table 1). In addition, a total of 22 kg of BMS landings of salmon for the period 2015-2017 has been reported by POL. As presented quantities are low they are not likely reflecting the actual catch. This indicates that discarding is still occurring.

The reported BMS landings of cod in the RDB in 2017 are compared with the reported BMS landings of cod in the ICES WGBFAS report (ICES, 2018) in Table 2. Some inconsistencies are found; BMS landings are reported for Germany and Latvia in the WGBFAS report but not in the RDB and the reported quantities of Polish BMS landings differ between the WGBFAS report and the RDB.

The number of countries that have reported sampling of BMS cod at sea has increased in the period 2015-2017; sampling by two countries in 2015, 3 countries in 2016 and 4 countries in 2017 (Table 3a). GER and LAT have reported sampling of BMS cod at sea in 2017 (Table 3a) while BMS landings are not reported in the RDB (Table 1). All countries except Lithuania also reported sampling of discards at sea. LTU and SWE consistently reported sampling of BMS landings of cod at the market in the period 2015-2017 (Table 3b).

Only a few records of logbook registered discards are reported in the RDB.

Table 1: Total BMS (t) landings reported to RDB 2015-2017 in the Baltic Sea

	Cod (<i>Gadus morhua</i>)			Plaice (<i>Pleuronectes platessa</i>)		
	2015	2016	2017	2015	2016	2017
DEU						
DNK	128	36	32			2
EST						
FIN						
LTU	108	63	15			
LVA	117	61				
POL	43	49	93			3
SWE	238	218	93			2
Total	634	427	233			7

Table 2: Comparison between BMS landings of cod submitted to RDB and to ICES WGBFAS (Eastern Baltic cod only) for 2017

	BMS landings cod submitted to RDB			BMS landings cod submitted to WGBFAS		
	BMS (t)	HUC (t)	% BMS (of total landings)	BMS (t)	HUC (t)	% BMS (of total landings)
DEU		350	0.0	10	337	2.7
DNK	31	6111	0.5	31	6109	0.5
EST		1	0.0		1	0.0
FIN		191	0.0		191	0.0
LTU	15	1715	0.9	14	1712	0.8
LVA		2	0.0	21	2058	1.0
POL	75	6542	1.1	15	6468	0.2
SWE	89	4316	2.0	89	4316	2.0

Table 3a: BMS sampling (indicated as no of trips) at sea reported to the RDB 2015-2017 in the Baltic Sea

	Cod		
	2015	2016	2017
DEU			22
DNK			
EST			
FIN			
LTU	6	3	3
LVA		10	8
POL			
SWE	6	60	44

Table 3b: BMS sampling (indicated with x) at market reported to the RDB 2015-2017 in the Baltic Sea.

* Error in uploaded data; BMS cod was sampled in 2016 and 2017.

	Cod		
	2015	2016	2017
DEU			
DNK			
LTU	X	X	X
POL			
SWE	X	*	*

North Sea

DEN and SWE have reported BMS landings for 2017 (Table 4). Where the Swedish BMS landings consisted mostly (295 t) of herring. Three countries have reported sampling of BMS landings of plaice, cod, and haddock and whiting at sea, where BEL and SWE sampled one trip and Scotland 11-21 trips (Table 5). Furthermore, Scotland has reported sampling of BMS landings of haddock and whiting for 1

trip at the market (Table 5). Only Belgium reported logbook registered discards for sole for 19 trips in the RDB.

Table 4: Total BMS (t) landings reported to RDB 2017 in the North Sea

	BMS (t)
BEL	
CHA	
DEU	
DNK	0.5
ENG	
ESP	
EST	
IRL	
LTU	
NIR	
NLD	
POL	
SCT	
SWE	297
WLS	
Total	297.5

Table 5: BMS sampling (indicated as no of trips) at sea and at the market reported to the RDB 2017 in the North Sea

	Plaice	At sea sampling			Market sampling	
		Cod	Haddock	Whiting	Haddock	Whiting
BEL	1					
DEU						
DNK						
ENG						
NIR						
NLD						
SCT		11	21	13	1	1
SWE		1	1	1		
WLS						

North Atlantic

IRL has reported BMS landings for 2017 (Table 6). SCO has reported sampling of BMS landings of haddock for two trips (Table 7). No countries have reported sampling BMS landings at the market. Only BEL reported logbook registered discards for sole for 13 trips in the RDB.

Table 6: Total BMS (t) landings reported to RDB 2017 in the North Atlantic

	Hake	Norway lobster	Whiting
BEL			
CHA			
DEU			
DNK			
ENG			
ESP			
EST			
IRL	0.189	0.02	10.33
LTU			
NIR			
NLD			
POL			
SCT			
WLS			
Total	0.189	0.02	10.33

Table 7: BMS sampling (indicated as no of trips) at sea reported to the RDB 2017 in the North Atlantic

	Haddock
BEL	
DEU	
ENG	
ESP	
GBR	
IRL	
NLD	
PRT	
SCT	2
WLS	

ToR 3: Contribute to and review ToRs & outcomes of WGCATCH 2017

WGCATCH have a routine ToR to 'Document and review changes in legislation that affect data collection and data quality and evaluate their impacts'

Background: The landing obligation has brought changes in reporting all catches and have implications on sampling of commercial catches. Furthermore in 2017 the first EUMAP will be implemented and the pace of transition to statistically sound sampling is expected to increase. The complexity of these processes has been followed up closely by WGCATCH through routine ToRs with the group meetings acting as fora where difficulties and changes can be reported, advice for sampling and estimation obtained and recommendations on best practice or data quality issues to both national laboratories and end-users.

