## The Data Collection Framework

EU Council Regulation 199/2008 - Establishing a Community framework for the collection, management and use of data in the fisheries sector for scientific advice regarding the CFP

# Report of the 12th Liaison Meeting

Meeting between the Chairs of the RCMs, the ICES PGDATA, PGMED and PGECON, the STECF EWGs on the DCF, the Regional Database Steering Committees, the ICES and GFCM representatives and the European Commission

## FINAL REPORT

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#### 1. Introduction

## 1.1 Background

According to Article 5(1) of Council Regulation (EC) No 199/2008 (Data Collection Framework, DCF), Member States shall coordinate their National Programmes with other Member States in the same marine region. For this purpose, the Commission may organise Regional Coordination Meetings (RCMs) in order to assist Member States in coordinating their National Programmes and the implementation of the collection, management and use of the data in the same region.

Five RCMs are operational in the framework of the DCF: Baltic, North Sea & Eastern Arctic, North Atlantic and Mediterranean/Black Sea/Large Pelagics and Long Distance Fisheries. Most fleets subject to DCF activities are covered by these RCMs.

According to the Commission Regulation (EC) No 665/2008, laying down detailed rules for the application of Council Regulation (EC) 199/2008, and to Commission Decision 2010/93/EU specifying practical aspects for data collection, actions planned by MS in their National Programme shall be presented according to the predefined regions. The scope of these regions was slightly modified by the RCMs 2008 and the 5th Liaison Meeting as follows:

- 1. the Baltic Sea (ICES areas III b-d);
- 2. 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;
- 3. the North Atlantic (ICES areas V-X, excluding Va and VIId);
- the Mediterranean Sea and the Black Sea (complemented since 2013 with fisheries on Large Pelagics managed by Regional Fisheries Management Organisations on tuna fisheries – ICCAT, IOTC, WCPFC, IATTC);
- 5. regions where fisheries are operated by Community vessels and managed by Regional Fisheries Management Organisations (RFMO) other than tuna RFMOs to which the Community is contracting party or observer (Long-Distance Fisheries).

Regional co-ordination greatly increases the efficiency, effectiveness and integration of the various DCF National Programmes (NPs). Regional Coordinating Meetings (RCMs) are held annually and involve National Correspondents and mainly biologists and, to limited extend, economists from each MS involved in the DCF programme (see last paragraph of this sub-section on the role of economists in DCF). The key objectives of the RCMs are to identify areas for standardisation, collaboration and cooperation between MS.

A Liaison Meeting (LM) between the chairs of STECF DCF EWGs (formerly chairs SGRN and SGECA), the chairs of the different RCMs, the chair(s) of the PGCCDBS/PGDATA, the chair of PGMED, DCF data end-users (ICES and GFCM), the chairs of the steering groups of Regional Databases and the Commission is held annually to analyse the RCM reports in order to ensure overall coordination between the RCMs. On the basis of the reports, the LM makes recommendations to the Commission.

The 2nd Liaison Meeting (2006) identified the following areas where it can contribute to the effectiveness of data collection and co-ordination within the framework of the Data Collection Regulation (DCR):

- Make sure that the Regional Co-ordination Meetings (RCMs) move in the same direction.
- Address recommendations made by the RCMs and comment on these / modify them when considered appropriate / necessary.
- Identify issues, developments etc. that are of a pan-European interest and propose actions to be undertaken at the appropriate level (Member States, bilateral, regional or international level)

The 8th LM (2011) discussed the role and added value of the LM in relation to the DCF framework and concluded that the role of the LM is to co-ordinate the work being carried out in the development of the DCF. The LM provides a coherent overview of the RCM issues at both a local and generic level. The LM prevents duplication of tasks and guides the evolution of the DCF. The LM prioritises RCM recommendations and reviews the follow-up actions required.

Following the recommendation of the 8<sup>th</sup> LM, an economic planning group (PGECON) was established in 2012 to discuss methodological and coordination issues related to the economic modules of the DCF at European level (fleet economic data, aquaculture, processing sector).

## 1.2 Opening of the meeting

The 12th Liaison Meeting (LM) between the Chairs of the RCMs, the ICES PGDATA, PGMED and PGECON, the STECF, the Regional Database Steering Committee, the ICES and GFCM representatives and the European Commission was held at the DG Maritime Affairs and Fisheries, Brussels, from 8th to 9th October 2015. Isabelle Garzon, DG MARE, opened the meeting by welcoming participants. She stressed the importance of the LM, also with regard to the consultation process on the forthcoming EU Multiannial Programme (EU MAP) for Data Collection. One of the main aims in the near future is to find ways to reduce administrative burden. Ms Garzon outlined that this will be the last LM in its current shape and that a new body will be created as umbrella of pan-European co-ordination, which will act as official forum for Delegated and Implementing Acts within the revised Data Collection Framework (DCF). This expert group on Data Collection will be officially recognised amongst COM services and assembles functions of various groups and meetings that were established over the years (namely the Liaison Meeting, National Correspondence meeting, etc.). This was further discussed by the LM (see section 7.3).

On request from LM participants, the Commission provided information on the currently envisaged timeline for the revised EU Multiannual Programme (EU MAP) for Data Collection: A draft EU MAP will be presented to STECF in November 2015, aiming for adoption by Member States and the Commission in spring 2016. At about the same time, the adoption of the revised DCF regulation by the Council and Parliament can be expected.

The Commission expects a discussion on the next steps of the drawing of the EU MAP/DCF, below the legislative level, i.e. the implementation arrangements (simplification of reporting, improvement of evaluation of Member State compliance). Ms Garzon reminded that the RCMs will be transformed into RCGs, which is important to avoid duplicating tasks and a way forward for regional cooperation. She further stressed that data calls are an important issue to be discussed and the end user participation is essential for the progress. She also drew attention to the compliance of Member States on their data collection obligations and that the Commission considers the data transmission chain as a key topic for improvement in the coming months. She stated that overall Member State performance has improved but that the burden of the way performance is evaluated is far too high and that the Commission intends to find ways to reduce this burden.

#### 1.3 Terms of Reference

The 12th Liaison meeting was held in Brussels on 8th and 9th October 2015 to address the following Terms of Reference:

## TOR 1. Discussion on possible follow-up to the main outputs/recommendations of:

- The 2015 RCMs specific recommendations addressed to the Liaison Meeting
- PGECON, PGDATA, PGMed outcomes and recommendations from their 2015 meeting
- STECF EWG and STECF Plenary outcomes and recommendations from their 2015 meetings
- Data end users (ICES, STECF, RFMOs GFCM, IATTC, ICCAT, IOTC, WCPFC, NAFO, SPRFMO, CECAF, WECAFC)

#### TOR2. End user feedback on data transmission and related issues

- Discuss feedback received from data end-users on data transmission: main issues and possible harmonization of end user feedback to the Commission
- JRC data transmission IT platform: experience gained and future steps
- Discuss best practices on automatization of data upload by MS: data validation tools used by end users
- Discussion on new set-up for STECF evaluation of AR2014 & data transmission 2014 used in 2015 continue like this next year?
- Harmonisation and dissemination of DCF metadata: codelists, metiers, nomenclatures, best practices, standards
- RCM data calls overview of how MS responded

## TOR 3. Regional cooperation

- Call for proposals MARE/2014/19 'Strengthening Regional Cooperation in the area of fisheries data collection—state of play'. Presentation by a representative of the two RCG grants and discussions by LM thereafter. What should be the way forward?
- Regional databases
- Overview of use of the Regional Databases for RCMs in 2015 and problems identified
- Other developments (RDB trainings in 2015, RDB Med&BS development)
- Changes for the future any recommendations from the LM?
- Future role of RCMs and DCF-related meetings: best practices, coordination, cohesion and common structure in line with emerging needs of DCF

## TOR 4. EU MAP

- Discuss recommendations/ output of RCMs: List of proposed stocks, landing obligation, metiers
- Discuss design-based sampling in relation to DCF: does it fulfil DCF requirements?

## TOR 5. Availability of data

 Overview of latest developments (DCF Database Feasibility Study and plans for a follow-up study to this)

## TOR 6. AOB

- Agree on a list of recommendations relating to DCF (that MS will need to report on in their AR2015) – COM will provide a compilation of proposed recommendations from LM & STECF Plenaries in 2014 as input
- Prepare a list of recommended meetings for 2016 as guidance for MS
- Review and prioritize DCF-related study proposals from RCMs, PGECON, EGs etc
- ICES update on workshop on concurrent sampling and plans to re-evaluate surveys

## 1.4 Participants

The  $12^{th}$  Liaison Meeting met with the following participants:

Name	Role
Jørgen Dalskov	Chair of RCM Baltic (outgoing), Chair of Regional Database
Jørgen Daiskov	Steering Committee (RDB-SC)(incoming)
Katja Ringdahl	Co-Chair of RCM North Sea & Eastern Arctic (RCM NS&EA),
Tuda Tunguan	Chair of RDB-SC (outgoing)
Alastair Pout	Co-Chair of RCM NS&EA, Scientific Coordinator of Regional
- /	Cooperation Grant ("FishPi" project, MARE/2014/19)
José Rodriguez	Co-Chair of RCM North Atlantic (RCM NA)
Estanis Mugerza	Co-Chair of RCM NA
Ireneusz Wójcik	Chair of RCM Long-Distance Fisheries (LDF) (outgoing)
Sieto Verver	Chair of RCM LDF (incoming)
Evelina Sabatella	Co-Chair of the RCM Mediterranean and Black Sea (RCM Med&BS)
Jernej Švab	Chair of the RCM Med&BS (incoming)
Tristan Rouyer	Chair of PGMED (outgoing)
Maria Teresa Spedicato*	Coordinator of Regional Cooperation Grant in the Mediterranean (MARE/2014/19)
Jörg Berkenhagen	Chair of PGECON (outgoing)
Ivana Vukov	Chair of PGECON (incoming)
Mike Armstrong	Co-Chair of ICES PGDATA
Christoph Stransky (Chair)	Chair of STECF EWGs (on DCF issues)
Cristina Ribeiro	Chair of STECF EWGs (on DCF issues)
Cristina Morgado	ICES secretariat
Federico DeRossi	GFCM secretariat
Isabelle Garzon*	European Commission
Bas Drukker	European Commission
Venetia Kostopoulou	European Commission
Jennifer Hochmuth	European Commission
Greta Borg*	European Commission
Antonio Cervantes*	European Commission
Zsuzsanna Koenig*	European Commission
Angel Calvo Santos*	European Commission
Joost Paardekooper*	European Commission
Amanda Perera Perez*	European Commission
Alexander Stein*	European Commission
Frederik Schutyser*	European Commission
Rodrigo Ataide*	European Commission
Stanislovas Jonusas*	European Commission

<sup>\*</sup>part-time

## 2 Main outcomes and recommendations from RCMs (ToR 1)

#### 2.1 Main outcomes of RCMs

## 2.1.1 RCM Long Distance Fisheries

Two RCM LDF meetings were held in 2015.

The first meeting, held in April at Thünen Institute (TI), Hamburg, Germany, was called on an ad-hoc basis to specifically address the urgent need of implementation of a sampling programme for the fishery activities by EU vessels in the SPRFMO area. The meeting was initiated during the EU National Correspondents meeting, organized by the European Commission on 25 March 2015. As a result, a new multilateral agreement on a joint sampling programme of the fishing activities in the SPRFMO area was agreed and signed. The meeting also provided the platform to discuss the already established multilateral agreement for the CECAF region and resulted in signing an amendment to this agreement, extending the joint sampling programme in the CECAF area until end of 2016.

The second meeting took place at Instituto Español de Oceanografía (IEO), Centro Oceanográfico de Cádiz, Spain, in June, with the aim to address the general Terms of Reference set for the RCMs 2015 and to provide a platform for an overview of the EU long-distance fisheries over the previous year in order to evaluate the scope of required regional coordination in data collection.

The group reviewed the progress in regional coordination since 2014, the outcomes of the 11th Liaison Meeting and feedback from the end-users.

The RCM LDF reviewed the Long Distance Fisheries activity by MS in CECAF and SPRMFO areas using updated 2014 data provided by MS. There were limited EU fishing activities in the SPRMFO area in 2013 and 2014.

Based on the characteristics of fisheries in different regions within the CECAF area and following the proposal made by STECF EWG 14-18, geographical fishing zones in the CECAF area were revised. The RCM LDF proposes the inclusion of a new fishing ground ("Canary"). In this way, EU and non-EU waters are separated at RCM level without modification of the RCM coverage, and without changes in sampling obligations or sampling patterns. Following this proposal, three fishing grounds are considered for CECAF: "Madeira", "Canary" (both being the EU waters) and "From Morocco to Guinea Bissau" (as a non-EU waters). General types of fisheries in the relevant area are described in the report.

In Madeira and the Canaries, where only vessels of one MS operate, coordination of data collection at regional level is not required as fisheries in those fishing grounds are already covered by the respective National Programmes.

The *status quo* on the Fisheries Partnership Agreements (FPAs) with Morocco, Mauritania, Senegal, and Guinea-Bissau were discussed.

In order to check whether there were any substantial changes in the fishing pattern in the CECAF area in 2014 which would require amendments to the National Programmes in 2016, the group updated last year's ranking and compared the updated version to the 2014 version. Based on that comparison, the RCM LDF concluded that there is no need for amendments to the NPs for 2016 in respect of the long-distance fisheries in CECAF area. The only change to the execution of NPs in the current year and 2016 relates to the NP budgets and the need to secure funding necessary to implement the multilateral agreement on the joint sampling programme for the fishery activities in the SPRFMO area (agreed and signed by the MS concerned in 2015).

In relation to the evaluation of the impact of the introduction of the landing obligation and/or preparations for its implementation in the context of the Long Distance Fisheries, the RCM LDF discussed the preliminary results of the project "For the provision of advice on the management of discards in EU fisheries beyond EU waters" (conducted under the Framework Contract No.

MARE/2012/21), concerning CECAF and FPAs of Morocco and Mauritania. In general, the introduction in EU legislation of the landing obligation has no impact on activity of the long distance fishery.

The RCM LDF briefly discussed project proposal on "Strengthening regional cooperation in the area of fisheries data collection" (MARE/2014/19) in relation to the combined North Atlantic/North Sea region ("FishPi" project). The group concluded that the work done within this project is beneficial for sampling procedures in place for the long distance fisheries. The outcomes of the project and possible future implications will be reviewed in 2016.

In relation to the call for proposals announced by the Commission regarding i.a. inter-sessional work between the annual RCMs, development and testing of an operational framework for establishing and coordinating statistically-sound sampling programmes at a regional or EU scale, the RCM LDF decided not to form a consortium to apply for this grant, but rather participate on a national basis to other consortia that are likely to be formed.

The RCM LDF 2015 made one recommendation in relation to future RCM LDF data calls – that the National Correspondents of all non-landlocked EU MS shall be contacted in order to be sure that all active fisheries in the areas in the competence of the RCM LDF are covered. It is expected that all National Correspondents contacted respond to the data call either with information on all fishing activity beyond the EU waters by the vessels under the flag of their MS or with confirmation of none of such activities, along with information on MS' participation in the working groups of any RFMOs, concerning fishing activity in the waters outside the EU.

With the expiration of the term of the current chair, the RCM LDF proposes Sieto Verver (NL) as the new chair.

The next RCM LDF meeting is planned for June 2016, and Lithuania kindly offered to host this meeting.

#### RFMO co-ordination

Following the presentation of the main outcomes of the RCM LDF, Antonio Cervantes intervened to inform on the annual meeting of EU scientists participating in RFMOs. This meeting is being organised by DG MARE Unit B1 since 2010 and its main objective is to ensure a meaningful and coordinated participation of EU scientists in RFMO scientific meetings and in general to enhance the EU contributions to the science and scientific processes in RFMOs and consequently their decision making which should be based on best science.

The meeting, which takes place every year in the first quarter, consists of two sessions, one plenary in which aspects of general interest (new developments in the CFP, DCF and research issues) are presented and a second one in which scientists meet the relevant desk officers bilaterally to discuss the challenges ahead in each of the RFMOs.

Early in 2016, DG MARE, in cooperation with the consortium implementing the Framework Contract MARE/2012/21¹, will establish a list of participants to be invited to this meeting. In DG MARE's view, it is essential that scientists involved in DCF activities in relation to both Long Distance Fisheries and Large Pelagics could actively participate in this annual meeting. To this end, the chairs of the relevant RCMs will be invited to present the main outcomes of their discussions and to meet the relevant desks.

<sup>1</sup> Framework Contract No. MARE/2012/21 "Scientific advice for fisheries beyond EU Waters". Consortium members: MRAG (UK) (Coordinator), IEO and AZTI (ES), IMARES (NL) and IPMA (PT).

#### 2.1.2 RCM Baltic

The RCM Baltic met in Riga (Latvia) between 24 and 28 August 2015. The main purpose of the RCM is to coordinate the data collection carried out by EU Members States (MS) in the region concerned. For the RCM Baltic 2015 the coordination on the 2016 data collection in the Baltic region was limited as the MS's National Programmes for 2011-2013 have been rolled over for the period 2014-2016. Therefore, the main focus at this year RCM meeting was i) assess the consequences of the implementation of the landing on the DCF data collection programmes, ii) to improve data quality, iii) to take the first steps toward establishing regional programmes instead of national programmes, iv) the view of the national administrations on regional coordination and cooperation and regional data base issues and finally v) the evolution towards the RCG's (Regional Coordination Groups).

A data call was launched by the chairs of the RCM Baltic, RCM NS&EA and the RCM NA where MS were requested to upload data for 2014 into the regional data base (RDB FishFrame) hosted by ICES. All Baltic MS have put a lot of effort into quality assurance of the data and all complied with this request.

All Baltic Member States (Denmark, Estonia, Finland, Germnay, Latvia, Lithuania, Poland and Sweden) are willing to upload the "Landings and effort data" as well as "Sampling data" to the RBD at the present level of details. Further, all Baltic Member States would like to stress that a RBD is a prerequisite for regional coordination and cooperation.

Based on the uploaded data a number of analyses were carried out prior to the RCM Baltic meeting. This approach where analyses were carried out in advance of the meeting made it possible during the meeting to discuss the outcome of the analysis. In addition, the ICES Data Center has developed and implemented a number of standard reports in the RDB which enables quick and easy reporting and overviews. Bases on the analysis the data quality issue could be discussed and agreements on actions to be taken to improve the data quality could be made.

The RCM Baltic 2015 would like to stress that for the coordination and the exchange of data the ICES Secretariat is seen as the ultimate RDB manager. In the management one crucial thing is that it includes development and implementation of new methods and functionalities in the RDB in close interaction with end-users (RCMs and e.g. ICES assessment working groups).

Clear progress in data availability to the RCM has been achieved since the FishFrame evolved into a RDB. However, the regional work would progress even faster if there were additional standard outputs including pre-produced reports, tables and graphs in the RDB. Hence, Baltic RCM 2015 reiterates its recommendation from 2014 that the RCM work will benefit immensely if the meeting can focus on the discussions and the decisions that are needed, instead of producing the standardised result tables and result graphs.

Analyses of total landings by species compared with the Annex VII in COM DEC 2010/93/EU. The main outcomes of this comparison were that several important species in the region are not included in the Baltic Sea section. Hence, these have not obliged to sample under DCF. Therefore, the RCM Baltic recommends that the species list given in Annex VII in COM DEC 2010/93/EU for the Baltic region for the new DC-MAP is revised. Pike (Esox lucius) should be deleted and the following; Vendance (Coregonus albula), Smelt (Osmerus eperlanus) and Whiting (Merlangius merlangus).

The RCM Baltic carried out a number of case studies on *length at age relationship* and *weight at age relationship* for selected species. Standard reports on these relationships are suggested as a very useful tool in the stock assessment work and for all stock coordinators. Therefore, the RCM Baltic recommends that standard report on *length at age relationship* and *weight at age relationship* are developed in the RDB and that any sampling method is taken into account when data are aggregated over time and country.

Analyses carried out the RCM Baltic 2015 suggest that task-sharing in terms of e.g. age determination and quality improvement could be reorganized to increase efficiency, as earlier concluded by RCM

Baltic 2011-2014. Present agreements including task sharing that has been concluded bi- or multi-laterally. Additional task-sharing is underway but too premature to implement.

The RCM Baltic 2015 concluded that all potential announcements of the new grants from COM intended to promote regional coordination will definitely give a possibility to enhance projects where task-sharing is included. This is because efficiency wise it is probably the best way to share e.g. age readings, instead of having in house expertise for aging all species at each institute. The data quality in different senses could also be improved if coordinating this work.

The RCM Baltic 2015 would like to stress that a Regional Data Base is a crutial and essential tool for the regional coordination and cooperation data collection. Further, that the Regional Data Base is a prerequisite for successful regional data collection, for providing quality assured data that are processed transparently using agreed methods for the use in the scientific advice processes for the support of the management of the Common Fisheries Policy.

Cost sharing of surveys has been discussed and the RCM Baltic agreed that before setting the surveys' cost sharing model an analysis of the structure and distribution of the cost between MS regarding surveys currently conducted on the Baltic Sea is needed. The chair of the RCM Baltic has offered to collect and compile the data required for such an analysis to be performed during the RCM Baltic meeting next year.

Furthermore, before deciding on key of sharing costs related to surveys, the feedback from an end-user is required. The group decided to request ICES, through the Commission, for a confirmation on what surveys in the Baltic Sea are required to meet the ICES needs for providing advice in support of the Common Fisheries Policy.

#### Landing obligation

At The RCM Baltic meeting in 2014, it was agreed that all MS involved in the discard sampling of Baltic Sea cod fisheries (DK, DE, LT, LV, PL, SE) should provide RCM Baltic 2015 with short summary on the experience gained from sampling activities in quarter 1 and 2 of 2015. The MS should assess the following aspects:

- If and how the MS has adapted the sampling program to the new management regime
- Are there changes in the access to vessels to sample catches (rejection rates)?
- Are there any indications on changes in the quality of the discard data?
- Have fishermen changed their fishing behavior? If yes, what has changed and how can we adjust and account for these changes in our sampling?

A questionnaire was send to all MS in summer 2015 and the summary of the results were presented to the RCM Baltic 2015. There are indications that the reported amounts (volume in weight) in logbooks or landing declarations differs significantly to the observer estimates, where the observer estimates are 10 times or more higher than the reported catch of fish below the MCRS. In addition, one MS with big TAC has serious problems to get aboard on vessel >12 m. This will probably have a significantly negative impact on the quality of assessment.

The RCM Baltic underlines the importance of establishing statistically sound sampling designs for the on-board observations, and to maintain the integrity of scientific observers (no mixing with observers used for control), in order to maintaining the collection of unbiased catch data for scientific purposes. Therefore RCM Baltic reiterates that in order to remove doubts on scientific estimates, it is essential that sampled vessels do not change their behaviour when observers are on-board. This is best achieved if there is no ambiguity on the scientific role of the observer. Separating clearly the monitoring for surveillance for control, from the collection of data for scientific assessment, is the pre-condition to run a scientific observer program. If there is any doubt that the information collected by the scientific

observers will be used for purposes of control and enforcement then the data will be compromised and no utilization of the information collected will be possible.

The landing obligation was introduced in 2015 for the pelagic industry and for cod and salmon in the Baltic. Data from 2015 in its present state has still not been fully evaluated for scientific purposes. However, there appear to be areas were the data quality could be improved.

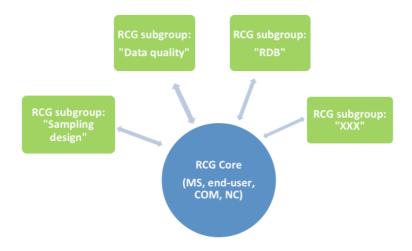
Haul by haul data in the logbook would increase the data quality. In the Baltic Sea haul by haul information in the logbook has been required and implemented for all MS since 2015. If the MCRS fish was recorded on these logbooks this would allow more detailed information on where the main catches of BMS fish are taking place. Furthermore, haul by haul information can be used to link the logbook data with CCTV and with VMS data given a much higher resolution and quality in the data and thereby improve any discard Atlas. It would also improve the potential to 'control' the logbook data if the skippers are obliged to fill in the information by haul.