Expected Deliverables: Forum to discuss specific problems and find appropriate solutions and recommendations of best practice

IN 2017 WGCATCH wrote "There appears to be more issues in compliance and the implementation of the LO than there are in the collection of data itself. Where access is straightforward and the different components can be easily identified then samples are continuing to be collected. However, the transition by means of a partial implementation and the current exemptions based on certain conditions make the interpretation of the samples collected onshore and offshore and the estimation complex. The industry might be recording the different components when necessary, but when the control regulation only requires a vessel to record the weight of discarded species exceeding 50kgs on each fishing event then recorded discard figures are likely less than those recorded by observers. The compilation of these questionnaires has been led by the RCM/RCGs and WGCATCH considers they are the best place to keep a watching brief on the impact of the LO on the sampling programmes. WGCATCH role is more that identifying possible issues and providing advice on the issues and problems encountered, developing ICES WGCATCH REPORT 2017 | 17 methods to assess the quality of the data retrieved and estimates produced. WGCATCH recommends members of all RCGs to fill in the questionnaires on an annual basis."

The RCG's will continue to fill in the questionnaires and identify potential issues

For discussion: Any feedback to the RCG's for future work?

Appendix I: Example of the questionnaire distributed to the relevant countries

Monitoring the impact of the landing obligation on data collection

Country:

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Completion date :

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Regions

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Overview of Species

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Gears

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Comments

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Overview of métiers on exemptions @national level

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1	Has the MS successfully adapted or implemented their <u>onshore</u> sampling programme to capture all landings categories? (including BMS)	
	Modified sample sheets	
	Modified databases	
	Sampling procedures	
	If yes - how? If no - why not?	
2	Has the MS successfully adapted or implemented their <u>offshore</u> sampling programme to capture all catch categories? (including BMS)	
	Modified sample sheets	
	Modified databases	
	Sampling procedures	

	If yes - how? If no - why not?	
3	Has there been issues getting access to vessels and all components of the catch and landings (incl. BMS landings)?	
	Onshore	
	If yes - what? Perceived, anecdotal, measureable?	
	Offshore	
	If yes - what? Perceived, anecdotal, measureable?	
4	Has the MS commenced the logging of responses when trying to source sampling events/observer trips?	
	Onshore	
	If yes - what? Perceived, anecdotal, measureable?	
	Offshore	
	If yes - what? Perceived, anecdotal, measureable? For what time period?	
	If no - why not?	
5	Is there any evidence of an effect on the quality of data?	
	Discard estimates	

	If yes - what? Perceived, anecdotal, measurable?	
	Landings data	
	If yes - what? Perceived, anecdotal, measurable?	
	Control data - Landings data (logbook, sales notes)	
	If yes - what? Perceived, anecdotal, measurable?	
6	Is there any evidence of a change in fishing behaviour? Technical (fishing gear, sorting processes) and tactical (fishing grounds and seasons)?	
	If yes - what? Perceived, anecdotal, measurable?	
	If measurable - have you or will you need to account for this in your programme?	
7	Is the MS doing any analysis for any observer effect	
	If yes - what?	
8	What additional measures has the MS put in place to implement the LO /regional discard plan	
	NA If yes - what?	

	NS-EA If yes - what?	
	Baltic If yes - what?	

9	Is or has the MS been involved in Pilot studies concerning the implications of the LO i.e. last haul data, video monitoring, reference fleets	
	If yes - what?	

10	Has the LO had any implication on recreational fisheries?	
	If yes - what?	

11	Has the MS carried out trials or desk studies on potential choke species?	
	If yes - what species and areas and provisional results?	

11	Are MS monitoring de minimis (and if so, how)	
	If yes - How?	

Appendix II: Overview exemptions

Table II.1: Overview of Survivability and *De minimis* exemptions for the demersal fisheries North Sea and in Union waters of ICES Division IIa (EU 2018/45)