Effective implementation including adequate compliance of the landing obligation would imply possible considerable reduction of discard sampling at sea observer trips, especially for the cod-directed fisheries. This possible reduction in sampling effort at sea could be used to collect information/data on wanted and unwanted catch from onshore sampling. As 2015 is the first year of implementation of the landing obligation, 2015 can serve as a transitional period to evaluate the reliability of the landings of the fraction which previously was discarded at sea. This fraction could be sampled at landing site.

Preliminary observation indicate that data on the landed volumes of unwanted cod (<35 cm) obtained during at sea observers trips and "discard" landed in harbors differs significantly, in some cases by orders of magnitude. Therefore, presently the discard data obtained from harbor sampling cannot be regarded as reliable and should not be used to estimate the amount of fish caught under MCRS when preparing data for stock assessment.in a raising procedure. Most of the MS in the Baltic Sea region do not, for this reason, sample discards from landings in ports., except Germany and Sweden It is important to note that these significant differences between the logbook data and the "true" discards can only be detected by at-sea observers, thus highlighting their role even under a landing obligation probably also in the future.

#### Regional Coordination Groups (RCGs)

The work conducted within RCGs should aim for setting up regional sampling programmes serving the end-user needs. It was discussed how the RCGs could be organized, and the following organisation and responsibilities were suggested:



#### "RCG Core"

## Responsibility:

- formulate the most important issues to tackle within the region
- set up a short-term and long-term plan to achieve the aims
- · formulate Terms of Reference for subgroup work
- use outcomes from subgroup work to improve and develop sampling programmes
- suggest on regional sampling plans, co-operation and task-sharing

"RCG Core" to meet once a year having experts from MS, end-users, the Commission and National Correpondents (NC). NC to join in the end of meeting for state-of-play information and possible decisions to be taken. Chair to be designated for the group.

## "Subgroups"

## Responsibilities:

• address issues to be analyzed, documented and results and suggestions for solutions or a way forward to be presented to / communicated with "RCG Core"

The expertise needed, the naming of a subgroup or the amount of subgroups is very much dependent on the issues that will be addressed. However, issues falling within "Sampling design", "Data quality" and "Regional database" are believed to be important in the near future and therefore statistical expertise will be needed to succeed with some of the crucial work. Other areas might come up (e.g. work to be done for optimisation of sampling) and therefore subgroups should not be fixed. Subgroup work could either be run by one institute only or by having experts from each MS contributing to the work. Physical meetings at least once a year and in addition web-based discussions and meetings are suggested for effective cooperation between MS. The chair/subgroup leader should be responsible for this process.

#### Studies (see also section 10)

The following study proposals were put forward / re-iterated at the RCM Baltic 2015:

- 1. Study proposal on "Exploration and Development of new facilities in RDB-FishFrame 5.0" (Priority 1). 2 year project and funding needed € 450,000
- 2. "Rescue of WebGR". RCM Baltic agreement on intermidiate solution for the WebGR. All RCM Baltic Member States, Denmark, Estonia, Finland, Germanay, Latvia, Lithuania, Poland and Sweden have agreed to contribute a maximum of € 500 by MS to support the needed update of WebGR.
- 3. Study proposal for "Further development and improvement of WebGR". 2 year project and funding needed € 350,000

## 2.1.3 RCM Mediterranean & Black Sea, Large Pelagics subgroup and PGMED

The RCM Mediterranean and Black Sea (RCM MED&BS) and the RCM Large Pelagics (RCM LP) met in Rome, 9-11 September 2015. The meeting was originally planned to be hosted in Greece but was moved to Italy, as financial problems occurred in the implementation of the Greek National Programme. The RCM MED&BS-LP appreciated the facilities offered by the Italian National Research Council (CNR, Dipartimento Scienze del Sistema Terra e Tecnologie per l'Ambiente). The availability of SharePoint offered by ICES proved to be very efficient in organizing the work before, during and after the meeting.

As decided by Liaison Meeting in 2013, a coordination group for Large Pelagics covering areas of competence of RCM LDF, NA, Med&BS and dealing with all large pelagic species and fisheries was created. This group has been associated with RCM MED&BS in order to limit the number of meetings and allow Mediterranean experts on LP fisheries and stocks to participate in the RCM LP subgroup while also participating in RCM MED&BS. Since 2014, the RCM MED&BS-LP is therefore a joint RCM with two co-chairs, one for MED&BS and one for LP.

Almost all ToRs were applicable to both groups and so it was considered that joint discussions would be beneficial for the final results. The 2015 meeting was therefore organized in plenary sessions while subgroup sessions were held only when needed. For this reason, only one joint report was produced; points of the agenda that were discussed separately by the two groups are reported with specific highlights if required by one subgroup.

According to the decision of the 12<sup>th</sup> RCM Med&BS-LP endorsed by the Liaison Meeting in 2014, the Planning Group for Methodological Development (PGMed), has been organized in the same time period as for the RCM Med&BS-LP, in the first two days (7 and 8 September 2015). Considering that ToRs of PGMed are strictly related with the tasks of RCM MED&BS-LP (methodological developments, analysis of data from official RCM data calls, sharing activities, ranking of métiers at regional level, etc.), it was decided to draft one single report for both the RCM MED&BS-LP and the PGMed incorporating two different parts: one dedicated to the RCM MED&BS – LP subgroup and one for PGMed.

Considering the increased number of regional tasks of the RCGs under the EU MAP for data collection, the RCM MED&BS-LP agreed to change the current working scheme of the RCMs and the PGMed (i.e. PGMed meeting followed by RCM MED&BS-LP meeting). In future, PGMed shall work simultaneously with the RCM, as a parallel subgroup with specific ToRs included in the RCM ToRs. PGMed will carry out the technical and methodological aspects of the agenda. The PGMed will be coordinated by a technical Chair. For ensuring good coverage of the work to be performed, intersession work should be also carried out previous to the meeting. RCM MED&BS-LP endorsed the list of ToRs for the 2016 PGMed.

This year's RCM MED&BS-LP was attended by the National Correspondents and/or their delegates from the following countries of the competent area: Croatia, Cyprus, France, Italy, Malta, Romania, Slovenia, Spain and Portugal. The only missing countries were Bulgaria and Greece. Participants expressed their concerns for the missing participation of Bulgaria – not having attended the last two RCMs – and Greece. Participants considered it essential to take all the necessary actions to guarantee the participation of all countries of the competent area in the next RCM MED&BS-LP.

The GFCM Secretariat attended the meeting, while EC DG MARE representatives attended only part-time through video-conference. The RCM MED&BS-LP was also attended by the chairs of the survey planning groups MEDIAS and MEDITS.

The GFCM Secretariat delivered a presentation on the GFCM Data Collection Reference Framework (DCRF). The DCRF is the first comprehensive GFCM framework for the collection and submission of fisheries-related data in the GFCM area (Mediterranean and Black Sea). These data are requested as per existing GFCM Recommendations and are necessary for the GFCM Scientific Advisory Committee (SAC) to formulate advice in accordance with its mandate. The RCM MED&BS welcomed the implementation of DCRF that could be beneficial also to increase the efficiency on data transmission procedures. The actual procedures, under the present Task 1 framework, caused several technical problems in data transmissions that led to financial penalties that Mediterranean MS received with regard to the submission of GFCM data. Following the method of penalisation adopted is prompting MS to submit less data than available since this leads to less penalties (due to cascading effect presenting data in earlier GFCM tasks has on later tasks). The RCM Med&BS 2015 is therefore recommending to better analyze the data failures in transmitting Task 1.5 data (biological parameters).

The project MARE/2014/19 Med & BS - Strengthening regional cooperation in the area of fisheries data collection in the Mediterranean and Black Sea, was presented. The project aims at simplifying the present

rules and addressing needs identified through experience with the current implementation of the DCF. The RCM Med&BS-LP fully supports the study and participants expressed their availability in giving their contributions. The RCM Med&BS-LP also recommends that the final results of the study should be presented in next RCM/PGMed.

For the first time, in 2015 an official data call for the RCM MED&BS-LP was launched. As detailed in the PGMED report, the data call was a clear success since all countries contributed to the data call. It may have required, however, to set up new procedures at national level to integrate variables coming from different databases managed by different organisations.

Data were inserted into a common file for MED&BS and LP, respectively, and kept available to the group on the dedicated sharepoint for the PGMED and RCM.

However, data management was possible only with the technical support of French technicians, considering that no regional database is actually present. The RCM Med&BS-LP considered that the development of a regional database is urgent to allow an efficient use of the data received from the official RCM data call and to allow a correct management of the data used by the PGMED and RCM. The RCM Med&BS-LP stated that it is fundamental to receive a clear feedback from the Commission in order to understand how to involve GFCM officially as host for the database, and then to be able to proceed with the development of the system that now is "stopped" since more than two years.

During the video-conference with the European Commission, a short presentation was made by the Commission representative concerning the preparation of the future EU Multi-annual Programme for data collection (EU MAP). As it is well known, the current EU MAP expires at the end of 2016 and several changes that have been requested by Member States and scientific groups, or that arise from new obligations, will need to be reflected in the future EU MAP. The RCM MED&BS-LP urged the Commission to guarantee that the new EU DCMAP should be ready by spring 2016 at the latest, for allowing MS to have time to prepare and implement their National Programs for 2017 onwards.

The Group reviewed the list of 8 surveys that was originally established during the RCM Med&BS 2010 and was evaluated by the STECF-SGRN 10-03 review of needs related to surveys. The RCM Med&BS – LP recommends that the Mediterranean and Black Sea surveys included in the current DCF (Appendix IX of Commission Decision 93/2010/EU) will remain in the future EU MAP with some adjustments. It was agreed that, from a scientific point of view, it would be very useful to enlarge the list of scientific surveys in the region and include all proposed surveys. On the other hand, the financial implications of enlarging / establishing new surveys cannot be overlooked, having especially in mind that the financial contribution of the EU in data collection has been fixed for the period 2014-2020 under the EMFF, therefore there are financial constraints. Certain MS reiterated their reluctance to perform any new survey, whereas others were not in a position during the meeting to reaffirm their willingness to perform new surveys.

The RCM MED&BS-LP reviewed the proposed list of stocks for which biological variables have to be collected and suggested several modifications that are detailed in a recommendation (#6). It has been considered important to maintain a prioritisation of the species, based on which different variables should be required to be collected with different periodicity. Moreover, the RCM suggested to maintain the columns with the inclusion of mandatory and optional variables (e.g. sex, maturity, weight and age), allowing the adjustment of data collection to national / sub-regional needs.

The RCM MED&BS-LP also discussed about the possible impacts that the Landing Obligation (LO) could have for the scientific data collection at sea and on-shore sampling programs, as well as the possible impact on census data such as logbooks. The RCM Med&BS - LP recommends to keep having observers onboard under the LO scenario. Furthermore, the RCM Med&BS-LP members also support that if MS decided to conduct LO control on board, this should be completely independent from scientific data collection

## 2.1.4 RCM North Sea & Eastern Arctic

The RCM NS&EA met 31st August - 4th September 2015 at den Haag, Netherlands with 27 participants form 11 member states and autonomous regions attending, including representatives of ICES and the Commission. National correspondents from Spain, UK, Denmark, Lithuania, Germany, Sweden and the Netherlands were present. The meeting was co-chaired by Katja Ringdahl (Sweden) and Alastair Pout (Scotland).

The RCM N&SEA considered the recommendations from the 11th Liaison meeting and summaries were presented of the work of expert groups and end users for the 2014-15 period to the plenary session of the meeting. The expert groups included WGCATCH, PGDATA, WKISCON2, WKRDB 2014-01, RDB–SC, STECF and the Zagreb meeting on transversal variables. ICES, as a main end user, provided feedback.