Survivability exemptions			Defined ICES Division/Area	Exemption for defined fishery and ICES Division/Area
Defined fishery				
Pots (FPO)				<u>Norway lobster</u> shall be released whole, immediately and in the area where it has been caught
Bottom trawls (OTB, TBN)	≥70mm meshsize	Species selective grid with bar spacing of max. 35 mm	IIIa	<u>Norway lobster</u> shall be released whole, immediately and in the area where it has been caught
Bottom trawls (OTB, TBN)	≥90mm meshsize	Seltra panel	IIIa	<u>Norway lobster</u> shall be released whole, immediately and in the area where it has been caught
Bottom trawls (OTB, TBN)	≥80mm meshsize	Netgrid selective device	FU6, FU8, FU9 during winter	<u>Norway lobster</u> shall be released whole, immediately and in the area where it has been caught
Otter trawls (OTB)	Cod-end 80-99mm mesh size	Vessel max. length 10m, max. engine power 221 kW, fishing in waters depth of ≤30 m, with limited tow duration of ≤1.30 hours	Within 6nm of the coast of IVc and outside identified nursery areas	<u>Common sole</u> shall be released immediately
Pots & fyke nets (FPO, FYK)				<u>Cod, haddock, whiting, plaice, sole, hake and saithe</u> shall be released immediately and below the sea surface
<i>De minimis</i> exemptions				
Defined fishery			Defined ICES Division/Area	Exemption for defined fishery and ICES Division/Area
Trammel nets & gillnets (GN, GNS, GND, GNC, GTN, GTR, GEN, GNF)			IIIa, IV, Union waters IIa	Discard a quantity of <u>common sole</u> which shall not exceed 3% of the total annual catches of that species
Beam trawl (TBB)	80-119mm mesh size	With increased mesh size in the extension of the beam trawl, Flemish panel	IV	Discard a quantity of <u>common sole</u> below the MCRCs which shall not exceed 6% of the total annual catches of that species
Bottom trawls (OTB, OTT, TB, TBN)	80-99mm mesh size		IV, Union waters IIa	Discard a quantity of <u>Norway lobster</u> below MCRCs which shall not exceed 2% of the total annual catches of that species

Norway lobster fishery with bottom trawls (OTB, TBN)	≥70mm mesh size	With a species-selective grid with bar spacing of maximum 35 mm	IIIa	Discard a combined quantity of <u>common sole, haddock, whiting, cod and saithe</u> below MCRS, which shall not exceed 4% of the total annual catches of Norway lobster, common sole, haddock, whiting and Northern prawn, cod and saithe
North prawn fishery with bottom trawls (OTB)	≥35mm mesh size	With a species selective grid with bar spacing of max. 19 mm, with unblocked fish outlet	IIIa	Discard a combined quantity of <u>common sole, haddock, whiting, cod, plaice and saithe</u> below MCRS, which shall not exceed 1% of the total annual catches of Norway lobster, common sole, haddock, whiting, cod, saithe and plaice and Northern prawn
Mixed fishery for sole, whiting, plaice and species without catch limits with bottom trawls (OTB, OTT, SDC, SSC)	70-99mm mesh size		IVc	Discard a combined quantity of <u>whiting and cod</u> below MCRS, which shall not exceed 6% of the total annual catches of Norway lobster, haddock, sole, Northern prawn, whiting, plaice saithe and cod; the max. amount of cod that may be discarded shall be limited to 2% of those total annual catches
Bottom trawls (OTB, OTT, TBN)	90-119mm mesh size or ≥120 mm mesh size	With Seltra panel (90-199mm mesh size)	IIIa	Discard a quantity of <u>whiting</u> below MCRS, up to a max. of 2% of the total annual catches of Nephrops, cod, haddock, whiting, saithe, common sole, plaice and hake

Table II.2: Overview of Survivability and *De minimis* exemptions for certain pelagic fisheries and fisheries for industrial purposes in the North Sea (EU 2018/189 and EU 1395/2014)

Survivability exemptions		Defined ICES Division/Area	Exemption for defined fishery and ICES Division/Area
Defined fishery			
Purse seine fisheries			LO shall not apply to catches of <u>mackerel and herring</u> if: (i) the catch is released before 80% for mackerel fishery, 90% for herring fishery or 80% in mixed fishery, of the purse seine is closed, (ii) the purse seine gear is fitted with a visible buoy clearly marking the limit for the point of retrieval, (iii) the vessel and gear are equipped with an electronic recoding and documenting system when, where and extent to which the purse seine has been hauled for all fishing operations. Further, it is prohibited to release catches of mackerel and herring after the point of retrieval and the surrounded school of fish shall be sampled before its release to estimate the species composition, fish size composition and quantity.
<i>De minimis</i> exemptions		Defined ICES Division/Area	Exemption for defined fishery and ICES Division/Area
Defined fishery			
Pelagic trawlers targeting mackerel, horse mackerel and herring (OTM, PTM)	Vessel overall length up to 25 m	IVb and c south of 54 degrees north	Up to a max of 1% of the total annual catches of <u>mackerel, horse mackerel, herring and whiting</u> may be discarded in 2018, 2019 and 2020

Table II.3: Overview of Survivability and *De minimis* exemptions for demersal and deep sea fisheries in North-Western waters (EU 2018/46)