A summary was presented of the progress in the regional coordination project (fishPi). This project involves over 40 participants from 12 Member States from NS&EA, NA and Baltic regions, two external statistical experts, and ICES. The project has a wide scope of regional cooperation issues including sampling designs, data formats, code lists, PETS, stomach sampling, small scale and recreational sampling, and data quality software production. It has a budget of €400,000, and a one year time line and with a planned completion date of April 2016. A project with identical aims is running in parallel in the Mediterranean and Black Sea regions.

The majority of the ToRs of the RCM NS&EA were addressed by three subgroups: one concerned with data analysis, one with the landing obligation, and one with issues particularly related to role and work of national correspondents.

## Data analysis sub group

The data analysis subgroup considered that the 2015 RCM data call was in large part well met with all NS&EA member states and countries providing data, all but 2 uploading successfully to the RDB. A notable feature of the response to the 2015 data call was the welcome addition, for the first time, of Spanish data. This enabled a far more complete picture of regional fisheries to be obtained and is a particularly welcome development in regional cooperation.

The completion of upload logs, designed at the 2014 RCM, was a considerable success. Most, though not all, countries fill them in and they highlighted a number of issues that will lead to the improving the process of RDB data submission.

Data analysis carried out by the subgroup, and ICES data centre, included some basic audits of the data within the RDB. This was supplemented by descriptions of fisheries within the region: NAFO area, Eastern Arctic area, northern North Sea demersal fisheries, southern North Sea flatfish and pelagic fisheries. Each of these descriptions included the identification of sampling frames of major landing harbours, the main national fleets by metier, the ranking of species tonnages, and maps of the fishing locations and landing ports.

Analysis of the landings abroad, and the extent to which the RDB held sampling data from flag vessels other than the landing country, showed that a considerable proportion of the landings (~23% by weight) are either not being sampling or the samples of this fraction cannot be uploaded to the RDB.

An analysis of the age data from the RDB was able to demonstrate the scope and the number of determined ages by species and country, and relate this to the proportion of the landings of the species concerned. While the number of age readings need not be directly related to the proportion of the landed catch, the findings are of interest in demonstrating potential for task sharing in age reading.

## Landing Obligation subgroup

The landing obligation (LO) continues to raise major concerns for RCM participants.

The subgroup considered evidence of the effect of the LO on the recording of the unwanted landings, which have now officially been classed as landings with a presentation BMS (below minimum size). The experience of the LO for NS&EA fisheries is as yet limited to pelagic fisheries where there appears to be little change in the landed components of the catch. The experience of Denmark, Sweden and Germany of the implementation in the Baltic suggest that, in some situations the BMS fraction is being grossly under recorded in logbooks and/or is simply not available where the landing data are derived from sales notes and BMS fraction is not sold. An additional problem is that the figures that are available are hard to equate to know catch fractions. The subgroup considered this to be extremely concerning, considering control data derived from logbooks comprises some of the principal input data to maintain the time series of stock assessment models. Blurring the distinction between the different components of the catch increases the uncertainties around any catch estimates derived from the sampling programmes and undermines any potential advice in reference to catch options or effort management from the assessments using these data.

The subgroup reiterated the desirability of maintaining at-sea observer programmes as the only reliable means of generating estimates of catches, as recommended by the RCM NS&EA 2014 and endorsed by the LM 2014. Noting further that the landing obligation only applies to TAC species, and that therefore, information on discards of non-TAC species will not be available without running observer programmes and full concurrent discard sampling. Such estimates are required to answer the requirements of the DCF to provide data for ecosystem impact and MSFD assessments.

RCM NS&EA also (again) highlight the need for national and international IT-systems and estimation procedures to be adapted to properly deal with the new BMS fraction of the catch. The issue is urgent and needs to be solved prior to data calls for 2015 data as the landing obligation already is in force for some stocks and in some areas.

A particular concern of the subgroup was also that throughout its discussions, RCM NS&EA was conscious that the opportunity had been lost for the Scheveningen Group charged with oversight of the discard plans for the North Sea region and the RCM to work in a coordinated manner to address the data collection issues arising from the landing obligation.

#### National Correspondents subgroup

A sub group of national correspondents of NCs was formed as part of the RCM NS&EA. This group considered it useful to have a forum where common experiences could be shared without the requirement for NC to act purely in a dissemination role. Of note where the consensus view that EMFF funding regime had, for a number of member states, made their funding position worse, and that in all cases it had imposed an unwelcome additional administrative burden. It was the consensus view of attending NCs that the population of the RDB was desirable and that a commitment to do so should form part of the nation programme. A number of issues relating to the harmonization of reference lists used by control agencies and other EU bodies were highlighted but there was no concern over the sharing control agency data, within and between member states. Some issues were also highlighted relating to the ability to define metiers, the recording of selection devices and the inadequate recording of under 10m fleet in logbooks.

The NCs subgroup noted the potential requirement for the distribution of the sampling commitments between member states might change considerable under regional sampling design, hence the obligations and of necessity the funding at national administration level. To that end it was suggested that a review of the current financial obligations, in relation to stock exploitation and TAC, would be a useful resume on which any such debate can be framed.

The cost sharing model for two surveys (International Blue Whiting Spawning Survey and International Ecosystem Survey in the Nordic Seas) proposed in 2014 was suggested as the basis for other surveys, it being noted that TAC share would be a simpler and more robust measure of a national contribution, than the stock exploitation.

#### Future work of the RCM and RCGs

The role of the RCM and RCG was discussed in plenary. The role and composition of RGC groups was identified to be mainly that of intercessional working groups, coalescing to cover particular needs and with the participants required for tasks. The structure of the groups could vary from ad hoc groupings to a more formalised membership, cooperating over differing time scales depending on the particular tasks they were to address. They would have a reporting role to existing RCM and/or a putative supraregional body. To that end the issues involved in the merging of the NSEA RCM and the NA RCM were considered, with many parallel processes being noted. The need of national scientific institutes to commit the person time to the RCG process was identified as a key aspect of the evolution of the RCG process. Funding the RCG process was discussed. The existing experience of the direct funding channels was noted as being administratively very inefficient, and the pooling of EMFF funding from national workplans was untried, and potentially fraught with complications.

The RCM NSEA expressed in the strongest terms that the short term needs of regional cooperation were dominated by the overwhelming need to fund work related to the RDB, emphasising the the RDB was not simply a data base, but also a means of facilitating the data analysis, skills, dissemination of best practices, and harmonisation of work involved in regional data collection and estimation. As such it is much more than an investment in the regional cooperation process as the tangible structure of the RDB as housed by the ICES data centre. It was emphasised that key requirements of data collection, such as the ability of member states to evaluate the impact of the landing obligation, are very largely dependent on such development funding. The role of the commission in facilitating this process was stressed repeatedly.

## 2.1.5 RCM North Atlantic

The 12th RCM North Atlantic (RCM NA) was held in Hamburg (Germany), 14-18 September 2015. The main purpose of the RCM is to coordinate the National Programmes (NP) of the Member States (MS) in the North Atlantic region. NPs for 2011-2013 have been rolled over for the period 2014-2016. Therefore, the main focus at this year was to improve regional data collection, analysis and storage and the evolution towards Regional Coordination Groups (RCG). The impact of the introduction of the landing obligation and preparations for its implementation was also discussed taking into account possible changes in scientific sampling schemes. The participation of four National Correspondents made it possible to address national administration issues related to the forthcoming EU MAP.

A data call was launched by the chairs of the RCM NA, RCM Baltic and RCM NS&EA where MS were requested to upload data for 2014 into the regional database (RDB Fishframe) hosted by ICES. All MS except France and Northern Ireland complied with this request on landings and effort data. All MS except France uploaded sample data for 2014. French data were available for the meeting using a webbased interface. Evaluation of the data call for submission data to the RDB revealed that the numbers of species in landings and sample data and the numbers of metiers in effort data are in general stable. The RCM NA sees big improvements in the work MS are conducting regarding data calls coming from a situation where some countries did not provide any data to a new scenario where everyone is providing data; at the same time, the overall quality has significantly improved, which is a large step forward.

## Regional data collection, analysis, storage and the evolution towards RCGs

Optimising and harmonising fisheries management across MS is dependent on improving regional coordination. The group discussed various needs and aspects relevant for facilitating future work of the RCM. Future tasks for the RCM do not differ much from the current tasks. The discussion was focused on the structure of the RCGs, funding and short-term needs to address tasks in an efficient way in future.

Regional coordination encompasses many different aspects, ranging from regional cooperation, sampling design, quality control procedures, data storage and analysis to the actual coordination, reporting and accountancy. Current task-sharing and coordination procedures as well as future mechanisms are partially covered under the current MARE study 2014/19 ("FishPi" project). The project and its progress were presented to the group. The outcomes of this study will demonstrate future procedures based on case studies.

As substantial effort and costs are involved to facilitate the process of regional coordination, the group highlighted the importance of access to budgets to cover the costs as fundamental need for future work. Especially funding for the development of the RDB is crucial for future work of the RCGs.

Due to the importance of moving to a regional catch sampling scheme, an exercise was realised and presented in planning a regional sampling design for on-shore sampling using data from the RDB. The optimisation of the regional sampling design set out was based on landing weight, for the simple reason that this was the only complete variable that was available for all the various national data sets. A regional sampling design can however be optimized in any number of ways (e.g. by landings value, by métier diversity, by species diversity, or by the number of fishing trips). The aims and aspirations of the end-users need to be defined to ascertain which way is most appropriate. It is one of the overriding advantages of a regional sampling design (as opposed to the aggregation of national designs) that the overall coverage can be set out to achieve regional goals.

The RCM NA analysed and discussed the main achievements of the 2<sup>nd</sup> ICES "Workshop on Implementation Studies on Concurrent Length Sampling" (WKISCON2). It became clear that concurrent sampling at-sea is a long-established practice in most MS and that, where it was applied, concurrent sampling of fishing trips on-shore resulted in substantial increases in species collected without jeopardizing the main uses of data. Stock assessment and discard estimation and management

are the major current uses of concurrent sampling data. Concurrent sampling has also been providing other benefits than its initial reason, such as advice to local, national and international authorities, research on MSFD descriptors, mixed fisheries and gear interactions and on mortality of rare species, data-poor stocks and Protected, Endangered and Threatened Species (PETS). It was clear that concurrent sampling is a statistically valid method for species selection, which has proven to fulfill different end-user needs. Implementation constraints, however, hinder concurrent sampling on-shore. Thus, in order to meet end-user needs, the RCM NA considers that different statistically sound approaches other than concurrent sampling could be tested in the field, so they may provide useful alternatives.

# Introduction of the landing obligation and its impact in the implementation in scientific sampling schemes

In terms of evaluating the impact of the introduction of the Landing Obligation (LO) on data collection, there is only limited experience as the current implementation only covers pelagic and industrial fisheries in this region but MS have or are preparing for the implementation where they can.

It is currently perceived that this year is a transition period for the pelagic fisheries and that these fisheries and control agencies are not fully implementing the LO (managing but not enforcing). As a result, MS did not have a lot of comments on the current year and are in general preparing for next year. During the meeting, it was decided to gather further information to address this issue by asking MS who were present to fill in a table on "Monitoring the impact of the landing obligation on data collection in the North Atlantic region" outlining the current state of play. This table could be considered as a live document which should be filled in year-by-year as the LO is phased in. This table will then serve to provide a historical record as countries can document the changes yearly and will also provide guidance and act as a learning tool to all MS on how other countries are implementing the LO.

#### National administrations

The RCM NA discussed the proposal for task-sharing and criteria for joint surveys. RCM NS&EA and RCM NA 2014 discussed a cost model for the present joint MS-financed surveys and for future joint surveys. In addition to this model, the RCM NA 2015 highlighted that four categories of surveys should be considered in relation to task sharing and criteria for joint surveys. In the light of cost sharing, the group commented that the current DCF recast proposal refers to 'exploitation of stocks' rather than EU TAC or landings. Given the relative stability, EU TAC shares are the preferred basis for sharing costs. The exploitation of stocks shall be interpreted as EU TAC share as a default. In specific cases, RCGs can in future agree on a different interpretation where needed and feasible.