Survivability exemptions				
Defined fishery			Defined ICES Division/Area	Exemption for defined fishery and ICES Division/Area
Pots, Traps or creels (FPO, FIX)			Subareas VI,VII	Survival exemption shall apply to catches of <u>Norway lobster</u>
Otter trawl gears (OTT, OTB, TBS, TBN, TB, PTB, OT, PT, TX)	Cod-end mesh size 80-99mm	Vessel max. length 10m, max. engine power 221 kW, fishing in waters depth of ≤30 m, with limited tow duration of ≤1:30 hours	Within 6nm of the coast of Division VIId and outside identified nursery areas	Survival exemption shall apply to catches of <u>common sole</u> below the MCRS
<i>De minimis</i> exemptions				
Defined fishery			Defined ICES Division/Area	Exemption for defined fishery and ICES Division/Area
Bottom trawls and seines of less than 100 mm (OTB, SSC, OTT, PTB, SDN, SPR, TBN, TBS, TB, SX, SV, OT, PT, TX)			Divisions VIIde	Discard <u>whiting</u> up to 6% of the total annual catches of that species by vessels obliged to land whiting
Pelagic trawls (OTM, PTM)				
Bottom trawls and seines of not less than 100 mm (OTB, SSC, OTT, PTB, SDN, SPR, TBN, TBS, TB, SX, SV, OT, PT, TX)			Divisions VIIb-j	Discard <u>whiting</u> up to 6% of the total annual catches of that species by vessels obliged to land whiting
Pelagic trawls (OTM, PTM)				
Bottom trawls and seines of less than 100 mm (OTB, SSC, OTT, PTB, SDN, SPR, TBN, TBS, TB, SX, SV, OT, PT, TX)			Subarea VII, except Divisions VIIade	Discard <u>whiting</u> up to 6% of the total annual catches of that species by vessels obliged to land whiting
Pelagic trawls				

(OTM, PTM)				
Vessels obliged to land Norway lobster and fishing for Norway lobster			Subarea VII	Discard <u>Norway lobster</u> up to 6% of the total annual catches of that species
Vessels obliged to land Norway lobster and fishing for Norway lobster			Subarea VI	Discard <u>Norway lobster</u> up to 2% of the total annual catches of that species
Vessels obliged to land common sole and using trammel and gill nets to catch common sole			Divisions VIIdefg	Discard <u>common sole</u> up to a maximum of 3% of the total annual catches of that species
Vessels obliged to land common sole and using TBB gear	Meshsize 80-119mm	Increased selectivity, such as a large mesh extension	Divisions VIIdefg	Discard <u>common sole</u> up to a maximum of 3% of the total annual catches of that species

Table II.4: Overview of Survivability and *De minimis* exemptions for certain pelagic fisheries in North-Western waters (EU 2018/190 and EU 1393/2014)

Survivability exemptions		Defined Division/Area	ICES	Exemption for defined fishery and ICES Division/Area
Defined fishery				
Purse seine fisheries				LO shall not apply to catches of <u>mackerel and herring</u> if: (i) the catch is released before 80% for mackerel fishery, 90% for herring fishery or 80% in mixed fishery, of the purse seine is closed, (ii) the purse seine gear is fitted with visible buoys clearly marking the limit for the point of retrieval, (iii) the vessel and gear are equipped with an electronic recoding and documenting system when, where and extent to which the purse seine has been hauled for all fishing operations. Further, it is prohibited to release catches of mackerel and herring after the point of retrieval and the surrounded school of fish shall be sampled before its release to estimate the species composition, fish size composition and quantity.
<i>De minimis</i> exemptions				
Defined fishery		Defined ICES Division/Area		Exemption for defined fishery and ICES Division/Area
Industrial pelagic trawlers targeting blue whiting and processing it onboard to obtain surimi base		Vb, VI, VII		Discard <u>blue whiting</u> up to a max. of 6% in 2018, and 5% in 2019 and 2020 of the total annual catches of blue whiting
Albacore tuna directed fisheries using midwater pair trawls (PTM)		VII		Discard <u>albacore tuna</u> up to a max. of 6% in 2018, and 5% in 2019 and 2020 of the total annual catches of albacore tuna
Pelagic trawlers using midwater trawl targeting mackerel, horse mackerel and herring (OTM, PTM)	Vessel overall length up to 25 m	VIIId		Discard <u>mackerel, horse mackerel and herring and whiting</u> up to a max. of 1% 2018, 2019 and 2020 of the total annual catches of mackerel, horse mackerel and herring

Table II.5: Overview of Survivability and *De minimis* exemptions for certain demersal fisheries in South-Western waters (EU 2018/44, 2016/2374)

Survivability exemptions Defined fishery	Defined ICES Division/Area	Exemption for defined fishery and ICES Division/Area
Trawls (OTB, OTT, PTB, TBN, TBS, TB, OT, PT, TX)	VII, IX	Survival exemption shall apply <u>Norway lobster</u> in 2018
<i>De minimis</i> exemptions		
Defined fishery Vessels using trawls and seins to catch hake (OTT, OTB, PTB, OT, PT, TBN, TBS, TX, SSC, SPR, TB, SDN, SX, SV)	Defined ICES Division/Area VIII, IX	Exemption for defined fishery and ICES Division/Area Discard <u>hake</u> up to a maximum of 6% in 2018 of the total annual catches of this species
Vessels using beam and bottom trawls targeting common sole (OTB, OTT, PTB, TBN, TBS, TBB, OT, PT, TX)	VIIIab	Discard <u>common sole</u> up to a max. of 5% of the total annual catches of this species
Vessels using trammel nets and gillnets (GNS, GN, GND, GNC, GTN, GTR, GEN)	VIIIab	Discard <u>common sole</u> up to a max. of 3% of the total annual catches of this species

Appendix III: An example of a data sheet and protocols from EFCA for last haul data from the Baltic is presented in

BALTIC SEA - LAST HAUL DATA FROM INSPECTION				
National Inspection Reference Number				
FISHING VESSEL DATA				
FLAG STATE				
EXTERNAL MARK				
NAME				
CFR				
IRCS				
INSPECTION DATA				
DATE				
TIME (start and end of inspection, UTC)				
POSITION (N/S DD.MM.mm - E/W DD.MM.mm)				
ICES AREA and SUB AREA (e.g. 3C22)				
GEAR TYPE (according to Annex XI, 404/2011)				
MESH SIZE (measured by control)				
ESCAPE PANEL TYPE (trawl only)				
GENERAL INSPECTION REMARKS				
Expected date, time and port of landing:				
CATCH COMPOSITION (Last observed haul only)				
Last haul catch (live weight in kg):				
Quantity sampled (live weight in kg):				
SPECIES		Quantities		
HER (live weight in kg)				
SPR (live weight in kg)				
		Above MCRS		Below MCRS
COD (live weight in kg)				
PLE (live weight in kg)				
SAL (individuals)				
		Retained		Discarded
TRS (live weight in kg)				
OTH (live weight in kg, specify species)				
Has the last haul been checked for PETS		Yes	No	
LAST HAUL REMARKS (comments about size distribution, reason for discards, etc.)				
INSPECTION FOR HIGH GRADING OF COD (live weight in kg)				
Size 5	Size 4	Size 3	Size 2	Size 1

Recording of discards from last hauls inspected in Baltic Sea

EFCA General Guidance on Procedures

GENERAL Enter the amount of BMS COD and PLE on board before the last haul from
 INSPECTION the logbook
 REMARKS

For last haul: General points	<ul style="list-style-type: none"> ○ Fish to be discarded and below minimum size (MS) should be kept separate for estimation by inspectors; ○ Estimates in kg for all species apart from salmon in individuals; ○ Develop an procedure to take a sufficiently large sample to enable an accurate estimation of the observed haul; ○ Any additional information that is relevant to the estimation may be provided in remarks section of the data collection form; ○ Data recording: see annex.
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Gear Type ⁵	Recommended Sampling Strategy
Trawl (OT, PT, SDN)	<ul style="list-style-type: none"> ○ Where possible observe the entire fish sorting procedure; ○ If large catches prevent this, take a sufficiently large sample and note: <ul style="list-style-type: none"> - Quantities of catch retained - Quantities of discarded and fish below MS estimated.
Set Nets (GN, GT etc.)	<ul style="list-style-type: none"> ○ Where possible observe hauling of at least one set of nets; ○ Note length of set(s) observed; ○ Note quantities of catch retained, discards and fish below MS.
Longlines (LL etc.)	<ul style="list-style-type: none"> ○ Where possible observe of at least one complete longline set; ○ Note number of hooks hauled; ○ Note quantities of catch retained, discarded and fish below MS.

⁵ Traps excluded from the project. Pelagic fisheries should not be prioritised given their scale / complexities.

Biology	Length distribution
Set Nets and Longlines (GN, GT, LL etc.)	<ul style="list-style-type: none"> ○ Where possible take a length distribution of the total catch (~200 fish/ species); ○ Where possible take a subsample (1 fish/ cm) from XX species for the scientist.

Discard	Mammals/ Birds (PETS)
Set Nets (GN, GT etc.)	<ul style="list-style-type: none"> ○ Observe when the gillnets are taken in; - If any mammals or birds are caught in the net register the numbers of individuals by species (if possible) in the remarks box. - Make a tick mark in the scheme if the catch have been checked for PETS

Appendix IV: Additional summary information on desk studies on choke and de minimis in the North Sea

A very detailed study has been conducted by the commission in 2018 and the main part of the following text comes from this report: Ulrich C 2018, . Research for PECH Committee – Landing Obligation and Choke Species in Multispecies and mixed Fisheries – The North Sea

Definition: A choke species is a species for which the available quota is exhausted (long) before the quotas are exhausted of (some of) the other species that are caught together in a (mixed) fishery (Zimmermann et al., 2015).

This study investigated several aspects of the landing obligation and discards problems but chapter 3 is mainly on the choke species chapter 4 on de Minimis and exemptions and main findings and conclusions are highlighted below.

KEY FINDINGS ..

- The landing obligation has triggered the need to characterise the various potential choke situations and assess the factors causing them, in order to identify the most appropriate mitigation strategies.
- For the same area different choke categories may be experienced at EU, Member State, Fleet and Individual vessel levels.
- Presently in the North Sea the most serious risks of choke situations for the main commercial stocks are estimated to be with Northern hake in trawl fisheries and North Sea plaice in small-meshed beam trawl fisheries, but for very different reasons. Issues with hake are linked with the historical relative stability key not being aligned with biological changes in the ecosystem, not least in relation to climate change. Issues with plaice are linked to the large amount of small plaice caught in the sole fishery.
- The potential choke effect of bycatch stocks has been less well studied so far.
- The discussion on possible chokes is still speculative, as these will only be actually observed under conditions of full enforcement of the landing obligation. No such situation have yet been reported by Member States.

Choke species

Levels of choke issues

Choke species situations can be derived by various types of situations, with different characterise to their causes and responsibility. It has been recognized that choke issues can potentially occur at various levels, depending whether the shortage of quota is due to a poor status of a stock or a poor distribution of fishing rights. The Advisory Councils (NSAC, 2017a) has developed a system for categorizing choke problems as follows:

Category 1: Sufficient quota at Member State level—choke is due to distribution within the Member State such that a region, a fleet segment or an individual vessel does not have enough but this can be resolved by the Member State itself.