Full agreement among the group was concerning the engagement and participation of National Correspondents (NC) in this meeting. The future role of the NCs in the RCG context was discussed, indicating a formal role for the NCs in the RCG process to approve and agree on regional arrangements. However, the current recast of the DCF does not include the formal involvement of the NCs in the coordination procedures and meetings. The RCM NA highlights this as potentially problematic for the foreseen formal role of the NCs.

## Other agenda items

Other items on the agenda of the RCM NA were the consideration of the follow-up of relevant recommendations made last year by the Liaison Meeting and presentations and relevant development from ICES, EC and SC-RDB.

## 2.2 RCM Recommendations and LM comments

Given the short time lag between the most of the RCMs in 2015 and the LM, final reports were only available from the RCM LDF and RCM MED&BS-LP-PGMED. Hence, the recommendations from the other RCMs are based on their draft reports and, therefore, the exact wording might differ from the final RCMs reports.

LM 1. RCM LDF Data Calls		
RCM LDF 2015 Recommendation	RCM LDF recommends that from 2016 onwards, data calls related to long distance fisheries are addressed to all non-landlocked EU MS in order to:	
	<ul> <li>ensure that all active fisheries in the areas in the competence of the RCM LDF are covered;</li> <li>obtain information on MS' participation in the working groups of any RFMOs related to fishing activity in the waters outside the EU</li> </ul>	
	It is expected that all National Correspondents contacted respond to the data call either with information on all fishing activity beyond the EU waters by the vessels under the flag of their MS or with confirmation of none of such activities.	
Justification	Until now, the RCM LDF concentrated its coordination in relation to two long-distance fisheries of which the group were aware so far (in CECAF and SPRMFO areas). However, in order to ensure that none of the potential active fisheries in the areas of the competence of the RCM LDF are excluded from the analysis of the EU fisheries activities and to ensure that comprehensive and updated information on the MS' involvement in working groups of any RFMOs related to fishing activity in the waters outside the EU is available, there is a need to call for such information to all non-landlocked MS.	
Follow-up actions needed	<ul><li>RCM LDF Chair to launch data call</li><li>All non land-locked Members States to respond</li></ul>	
Responsible persons for follow-up actions	Chair of the RCM LDF and non land-locked Members States.	
Time frame (Deadline)	RCM LDF Data Calls from 2016 onwards.	
LM comment	LM endorses this recommendation.	

LM 2. Sampling of species		
RCM Baltic 2015 Recommendation 1	The RCM Baltic recommends that the species list given in Appendix VII of COM Decision 2010/93/EU for the Baltic region for the new EU MAP is revised. Pike ( <i>Esox lucius</i> ) should be deleted and the following species should be added: Vendance ( <i>Coregonus albula</i> ), Smelt ( <i>Osmerus eperlanus</i> ) and Whiting ( <i>Merlangius merlangus</i> ).	
Justification	Analyses of the total landings/catches by species caught in the Baltic shows that several important species in the region are not included Appendix VII of COM Decision 2010/93/EU for the Baltic region. Therefore, the RCM Baltic 2015 recommends the species list is revised.	
Follow-up actions needed	The recommendation is forwarded to the LM and the Commission.	
Responsible persons for follow-up actions	European Commission	
Time frame (Deadline)	To be included in the new EU MAP	
LM comment	LM endorses this recommendation	

LM 3. Quality assurance – length at age relationship and weight at age relationship		
RCM Baltic 2015 Recommendation 2	The RCM Baltic recommends that standard report on <i>length-at-age</i> relationships and weight-at-age relationships are developed in the RDB and that any sampling method is taken into account when data are aggregated over time and country.	
Justification	The RCM Baltic finds it useful to have stadard table on <i>length-at-age</i> relationships and weight-at-age relationships when analysing data. It would be a useful tool for the stock coordinator when analysing data to be used in the stock assessment prosesses.	
Follow-up actions needed	ICES Data Center has to analyse implications both in terms of cost and in terms of technicalities, since there is no current funds for RDB development.	
Responsible persons for follow-up actions	RCM Baltic chair to contact the ICES Data Center.	
Time frame (Deadline)	mid-2016	
LM comment	LM endorses this recommendation.	

LM 4. Penalties of transmission of data to the GFCM		
RCM MED&BS - LP 2015 Recommendation 1	Regarding the penalties Mediterranean MS receive with regards to the submission of GFCM data, the RCM Med&BS 2015 is recommending that the following is to be taken into consideration:	
	<ul> <li>Task 1.5 data (Table 9) requests biological data (i.e. data on length, sex and maturity scale) of the main associated species caught from all operational units in which the national fleet is active. However, such data are not always required to be collected under the EU's Data Collection Framework. For example, for some species only length is required to be collected, while for some operational units (e.g. operation of fishing fleets in GSAs other than the national ones) no biological information is collected. In such cases, if the relevant columns are left blank, it is considered that there are missing data and not full coverage. Furthermore, this biological data is required in Task 1.5, irrespective of the importance of the species in the relevant GSA (for example irrespective of its catches, which sometimes can be insignificant). The issues mentioned above should not be encountered once the new GFCM DCRF (Data Collection Reference Framework) will be followed.</li> <li>The data in each task depends on the data provided in the previous task/s, whereby data not provided in the initial tasks has a cascading effect on the following tasks.</li> </ul>	
	With regards to the lack of data as described in the first point above a better communication could be established between the MS and the GFCM Secretariat.	
Justification	MS are receiving penalties following the DCF regulations for not submitting data which is not required by the DCF regulation to an enduser. Following the method of penalisation adopted is prompting MS to submit less data than available since this leads to less penalties (due to cascading effect presenting data in earlier GFCM tasks has on later tasks).	
Follow-up actions needed	COM to properly consult GFCM on assessment of data failures	
Responsible persons for follow-up actions	European Commission	
Time frame (Deadline)	Before the next assessment of data failures by MS	
LM comment	LM endorses this recommendation.	

LM 5. Penalties on data request from end users		
RCM MED&BS - LP 2015 Recommendation 2	RCM MED&BS - LP 2015 agrees with the STECF (15-13) recommendation; "if a MS has informed the end-user that due to issues beyond their control they are unable to collect certain data, and in spite of this communication the end-user continues to request the data, then only in the first year this can be announced as a data transmission failure, and should not be repeated in following years. Data should not further be requested from the MS for those years. "  RCM MED&BS - LDF 2015 notes that a data transmission failure of this type is only to be announced for the first request, even if the request for the same data comes from different end-users.	
Justification	To avoid MS being penalised for the same reason more than once	
Follow-up actions needed	COM to consider this recommendation when assessing data failures for each year.	
Responsible persons for follow-up actions	DG MARE	
Time frame (Deadline)	Before the next assessment of data failures by MS	
LM comment	LM endorses this recommendation.	

LM 6. Speed up the process of setting up a RDB for Med&BS (Med&BS-RDB) and a RDB for LP (LP-RDB)		
RCM MED&BS - LP 2015 Recommendation 3	RCM Med&BS-LP 2015 recommends that the COM should give clear indications on the possibilities to implement RDBs as soon as possible.	
Justification	The RCMMed&BS-LP considered that the development of regional databases is urgent to allow an efficient use of the data received from the official RCM data call and to allow a correct management of the data used by PGMed and RCM.	
	The process of development of the Mediterranean RDB started in 2011 and important steps were implemented. But all the process was stopped in 2013, because the COM informed on the need to wait for the outputs of the "feasibility study" and of its update.	
	However, RCMMed&BS would like to proceed on the implementation of the RDB and in particular, considered <u>fundamental to receive a clear feedback from the Commission in order to understand how to involve officially the GFCM as host, and then to be able to proceed with the development of the system that now it is "stopped" since more than two year.</u>	
Follow-up actions needed	COM to prepare legal basis for the RDB	
Responsible persons for follow-up actions	Liaison Meeting, DG MARE, GFCM, MS	
Time frame (Deadline)	2016	
LM comment	LM endorses this recommendation.	

LM 7. Evolution towards RCGs: Design-based sampling		
RCM MED&BS - LP 2015 Recommendation 4	RCM Med&BS-LP considered that MS should improve their knowledge on the design-based sampling and other statistical sampling tools used in others EU regions. For that, RCM recommended MS to participate in the EU Working Groups and Workshops relative to sampling designs and methods like WGCATCH.	
Justification	The information on design-based sampling is scarce at Mediterranean and Black Sea level.	
Follow-up actions needed	MSs' experts to participate in the WG	
Responsible persons for follow-up actions	MSs	
Time frame (Deadline)	2016	
LM comment	LM endorses this recommendation.	

LM 8. List of surveys in the future EU MAP		
RCM MED&BS - LP 2015 Recommendation 5	<ul> <li>The RCM MED&amp;BS – LP recommends that in the future EU DCMAP:</li> <li>the Mediterranean and Black Sea surveys currently included in the DCF (Appendix IX of Commission Decision 93/2010/EU) will remain, with updates on their geographical coverage; specifically, it is recommended that Croatia is included in the list of MS, and MEDIAS is extended for covering the Tyrrhenian Sea;</li> <li>in the list of surveys the column Survey effort – Days (maximum) is deleted;</li> <li>the geographical areas of the surveys in the Mediterranean and Black Sea are indicated in terms of GSA and not statistical divisions.</li> <li>new surveys may be included based on a STECF re-evaluation of the proposed list of surveys for providing an updated advice on their prioritization</li> </ul>	
Justification	Current surveys have built time series important for the assessment of stocks and the estimation of ecosystem indicators. The scope of the surveys has been/ will be even more enlarged to meet new data requirements stemming from the Marine Strategy Framework Directive (e.g. marine litter). Geographical enlargement is needed for including the new MS (Croatia) and the proposed area of Tyrrenian Sea.	
	The deletion of the column Survey effort – Days (maximum) will allow flexibility to the MS to adjust the days of the survey for the collection of new required data.	
	The indication of the geographical areas in terms of GSA will present more clearly the exact areas and MS involved in the surveys.	
	Since the 2010 STECF evaluation of proposed surveys, the scope of surveys has been modified for incorporating arising data requirements stemming out from the implementation of Marine Strategy (data on marine litter, sharks and other vulnerable species). A re-evaluation of proposed surveys, based on standard criteria and rules is needed for providing advice on their prioritization.	
Follow-up actions needed	<ol> <li>Re-evaluation of surveys</li> <li>Establishment of list of surveys for the new EU MAP</li> </ol>	
Responsible persons for follow-up actions	<ol> <li>DG MARE, STECF</li> <li>DG MARE</li> </ol>	
Time frame (Deadline)	Before adoption of new EU DCMAP	
LM comment	LM endorses this recommendation.	

LM 9. Review of the list of proposed stocks (current Appendix VII of COM Decision 2010/93/EU)		
RCM MED&BS - LP 2015 Recommendation 6	The RCMMed&BS-LP, after having revised the list of species/stocks proposed by the Commission, recommends to:  • maintain the column for prioritizing the species (G1: group 1; G2: group 2; G3: group 3) as revised and updated during the RCMMed&BS-LP 2015 meeting;  • separate the list of species/stocks for the Mediterranean Region and the Black Sea Region as proposed by the meeting;  • keep separate the large pelagic and all shark species from the other species;  • maintain the four columns reporting the variables to be collected (M: mandatory; O: optional) by single species, as checked and revised by the RCMMed&BS-LP 2015 meeting;  • insert the column reporting the frequency of the data collection for the listed variables (A: annually, T: triennial) as revised and updated during the RCMMed&BS-LP 2015 meeting;  • include the list of species pertaining to Group 3 (note: no FAO areas have been assigned to the species of this Group) as agreed during the meeting;  • exclude from the proposed table all mammals, seabirds and reptiles, grouping them as vulnerable species, and reporting in a separate table. For this species there will be non-obligation to collect any biological parameter;  • keep the exceptions rules as revised and agreed during the RCMMed&BS-LP 2015 meeting:  • the species is/are rare or not present in the national waters;  • the species represents less than 10% of EU total landings in the region (note: this value should be applied separately for Mediterranean and Black Sea);  • the species is present in the national waters, but its total weight accounts for less than 2% or 200 tons of total landings of the country.  The above-mentioned exemptions rules should be applied only for the collection of	
Justification	It considered important to maintain a kind of prioritization of the species, based on which different variables and with different periodicity should be required to be collected. Moreover, the Group also suggests to maintain the columns with the inclusion of mandatory and optional variables (e.g. sex, maturity weight and age), allowing the adjustment of data collection to national / sub-regional needs.	
Follow-up actions needed	COM to consider this recommendation in drafting the new EU MAP and DCF.	
Responsible persons for follow-up actions	LM, DG MARE	
Time frame (Deadline)	Before Data collection 2016	
LM comment	LM endorses this recommendation.	