Category 2: Sufficient quota at EU level, but insufficient quota at MS level—choke is due to a mis-match of catches and the distribution of quotas between Member States and can theoretically be resolved between themselves in a regional context.

Category 3: Insufficient quota at EU level—choke is due to insufficient quota within the relevant sea basin to cover present catches or catch levels that can be realistically reduced, resulting in a total stop of fishing for a Member State or Member States.

Category 4: Economic choking may occur at the vessel level when there is a considerable bycatch of a low value species and the boat is filled with fish that will not deliver a profit.

Initial considerations on quotas prior to landing obligation

The landing obligation has been gradual phased-in for the North Sea demersal fisheries. This has resulted in higher focus on the species first to be implemented in the landing obligation and therefore the species that are in focus today are different from the ones in focus 1-2 years ago.

Fishery	Cod	Haddock	Saithe	Whiting	N. lobster	Sole	Plaice	N. prawn	Hake
TR1	2017	2016	2016 /2018	2017	2017	2017	2016	2016	2019
TR2	2018	2016	2018	2018	2016	2016	2019	2016	2019
GN/GT	2017	2017	2018	2017	2017	2016	2019	2016	2019
LL	2017	2017	2018	2017	2017	2017	2019	2016	2016
BT1	2018	2017	2018	2017	2017	2017	2017	2016	2019
BT2	2018	2017	2018	2018	2017	2016	2019	2016	2019
TRAPS	2018	2017	2018	2017	2016	2017	2019	2016	2019
Trawl 32-69 mm	2018	2017	2018	2017	2017	2017	2019	2016	2019

Prior to the landing obligation (STECF, 2014) investigated for which species and stocks each Member State had catches (including discards) in 2012 in excess of its initial and final quota (including swaps/banking etc.). Landings in excess of initial quota but not of final quota illustrated the dependency of MS on swaps to cover their fisheries, while catches in excess of final quota illustrated potential risks of choke species at Member State level. STECF concluded at this time that these preliminary analyses demonstrated that for all Member States and for a number of primary and secondary (by-catch) stocks, catches in 2012 were well in excess of the available quota, and for some stocks, this was the case even after quota swaps and banking and borrowing. That means that while in many cases the landings were aligned with the landings quotas, TACs increases (top-ups) might not necessarily be sufficient to cover the discards of all Member States.

In March 2017, the NSAC conducted an updated analysis of this, comparing available quota with 2015 landings and discards data for the main species (NSAC, 2017b). The aim was to classify the stocks according to the choke categories 1 to 4 above. The analysis was hampered by concerns on the validity of the discard estimates. The outcomes of this analysis was used to advice the

Scheveningen Group who agreed to postpone the phasing-in of the landing obligation for North Sea plaice and Kattegat cod in some fisheries to 2019.

Northern hake is not considered to be a “species defining the fisheries” in the article 15 of (European Parliament and Council of the European Union, 2013), and is only to be phased-in next year in 2019. Hake was thus not included in this NSAC study. However, potential issues linked to the recovery of the stock and its expansion in northern waters have been flagged, and generalized quota shortage for that stock across the North Sea was noted by the NSAC in its following advice (NSAC, 2017a).

Main choke species in the North Sea demersal fisheries in 2019

Most available analyses of potential choke species issues have dealt with the main commercial stocks, and less with the effect of the secondary species that will enter the landing obligation in 2019. Out of the information gathered here, the most important cases appear to be:

- **Northern hake in TR1/TR2 fisheries**, because of its recent expansion in the North Sea where most Member States have only small historical quota shares;
- **North Sea plaice in BT2 fisheries**, because of the very large volume of undersized plaice caught in the sole targeted fishery;
- **North Sea whiting and Kattegat cod** in all fisheries, because of their high discards rates.

Noticeably, the two first choke cases are linked to stocks that are in a very good state, with high biomass levels and fishing mortality at F_{msy}. For these two cases, choke issues are thus not of biological nature. But the issues for these two stocks are also diametrically different. For plaice, the problem is technical and economic; for hake, the problem is political, linked to the historical relative stability key being no more aligned with the spatial distribution of fish stocks in relation to climate change.

Exemptions for landing obligation

In the CFP (2013), article 15 is not only referring to the fisheries where the landing obligation is referring to but also to the situations where exemptions can be applied for. Three different scenarios can be used for applying for exemptions: The landing obligation referred to in paragraph 1 shall not apply to:

- a) species in respect of which fishing is prohibited and which are identified as such in a Union legal act adopted in the area of the CFP;
- b) species for which scientific evidence demonstrates high survival rates, taking into account the characteristics of the gear, of the fishing practices and of the ecosystem;
- c) catches falling under de minimis exemptions.

Ahead of the final year of full implementation of the Landing Obligation in 2019 STECF (2018) analysed the number of exemptions proposed. The listed exemptions increased from just over 40 for 2018 to nearly 70 for 2019. STECF (2018) combined exemptions across the regions and assessed them, which meant that the total number of proposed and assessed exemptions across all regions (NS, NWW, SWW, MED) was 58 (Table 1). Presently there are no exemptions for high survival in the Baltic Sea, although scientific studies are ongoing for exemptions for high survival for plaice.