LM 10. Need for observers on board with a clear scientific role	
RCM MED&BS - LP 2015 Recommendation 7	The RCM Med&BS - LP recommends keeping on having observers on board under the LO new scenario. Furthermore, the RCM Med&BS-LP members also support that if MS decided to conduct LO control on board, this should be completely independent from scientific data collection.
Justification	Different reasons where raised during the meeting to support this recommendation:
	<ul> <li>Some discard practices will always occur, even under LO scenario; species not under LO but still included in the DCF, species mandatory to discard, some demersal species not affected by LO till 2019 or non-commercial species. Observers are the best option for the monitoring of these discards.</li> <li>Observers provide detailed spatial information of the unwanted catches useful for avoiding unwanted catches in the future</li> <li>From observers we obtain independent information on logbooks (not strictly control). This information is useful in order to identify bias in census data.</li> <li>Observers play a role of direct contact between the scientists and the industry, and are useful to better understand what the feeling of the fishermen is.</li> <li>The group also agrees with the idea that if MS decided to conduct LO control on board (inspector), this should be completely independent from scientific data collection. Furthermore, this means that data collected under DCMAP should not be used later for control purposes. This way observer effect and its associated bias, and the refusal rate for accepting observers onboard will decrease. Moreover, this separation of roles should be clearly enough explained so that there are no doubts within the industry.</li> </ul>
Follow-up actions needed	COM to consider this recommendation in drafting the new EU MAP and DCF.
Responsible persons for follow-up actions	LM, STECF, DGMare
Time frame (Deadline)	2016
LM comment	LM endorses this recommendation.

LM 11. Upload in the RDB	
RCM NS&EA 2015 Recommendation 1	RCM NS&EA urges all countries to upload their data in time for the RCM.  RCM NS&EA also recommends EU to allow the appointment of some experts to prepare tables and figures for some days in advance of the RCM meeting.
Justification	Data fiddling within the RCM, has led to such delays in the analysis that no time was left for coordination. Only upload of the full datasets in time and preparation of summary tables by a group of experts in advance of RCM meeting can promote an effective coordinating meeting.
Follow-up actions needed	All MS to upload their datasets in time  A small group of experts (2-3 persons) to be named to prepare tables and figures summarising the information contained in the RDB in advance of the RCM meeting.
Responsible persons for follow-up actions	All MS EU and RCM NS&EA
Time frame (Deadline)	Mid-2016 to be used by RCM NS&EA in 2016.
LM comment	LM endorses this recommendation.

LM 12. Use of the RDB	
RCM NS&EA 2015 Recommendation 2	RCM NS&EA recommends that once the code list is finalized, all countries should repopulate the whole time series of landings, effort and samples to the RDB.
Justification	A multitude of codes for e.g. harbours, métiers, have been used and accepted to the RDB, leading to heterogeneities between countries and/or between years. Agreed code list for all fields of the RDB (see recommendation in ToR g), will enable the development of regional procedures for validation, statistical inferences and reporting.
Follow-up actions needed	RCM NS&EA to agree on code lists for all fields of the RDB All MS to implement the agreed code lists in their national data center for exporting purposes and upload their data in the RDB.
Responsible persons for follow-up actions	RCM NS&EA All MS
Time frame (Deadline)	Mid-2016 to be used by RCM NS&EA in 2016.
LM comment	LM endorses this recommendation.

LM 13. Landings abroad and the RDB	
RCM NS&EA 2015 Recommendation 3 & RCM NA 2015 Recommendation 11	RCM NS&EA and RCM NA recommend that the present situation in the sampling and estimation of landings abroad is reviewed and that the ICES data centre ensures that the RDB can hold accurate data that on the landings abroad fraction of the catch.
Justification	Landings abroad constitute a substantial fraction of the landed catch, a fraction which needs to be sampled adequately and for which estimates are required. The number of records within the RDB would suggest either that foreign landings cannot be uploaded and stored adequately, or that there is very little sampling of foreign vessels occurring.
Follow-up actions needed	ICES data centre to ensure that sampling data derived from landings abroad can be uploaded, and that this data can be stored correctly within the RDB.  WGCATCH to review the present situation in the sampling of foreign vessels, and the methodology employed to estimate landings abroad.  SC-RDB to analyse data policy implications.
Responsible persons for follow-up actions	ICES Data Centre, WGCATCH, SC-RDB
Time frame (Deadline)	To report back to the RCMs in 2016.
LM comment	LM endorses this recommendation.

LM 14. Upload logs	
RCM NS&EA 2015 Recommendation 4 RCM NA 2015	RCM NS&EA recommends that the upload logs messages from the 2015 upload exercise be taken into account when agreeing on regional reference lists for the RDB.
Recommendation 3	The RCM NA strongly recommends that:
	<ol> <li>those upload logs not depending on RCM decisions are to be taken into account by the SC-RDB and RDB support;</li> <li>each MS appoints a person to work on intersessionally sub-group to deal with those upload logs pending from RCM decisions;</li> <li>If relevant, MS to consider reload all their data and update the upload log on next RCM data call</li> </ol>
Justification	There are a variety of errors reported by the upload logs that need to be sorted, like the different length codes used, the need to define codes of procedure for e.g. KW days and how to deal with missing or incomplete information.
	Though the database support has improved substantially, its development is a continuous process which has to be enhanced based on user's feedback. There are still inconsistencies and errors in the data on the RDB that have been caused by the IT system design itself, by non-restrictive reference lists or due to insufficient data checks by MS. Data gaps limit the potential for data analysis and delays RDB use on the regional coordination process.
	The data call for the RCM 2015 was forwarded together with an upload log from de RCM NA report to be completed so that users can assess the limitations of the data and therefore what interpretations or analysis can be done with it. The RDB will be developed to record the status of the data within it, but until this feature is available a standard log submitted at the time of each data call can provide RCGs and data users with a reference to what data is not on the system as well as what is.
	Given the amount of issues listed pending from RCM decisions and the workload behind its scrutiny, intersessional work is required. Once analyzed and an action is set, the upload issues are to be addressed to the SC-RDB.
	If there are actions not pending from The RCM decision, the upload issues must straight assigned to the relevant responsible.
Follow-up actions needed	<ul> <li>Taking into account upload logs for reference lists.</li> <li>Upload log to be addressed to SC-RDB;</li> <li>Upload log issues pending from RCM decision to be analyzed intersessionally by persons appointed by MS;</li> <li>RCM chairs to include an updated upload log in data call 2016 and, when relevant ask MS to consider reload their data.</li> </ul>
Responsible persons for follow-up actions	RDB-SC, RCM chairs and intersessional group for the upload log

Time frame (Deadline)	Upload log 2015: before SC-RDB 2015  Upload log 2016: to include in data call 2016 (mid-2016)  Reloading of data and submitting of upload log to RCM chairs: by deadline specified in data call 2016
LM comment	LM endorses this recommendation.

## LM 15. Implications of the landing obligation - Scientific data storage, IT systems and estimation

## RCM NS&EA 2015 Recommendation 5

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## RCM NA 2015 Recommendation 9

RCM NS&EA repeats the recommendation from last year that scientific institutions and ICES need to ensure that data recording systems, IT systems and estimation routines are able to appropriately deal with the new BMS (fish landed below MCRS) fraction of the catch that origins from the landing obligation. National and international databases (including InterCatch and FishFrame) need to accommodate this new fraction in order to make catch estimates transparent.

RCM NA recommends that scientific institutions and ICES ensure that data recording systems, IT systems and estimation routines are able to appropriately deal with the retained discard fraction (Landings BMS) and official discards. RCMs to review, monitor and advise on the impact of the implementation. Also, authorities should adjust logbooks and IT systems to accommodate the accurate recordings of all catch components, including the part that can be released under the de minimis exemptions.

Authorities should adjust logbooks and IT systems to accommodate the accurate recordings of all catch components, including BMS and fish that are discarded, for example under the *de minimis* exemptions.

## Justification

The landing obligation will introduce a new category of landed fish below minimum conservation reference size (BMS) and this fraction of the catch will require to be estimated. This necessitates that within national institutions and ICES all stages of the recording, storage and estimation processes are able to accommodate this fraction.

Many national IT systems may have data models based on a distinction between landed and discarded data that will require modification to accommodate the BMS fraction. Routines to estimate national catch compositions for length and age for assessed stocks will need to be adjusted. The ICES InterCatch system and the regional data base may be similarly affected.

## Follow-up actions needed

Scientific institutions and ICES data centre to consider if present systems are appropriate and if not make the required modifications.

RCMs to review the impact of the implementation on data collection and consider the use of the draft template or similar on an annual basis (see RCM NA 2015 report).

MS and EU authorities to, where feasible, improve control data capture methods to assure the quality of the data used for scientific advice. Authorities should consider:

- 1. BMS fraction in the logbooks not just on the landing declaration. Assure and maintain accurate species composition data.
- 2. Sales notes or equivalent to need to account for the non-sold BMS fraction.
- 3. Validation of the control data for the BMS fraction.
- 4. Assured solutions for the under 10 meter vessels presently only

	reporting catch on sale notes. 5. Haul by haul information recorded in the logbook 6. Gear selectivity measures to be recorded in the logbook
Responsible persons for follow-up actions	Scientific institutions within MS & ICES  National and EU authorities
Time frame (Deadline)	As soon as possible as the landing obligation already is in place in some areas and for some species.  For InterCatch/RDB prior to data calls for 2015 data.
LM comment	LM endorses this recommendation.

LM 16. Age determination in st	ocks were age is not used in assessments
RCM NS&EA 2015 Recommendation 6 RCM NA 2015 Recommendation 12	RCM NS&EA recommends that the Liaison Meeting (LM) discusses and suggest a decision making process on how to deal with requirements on age determination for stocks were age is not used in the assessment due to poor agreement between age readers.
	RCM NA recommends a full evaluation of the state-of-the-art regarding relations between age reading of species and assessment. This evaluation could be done by WGBIOP in contact with stock coordinators. This recommendation should be valid until an agreed standardized age reading method is developed.
Justification	Many Member States undertake the task of determining the age of fish stocks e.g anglerfish ( <i>Lophius</i> sp) for which the age determinations is not used in the assessment due to poor agreement between readers. In the present situation all MS make, in lack of guidance, their own judgement if age determination should be kept or not. There need to be some kind of guidance to MS on how to act in those situations and the responsible body to give this guidance need to be identified.
	The collection of material (e.g otoliths) should of course continue as long as it is a requirement in DCF.
	RCM NA received a petition to consider the case of <i>Lophius</i> spp. Strong discrepancies between ilicia and otolith reading are found. This made not possible to use the age estimates of both calcified structures together, ilicia and otoliths, for stock assessment purposes.
	There is a need for an agreement between WGBIOP and <i>Lophius</i> stock coordinators to agree in the usefulness of following collecting and reading these structures for assessment purposes.
Follow-up actions needed	LM members to discuss and reach an agreement.  Agreement between WGBIOP and <i>Lophius</i> stock coordinators.
Responsible persons for follow-up actions	Liaison Meeting 2015 WGBIOP and <i>Lophius</i> stock coordinators
Time frame (Deadline)	2015 Next WGBIOP meeting (2016).
LM comment	LM considers that guidance in improving age determination is a task of WGBIOP. WGBIOP 2015 strongly encourages that the data endusers (i.e. assessment WGs and Benchmark WKs) stay in dialogue with WGBIOP and the RCMs in order to provide feedback on the usability and feasibility of (deriving) age reading data for these difficult species.

LM 17. ICES planning of working groups	
RCM NA 2015 Recommendation 1	RCM NA recommends ICES to review the ability of MS to provide data for working groups occurring in the first two months of the year in terms of the impact on quality and completeness of the data supplied. RCM NA share the opinion that this possible impacts would be avoided by moving the groups to April or later. It is strongly recommended to allow MS to have enough time to prepare and review the data.
Justification	Laboratories have problems to provide complete quality assured data to working groups occurring during the first two months and the effect of this on the quality of the assessments needs to be evaluated. That has been specifically the case of WGDEEP in 2014 (25th February).
Follow-up actions needed	ICES to ensure that this recommendation is considered yearly before establishing the annual calendar.
Responsible persons for follow-up actions	ICES
Time frame (Deadline)	2016
LM comment	LM endorses this recommendation. For 2016, some assessment WGs have been shifted to a later date (HAWG, WGDEEP).

LM 18. Improving species selection protocols	
RCM NA 2015 Recommendation 2	The RCM NA recommends simulation and practical implementation studies on onshore sampling methodologies with the objective of improving species selection protocols.
Justification	WKISCON2 reported that both MS (questionnaires sent by national correspondents) and ICES end-users see numerous uses and benefits on the data collection of more species that now allow improved analyses of the impacts of fisheries in the marine ecosystem. However, it is also clear that under the DCF not all countries have obtained data using the same sampling strategies and that sampling methodologies other than full-species concurrent sampling may be available that may also provide quality data on more species albeit with different levels of cost/efficiency, aggregation, precision and bias.
	Requirement to explore and analyse other sound statistical methods for species selection which are efficient in fulfilling end-users needs and consider logistic and operational problems that may arise with the implementation of concurrent sampling, particularly onshore.
Follow-up actions needed	This study could be achieved as one task of an extension of the current project FishPi, particularly taking the advantage of data made available for the project as well as expertise and project products.  European Commission to provide continuing funding of project FishPi
Responsible persons for follow-up actions	European Commission
Time frame (Deadline)	April 2016
LM comment	LM endorses this recommendation.

LM 19. Setup interregional task groups between RCM NA and RCM NS&EA	
RCM NA 2015 Recommendation 4	<ul> <li>RCM NA recommends to establish 4 task groups working intersessionally on supra regional subjects:</li> <li>Cost sharing of funding surveys</li> <li>Impact of landing obligation</li> <li>Reviewing the ICES list of data needs as input for designing regional sampling plans.</li> <li>Review and follow-up on upload logs</li> </ul>
Justification	Setting up these task groups will establish common working procedures between both RCMs and prepare ground for future cooperation on a supra regional level as is needed to fulfil future coordination tasks in the broad sense.
Follow-up actions needed	LM for approval, RCM NA and RCM NS&EA to allocate tasks.
Responsible persons for follow-up actions	Chairs of RCM NA and RCM NS&EA, end-users (ICES), EFARO
Time frame (Deadline)	1 February 2016
LM comment	LM endorses this recommendation and considers that data end-users are actively involved in these task groups. In order to enable actual work under these task groups, LM suggests that EFARO institute directors provide the necessary national financial and staff support.

LM 20. Data compliance versus data quality	
RCM NA 2015 Recommendation 5	RCM NA recommends that checks for data transmission failures are decoupled from general data quality issues raised by end users. The dialogue between end users and the RCM/RCG needs to improve to establish:
	<ul><li>a) whether data collected under the DCF is fit for purpose</li><li>b) how data collection can be improved when quality issues are raised.</li></ul>
	Separately, data transmission checks should focus on whether member states comply with the requirements of data provision according to specific data calls and DCF legislation.
Justification	National administrations raised concerns on the burden to respond to data transmission failures which are not related to compliance but to data quality issues raised by the end users. The RCM NA highlights the statement by STECF (EWG 15-10) that many issues highlighted as data transmission failures were idealised scenarios from the assessment working groups, and not data transmission failures.
Follow-up actions needed	LM to approve recommendation and COM to follow-up.
Responsible persons for follow-up actions	European Commission
Time frame (Deadline)	Before review of MS data transmission failures 2015.
LM comment	LM endorses this recommendation.

LM 21. Review of surveys to be included in EU MAP	
RCM NA 2015 Recommendation 6	RCM NA recommends an STECF EWG meeting to review the list of surveys to be included under the new EU MAP. This should include a review of the spatial and temporal coordination on a regional scale with the aim to optimise sampling effort. It is proposed to use the same evaluation approach as SGRN 10-03, however different weighting of criteria could apply in order to address newly emerging needs for ecosystem monitoring.
Justification	The last survey review was carried in 2010 (SGRN 10-03). An update is required, to:  a) identify any redundancies b) establish newly emerging data needs for fisheries advice c) improve harmonisation with monitoring needs under MSFD.
Follow-up actions needed	LM to approve recommendation and COM to follow-up.
Responsible persons for follow-up actions	European Commission
Time frame (Deadline)	Early in 2016, prior to finalising EU MAP.
LM comment	LM endorses this recommendation.

LM 22. MS contributions to RDB Fishframe	
RCM NA 2015 Recommendation 7	RCM NA recommends that each MS in the North Atlantic area contributes to the development and maintenance of the Regional Database and the supporting tools by contributing 5000 € yearly in 2016 and 2017.
Justification	The Commission indicated that a call for a 2nd study on data transmission and storage will be launched by the end of this year. Pending the outcomes of this study, no direct funds will be made available from the Commission for the development and maintenance of the Regional Databases and the supporting tools. As development of the RDB is crucial for future work of the RCGs, funds are needed for the development. These funds can be made available from the national EMFF budget.  Still the optimal setup would be through a project funded by the EMFF direct management as it would be a benefit for the RCM Baltic, RCM NS&EA, RCM NA and probably also for the RCM MED&BS.
Follow-up actions needed	Approval by NCs, RDB-SC
Responsible persons for follow-up actions	European Commission
Time frame (Deadline)	1st of January 2016
LM comment	LM endorses this recommendation.

LM 23. Descriptions of metiers	
RCM NA 2015 Recommendation 8	RCM NA recommends MS to provide a description of the métiers that are sampled in the RDB. RCM NA opinion is that this could be answered during next data call. At the same time it would be recommended to set up space in the RDB to keep these descriptions (link it in a repository with version control).
Justification	A short description of the metiers provides a useful method to understand the fishing units RCM NA works with. As long as the RDB is using these units, it should contain its description.
Follow-up actions needed	<ol> <li>RCM NA MS to provide this template before RCM NA 2016.</li> <li>RCMs chairs to include this request in next Data Call as an optional request recommended.</li> <li>RDB Managers to set up a space in the RDB to maintain these descriptions</li> </ol>
Responsible persons for follow-up actions	MS of the RCM NA, RCM chairs, RDB Manager
Time frame (Deadline)	2016 Data Call
LM comment	LM endorses this recommendation.

LM 24. EU TAC shares in the light of cost-sharing	
RCM NA 2015 Recommendation 10	The current DCF recast refers to 'exploitation of stocks' rather than EU TAC or landings. RCM NA recommends to change the reference from 'exploitation of stocks' to 'EU TAC shares or exploitation of stocks'.
Justification	EU TAC shares form a relative stable basis for cost sharing. In specific cases, by approval of the RCM, other indicators might be considered appropriate for certain surveys. Specifying EU TAC shares circumvents problems with stocks having a large share by third countries, thus excluding EU MS from their obligation to participate in a survey.
Follow-up actions needed	COM to implement in recast DCF
Responsible persons for follow-up actions	European Commission
Time frame (Deadline)	Prior to finalizing DCF recast
LM comment	LM endorses this recommendation.

LM A1.	
	AGREEMENT
Quality assurance – Upload of historical data to RDB FishFrame	
RCM Baltic 2015 Agreement	The RCM agrees on a repetitive data call demanding all MS to ensure that all historical data (including data in salmon and eel) for the period 2009-2014 are uploaded to the RDB hosted by ICES.
Justification	A complete and easily accessible regional data set is crucial for the progress of a statistical sound sampling design in the data collection at a regional level.
Follow-up actions needed	Data call to all MS via NC  Uploading of missing data by all MS
Responsible persons for follow-up actions	RCM Baltic chair to send out data call
Time frame (Deadline)	1st February 2016
LM comments	LM endorses this agreement

# 3 Outcomes and recommendations from PGECON (ToR 1)

### 3.1 Main outcomes of PGECON

The Fourth Planning Group on Economic Issues (PGECON) met in Berlin, 18-22 May 2015. 20 representatives from 15 Member States, two experts from JRC and one representative of DG MARE, attended the meeting.

Recent developments in the context of EU MAP legislation were presented by a DG MARE representative.

The outcome of two workshops with relation to DCF economic and transversal data was presented and discussed. Results of the The Hague workshop on the use of activity levels to stratify the results for economic parameters of fisheries were presented and discussed. From the results of the workshop, it became clear that the distinction between so called low active vessels and active vessels might increase the quality of the results for some cases, but that are also problems attached to making this distinction:

- There is no natural/obvious boundary value to make the distinction.
- An EU covering theoretical framework for setting a boundary value is not available.
- Implementation of such a distinction is very difficult/undesirable for many (Southern European) countries due to the lack of a comprehensive dataset on fishing activities (esp. logbooks).

It was concluded that a regional approach is needed to make progress on this topic and that another workshop should be held to evaluate possible consequences making the distinction for the Baltic and the North Sea region.

At the Zagreb workshop, transversal/effort data, their definitions, their resolution and their codification in biological and economic data calls were addressed. During an exercise performed by representatives of several MS, it was observed that a wide range of values resulted for effort variables across MS and across fields using the same six activity scenarios. The variables in question were days at sea and fishing days. This exercise illustrates the different interpretations with regards to the definition of these variables. Moreover, a mismatch of coding between biological and economic data calls was highlighted.

There is a clear need for harmonisation of both interpretation of definitions and codification. This has also been supported by STECF at the 2015 spring plenary. A follow-up workshop has been suggested during the workshop to apply common approaches to real datasets provided by MS representatives. Ideally, the findings can be implemented by MS for upcoming transversal data calls. However, it has to be borne in mind that the implementation can be time-consuming. It should be scheduled in a way that the considerable extra work is feasible.

PGECON strongly supports the suggested workshop and underlines the workshop recommendation, "The results must be considered in the DCF reviewing process that is now being undertaken, specifically when tackling effort variables. Data provided according to the JRC data calls are not used for direct management purposes i.e. setting of baselines for kWdays.".

Moreover, PGECON suggests that a common data format should be defined prior to the follow-up workshop which MS could apply to provide data for the workshop. This would facilitate the development of a common program code (and/or pseudo-code) to enable consistent processing of data from all MS.

PGECON appreciates the exercise of deriving DCF Annual Report Tables III.B.1-3 directly from data submitted for the fleet economics data call. It is suggested to consider extending this approach to aquaculture, fish processing and also transversal variables (Table III.F.1). Moreover, a link to NP tables

should be developed. For that purpose a redesign of NP tables should be considered, addressing the relevance and the need for information that is being requested.

The amended design for future aquaculture data calls was presented and discussed. PGECON regarded the amendments helpful and supports the changes.

The quality checks of DCF data submitted to different stakeholders (mainly EU COM) have been discussed and regarded very helpful. PGECON states that a recurring failure of delivering certain values (basically referring to previous years) should be reconsidered. If MS have failed to collect certain data in the past it is likely that it is not going to be made up in following years.

Methodological issues on data collection and data quality were also considered at PGECON. A modeling approach on estimating fuel costs was presented and discussed. It was regarded as a good example for an estimation based on additional information which is readily accessible. PGECON suggests the preparation of a workshop on harmonizing estimation approaches amongst MS during the 2016 event.

Data quality issues were discussed. The discrepancy between requesting data quality indicators and using them was stressed. Analyses based upon economic data are usually undertaken with no regard to data quality. This might lead to wrong conclusions.

PGECON recommends a follow-up on data quality considerations by the Commission/EWG. It should be clarified how quality information as requested under the data collection framework can be used meaningfully in the future. Moreover, the implications of quality properties of provided economic data for the different purposes for which these data are being used (e.g. performance indicators, balance indicators) should be further specified.