*Table 1. Number of recommendations by type and region evaluated by STECF (2018).
Recommendations evaluated*

Region	de minimis	high survivability	Total
North Sea	8	8	16
North Western Waters	5	10	15
South Western Waters	10	3	13
Mediterranean (consolidated)	8	6	14
Total	31	27	58

High survivability exemptions

In the North Sea several high survival exemptions has been applied for:

Norway lobster

The survivability exemption applies to the following catches of Norway lobster:

- Catches with pots (FPO);
- Catches in ICES Division IIIa with bottom trawls (OTB, TBN) with a mesh size of at least 70 mm equipped with a species selective grid with bar spacing of maximum 35 mm;
- Catches in ICES Division IIIa with bottom trawls (OTB, TBN) with a mesh size of at least 90 mm equipped with a seltra panel;
- In winter months (October to March), catches in the functional units Farn Deepes (FU6), Firth of Forth (FU8) and Moray Firth (FU9) with bottom trawls (OTB, TBN) with a mesh size of at least 80 mm equipped with a net grid selectivity device.

Common sole

The survivability exemption applies to TR2 catches of common sole below MCRS made within 6 nautical miles of the coast in ICES area IVc and outside identified nursery areas. The exemption only applies to small vessels (<10 metres length, <221 kW engine power), when fishing in waters with a depth of 30 metres or less and with limited tow durations of no more than 1.30 hours.

Fish by-catch in pots and fyke nets

The survivability exemption applies to catches of cod, haddock, whiting, plaice, sole, hake and saithe with pots and fyke nets (FPO, FYK).

De Minimis exemptions

The following de Minimis derogations apply:

- a) in the fisheries by vessels using trammel nets and gill nets in ICES Division IIIa, ICES Subarea IV and Union waters of ICES Division IIa: a quantity of common sole which shall not exceed 3 % of the total annual catches of that species;
- b) in the fisheries by vessels using beam trawl BT2 with Flemish panel device, in ICES Subarea IV: a quantity of common sole below MCRS, which shall not exceed 6 % of the total annual catches of that species;

- c) in the fisheries by vessels using TR2 in ICES Subarea IV and Union waters of ICES Division IIa: a quantity of Norway lobster below MCRS, which shall not exceed 2 % of the total annual catches of that species;
- d) in the fishery for Norway lobster by vessels using bottom trawls equipped with a species-selective grid with bar spacing of maximum 35 mm in ICES Division IIIa: a combined quantity of common sole, haddock, whiting, cod and saithe below MCRS, which shall not exceed 4 % of the total annual catches of Norway lobster, common sole, haddock, whiting and Northern prawn, cod and saithe;
- e) in the fishery for Northern prawn by vessels using bottom trawls (OTB) with a mesh size equal to or larger than 35 mm equipped with a species selective grid with bar spacing of maximum 19 mm, with unblocked fish outlet, in ICES Division IIIa: a combined quantity of common sole, haddock, whiting, cod, plaice and saithe below MCRS, which shall not exceed 1 % of the total annual catches of Norway lobster, common sole, haddock, whiting, cod, saithe and plaice and Northern prawn;
- f) in the mixed fishery for sole, whiting, plaice and species without catch limits by vessels using bottom trawls (OTB, OTT, SDN, SSC) of mesh size 70-99 mm in ICES Division IVc: a combined quantity of whiting and cod below MCRS, which shall not exceed 6 % of the total annual catches of Norway lobster, haddock, sole, Northern prawn, whiting, plaice, saithe and cod; the maximum amount of cod that may be discarded shall be limited to 2 % of those total annual catches;
- g) in the fisheries by vessels using bottom trawls (OTB, OTT, TBN) with a mesh size of 90-119 mm, equipped with Seltra panel, or with a mesh size of 120 mm and above in ICES Division IIIa: a quantity of whiting below MCRS, up to a maximum of 2 % of the total annual catches of Nephrops, cod, haddock, whiting, saithe, common sole, plaice and hake.

Monitoring of de Minimis

In a STECF earlier report (2017) STECF highlights in 2018 the “lack of [required] reporting by vessel operators of fish discarded under exemptions...”. STECF stress again (2018) the need to improve the collection of catch documentation data. If the data situation does not improve and the true quantities being caught as reported do not reflect the actual removals, it will likely have a significant impact on the quality of scientific advice and may compromise the achievement of the MSY objective. As STECF PLEN 18-01 pointed out, innovative monitoring measures such as CCTV and Remote Electronic Monitoring (REM) have been applied in pilot studies and could be a more effective way to enforce the landing obligation (STECF EWG 13-23).

TAC removal

Removing TACs from annual TAC regulations so that associated stocks are removed from the landing obligation has been put forward by several stakeholders as a way to deal with problematic stocks, i.e. where discarding are high due to low commercial value and/or where quotas are insufficient to cover catches. In 2017 the EC proposed, and Council agreed to delete the combined TAC for dab and flounder in the North Sea, after that ICES had assessed the sustainability risk of that removal to these two stocks to be low¹¹. Several additional TACs removals are currently under discussion.

Reference

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Annex 11 – List of acronyms

ADGBYC	ICES Bycatch Advice Drafting Group
ASH	International ecosystem survey in the Nordic Seas
AZTI	Centro tecnológico experto en innovación marina y alimentaria
BMS	Below minimum size
CE	Commercial fisheries effort statistics (RDB data type)
CEFAS	Centre for Environment, Fisheries and Aquaculture Science
CFP	common fisheries policy
CL	Commercial fisheries landings statistics (RDB data type)
Com or COM	EU Commission
CS	Commercial fisheries sampling (RDB data type)
DATRAS	Database of Trawl Surveys
DCF	Data collection framework
DST	Decision Support Tool
EG	Expert Group
EU MAP	Eu EU Multi-Annual Programme (of fisheries data collection)
GFCM	General Fisheries Commission for the Mediterranean
GitHub	Web-based hosting service for version control using Git.
HAWG	ICES Herring Assessment Working Group for the Area South of 62°N
IBP	Inter-benchmark process
IBTS	The International Bottom Trawl Survey Working Group
IBWSS	International Blue Whiting Spawning Stock Survey
ICCAT	International Commission for the Conservation of Atlantic Tunas
ICES	International Council for the Exploration of the Sea
IFREMER	L'Institut Français de Recherche pour l'Exploitation de la Mer
ISO	International Organization for Standardization
JRC	EC Joint Research Centre
LM	Liaison Meeting

LO	Landings Obligation
MIXFISH	ICES Working Group on Mixed Fisheries Advice
MRF	Marine Recreational Fisheries
MS	Member State
MSS	Marine Scotland Science
NC	National Corresspondent
NSP	National Sampling Plan
NWP	National Work Plan
PETS	Protected, Endangered and Threatened Species
PGDATA	Planning Group on Data Needs for Assessment and Advice
PSU/SSU	Primary Sampling Units
RCG	Regional Coordination Group
RCG LDF	Regional Coordination Group Long Distant Fisheries
RCG MED BS	Regional Co-ordination Group for the Mediterranean and Black Sea
RCG NA	Regional Coordination Group North Atlantic
RCG NS&EA	Regional Coordination Group North Sea and Eastern Arctic
RDB	Regional Data Base
RDBES	Re-gional Database and Estimation System
RFMO	Regional Fisheries Management Organisation's
RSP	Regional Sampling Plans
SCRDB	Steering Committee of the regional database
SECFISH	Socio-Economic data collection for Fisheries, aquaculture and the processing industry
SID	ICES Stock Information Database
SISP	Series of ICES Survey Protocols
SLU	Swedish University of Agricultural Science
SSU	Secondary Sampling Units

STECF	Scientific, Technical and Economic Committee for Fisheries European Commission
STREAM	Sustainable technologies and research for European aquatic management
SWOT	Strengths, Weaknesses, Opportunities, Threats
TOR	Terms of Reference
URS	User Requirement Specification,
USTAN	University of Saint Andrews
UWTV	Under Water Television
VMS	Vessel monitoring system
WG	Working Group
WGBAST	ICES Working Group on Baltic Salmon and Trout Assessment
WGBEAM	ICES Working Group on Beam Trawl Surveys
WGBIE	ICES Working Group for the Bay of Biscay and the Iberian Waters Ecoregion
WGBIOP	ICES Working Group on Biological Parameters
WGBYC	ICES Working Group on Bycatch of Protected Species
WGCHAIRS	Annual Meeting of ICES Expert Group Chairs
WGCATCH	ICES Working Group on Commercial Catches Sampling
WGCEPH	ICES Working Group on Cephalopod Fisheries and Life History
WGCSE	ICES Working Group on Celtic Seas Ecoregion
WGDIAD	Working Group on Science to Support Conservation, Restoration and Management of Diadromous Species.
WGDEEP	ICES working group on biology and assessment of deep-sea fisheries resources
WGEEL	ICES Working Group on Eels
WGHANSA	ICES Working Group on Southern Horse Mackerel, Anchovy and Sardine
WGIPS	ICES Working Group of International Pelagic Surveys
WGNAS	ICES Working Group on North Atlantic Salmon
WGNSSK	ICES Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak
WGRFS	ICES Working Group on Recreational Fisheries Surveys

WGTRUTTA	ICES Working Group with the Aim to Develop Assessment Models and Establish Biological Reference Points for Sea Trout (Anadromous Salmo trutta) Populations
WGWIDE	ICES Working Group on Widely Distributed Stocks
WKASMSF	Report of the Workshop for Advancing Sexual Maturity Staging in Fish
WKBIOPTIM2	Workshop on Optimization of. Biological Sampling at Sample Level
WKMET	DCF Métier Workshop: Sub-group of the RCGs - North Sea and Eastern Arctic and North Atlantic
WKPETSAMP	Workshop on sampling of bycatch and PET species
WKRDB-MODEL	Workshop on new data model for the Regional Database
WKRDB-POP	Workshop on Populating the RDBES data model
WKRDB-SPEC	Workshop on new specification for the Regional Database
WKRDB-URS	Workshop on User Requirement Specifications for the Regional Database.
WP	Work package. Relates to fishPi2 project