As a general observation, it was stated at PGECON that numerous activities have been undertaken in the past to tackle issues of various nature, e.g. sampling, modelling and estimation procedures, calculations, interpretation, definitions, etc. While some issues could be solved others seem to have been perpetuated, getting stuck as recommendation for a study or being forgotten in one of the numerous reports or documents.

In order to collate recommendations on economic data collection (e.g. from RCMs, STECF, PGECON), PGECON suggests that a web repository should be established and maintained. The data collection website was mentioned as a possible place to store information about different practices of MSs, to help share the information between the MSs. This might include information such as methodological guidelines of MSs and questionnaires used for collecting the data.

Due to its heavy involvement a JRC representative agreed to prepare a compilation of findings and recommendations from previous reports concerning the data collection framework. As a first step a folder has been set up on PGECON ftp. The folder called DCF Methodology was created in order to collate all recommendations (RCM, STECF/SGECA, PGECON) and documents in the same storage. MS are invited to share their national methodological reports/rules of implementation and procedures with the other countries involved in the DCF.

This approach will have to be followed-up with regard to effectiveness. It was decided that a review would be gathered for the next PGECON.

Whenever needed, PGECON suggests establishing an economic workgroup which convenes more frequently than a workshop to tackle particular issues, as is common in the biology context. The work on transversal variables would be a good example.

PGECON repeats the need for several studies which have been strongly recommended, some of them for several years:

- Origin and Sources of Raw Material in the European Seafood Industry
- Study to disaggregate economic variables by activity and area

- Handbook on sampling design and estimation methods for fleet economic data collection
- Harmonise quality reporting and propose methodology in the case of non-probability sample survey
- Pilot study on social indicators
- Study to propose methodologies for estimation of intangible assets in EU fisheries

# PGECON 2015 suggested three workshops:

- Aquaculture data collection (as recommended in 2014, took place in summer 2015)
- Implementation of thresholds on fishing activity (follow-up on 2014 WS)
- Harmonisation of transversal variables (follow-up on 2015 WS on effort data)

# 3.2 PGECON recommendations and LM comments

LM 25. Workshop on thresholds for activity levels (follow-up on 2014 WS)	
PGECON 2015 Recommendation 1	PGECON recommends a follow-up workshop on introducing a threshold for distinction between commercially and non-commercially used registered vessels, using a regional approach.
Justification	The 2014 WS has shown that applying a threshold can result in more useful economic data. However, the issue of most appropriate measures for threshold could not be clarified. Moreover, differences in data availability suggest to pursue a regional approach, running an exercise for the Baltic/North Sea region for which sufficient control data are available <i>a priori</i> .
Follow-up actions needed	Conducting workshop on thresholds
Responsible persons for follow-up actions	H. v. Oostenbrugge (LEI, The Hague, NL)
Time frame (Deadline)	Scheduled for Oct. 2015
LM comments	LM endorses this recommendation.

LM 26. Workshop on linking economic and biological effort data (follow-up on 2015 WS)	
PGECON 2015 Recommendation 2	PGECON recommends a follow up workshop on linking economic and biological effort data.
Justification	During the first workshop it was elaborated that the definition of effort variables is interpreted differently by MS. More work is required to achieve a common understanding of effort variables and harmonize codification across data-calls in order to get data which are comparable amongst MS.
Follow-up actions needed	Conducting workshop on linking economic and biological effort data
Responsible persons for follow-up actions	Cristina Castro Ribeiro (JRC)
Time frame (Deadline)	Scheduled for November 2015.
LM comments	LM endorses this recommendation.

LM 27. Extension of automatic generation of AR tables from JRC database to aquaculture, processing and transversal variables		
PGECON 2015 Recommendation 3	PGECON suggests trying to extend the optional generation of DCF Annual Report (AR) Tables III.B.1-3 to Tables III.F.1, IV.A.1-IV.B.2 (transversal, Aquaculture, fish processing).  Moreover, it should be evaluated if all information as requested in current AR tables is really necessary (e.g. target/frame population).	
Justification	The approach has been proven successful for fleet economic data. It facilitates the reporting for MS. Moreover, it is directly linked to submitted data, i.e. the AR table which is derived from the JRC database is based upon data which MS were able to submit.  Therefore, the evaluation of MS activities (AR) is also facilitated.	
Follow-up actions needed	The routine of AR table extraction has to be further developed; it has to be scrutinised if all AR data can be derived from the database and if missing values (i.e. data that cannot be derived from the data base) are necessary.	
Responsible persons for follow-up actions	JRC, STECF/COM	
Time frame (Deadline)	End of 2016	
LM comments	LM endorses this recommendation	

LM 28. Clarification of use of quality information		
PGECON 2015 Recommendation 4	PGECON recommends clarifying the use of data quality information as provided together with economic data.	
Justification	Data quality information is being requested and provided for a long time. However, this information has been entirely disregarded whenever economic data have been used for analyses. This can lead to misinterpretation e.g. if conclusions are drawn on figures which are regarded as precise, although they come with some uncertainty.	
Follow-up actions needed	Assure that information on data quality is being transferred and used whenever economic data are analysed.  Clarify how information on data quality has to be evaluated and made publicly available to end-users.	
Responsible persons for follow-up actions	DG MARE/STECF	
Time frame (Deadline)	Prior to 2016 LM	
LM comments	LM endorses this recommendation	

LM 29. Enabling the establishment of economic workgroup		
PGECON 2015 Recommendation 5	PGECON recommends setting the scene for establishing economic workgroups when required.	
Justification	Thus far there has not been any economic workgroup that would convene for several times to address a problem – compared to biological workgroup.	
	There are two current issues which are to be addressed through subsequent workshops. Those topics could more efficiently be solved through a workgroup which could plan meetings more flexibly.	
Follow-up actions needed	Provision of formal prerequisites to generate an economic workgroup.	
Responsible persons for follow-up actions	DG MARE	
Time frame (Deadline)	Prior to 2016 PGECON	
LM comments	LM endorses this recommendation	

LM 30. Clarification of definition and purpose of distinction between target and frame population		
PGECON 2015 Recommendation 6	PGECON recommends a clarification of the variables "target population" and "frame population" as requested in the DCF Annual Reports (AR).	
Justification	It turned out that the definition of target and frame population has been interpreted in manifold ways. Moreover, the purpose of the distinction is not clear. Apparently, it has never been analysed, as otherwise the range of different understandings would have been addressed.	
Follow-up actions needed	Update of AR and NP guidelines according to clarification	
Responsible persons for follow-up actions	COM, STECF	
Time frame (Deadline)	Prior to release of AR and NP guidelines	
LM comments	LM endorses this recommendation	

LM 31. Studies requested in previous years		
PGECON 2015 Recommendation 7	<ul> <li>PGECON must realize that a considerable number of studies that have been recommended through the years have piled up without having been addressed in any way – e.g.</li> <li>Origin and Sources of Raw Material in the European Seafood Industry</li> <li>Study to disaggregate economic variables by activity and area</li> <li>Harmonise quality reporting and propose methodology in the case of non-probability sample survey</li> <li>Pilot study on social indicators</li> <li>Study to propose methodologies for estimation of intangible assets in EU fisheries.</li> <li>Handbook on sampling design and estimation methods for fleet economic data collection</li> </ul>	
Justification	Studies have been justified and endorsed numerous times. See detailed description in PGECON 2014 report.	
Follow-up actions needed		
Responsible persons for follow-up actions	DG MARE	
Time frame (Deadline)	End of 2015	
LM comments	LM endorses this recommendation	

# 4 Outcomes from PGDATA (ToR 1)

#### Main outcomes of the ICES PGDATA 2015

The ICES Planning Group on Data Needs for Assessments and Advice (PGDATA) met for the first time in Lysekil, Sweden, from 30 June to 3 July 2015. The main focus for the group in its first year was the end-use of data and information on data quality by the ICES stock assessment process, particularly the benchmarking of singe-species stock assessments. The PG reviewed previous benchmark stock assessment meeting reports going back to 2009, and also the responses of ICES stock assessment expert groups to data-quality questionnaires for discards estimates supplied by Member States in the 2015 ICES data call, and found an extremely variable approach to evaluating and acting upon the quality of data available for the assessments. PGDATA drafted, using this back ground, detailed guidelines for the data compilation and evaluation stage of ICES benchmark stock assessments to encourage a more consistent, transparent and objective approach for data evaluation. The guidelines will be tested using a full data evaluation process for Irish Sea whiting in the forthcoming Irish Sea benchmark assessment (WKIRISH).

The 3-year programme for PGDATA included (for its second year) the planning and running of a workshop to develop tools for evaluating how the quality of individual data sets affect the precision of stock assessment estimates, and how data improvements would affect the quality of assessments and advice. To address this, PGDATA has planned to conduct a workshop on cost benefit analysis of data collection in support of stock assessment and fishery management (WKCOSTBEN, see Annex 1), which would meet at ICES HQ, 28 June to 1 July 2016. The proposed terms of reference are given at the end of this section.

PGDATA discussed its role in relation to InterCatch, the Regional Data Bases (RDB) and the ICES Data Group. The PG recognises the potential huge value of the RDB as a tool for end users to scrutinise the coverage and quality of fishery sampling data, including the evaluation and documentation of data quality for benchmark and update assessments at ICES. PGDATA recommends that funding be made available for further development of the RDB including analysis routines to provide estimates needed for stock assessments or other end use together with diagnostics of the quality of data and estimates.

The PG addressed a European Commission request on the needs for recreational fishery data, and supported the detailed response of the 2015 ICES Working Group on Recreational Fishery Surveys, but further emphasizing role of RCG / ICES in defining regional needs and sampling plans.

Feedback on the role and work programme of PGDATA was sought at the meeting from the chairs of ICES Expert Groups (WGBIOP, WGCATCH) and regional coordination meetings (RCMs), and the work programme for 2015/16 was reviewed and adapted.

# 5 Outcomes from STECF EWGs on DCF (ToR 1)

#### 5.1 STECF EWG 14-17

The STECF EWG 14-17 met in Hamburg, Germany, from 20-24 October 2014, addressing 1) short-term revision of the Annual Reports guidelines and standard tables (based on EWG 14-07 and work prepared by an ad-hoc expert) and 2) long-term preparations for National Work Plans and Annual Reports. The underlying aim of both Terms of Reference was simplification compared to the current DCF guidelines and templates and improved use of the information contained in MS Work Plans and Annual Reports by data end-users.

Regarding proposals for short-term changes for Annual Report formats, the EWG prepared revised guidelines and standard table files with changes visible, with the aim of providing Member States with new reporting formats and guidance agreed by STECF for the forthcoming reporting period (Annual Report 2014) until the end of 2014. The proposed set of standard tables contain several suggestions for deletions of redundant information and clarification on issues that caused confusion or uncertainty on reporting requirements in the past. Moreover, the EWG addressed all outstanding questions on changes by the ad-hoc expert.

When dealing with longer-term perspectives for National Work Plans and Annual Reports, the EWG 14-17 faced the problem that a proposal for a revised DCF and corresponding Implementing Acts was not available. Therefore, the discussions and ideas on National Work Plan elements and on improved Annual Report compilation presented here only provide first hints on a way forward, aiming at simplification and improved use of the information, compared to the current DCF system. The EWG considers that National Work Plans would contain a static part defining long-term elements such as data collection and data quality assurance methods, and a flexible part that reflects short-term adaptations such as sampling intensities and responsive actions from regional recommendations.

The use of existing (and future) databases for fisheries information and intended/conducted sampling is a strong new element suggested for compilation of National Work Plans and Annual Reports. The EWG briefly described existing databases for the various data types. An example for the immediate use of data from the Fleet Economics Data Call in current Annual Report tables is given to illustrate the use of databases for reporting on fisheries and sampling data.

The EWG further discussed current data transmission requirements and timing, suggesting the need for harmonisation of the various requirements of Regional Fisheries (Management) Organisations and International Organisations (e.g. ICES) with DCF requirements.

#### 5.2 STECF EWG 14-18

The STECF Expert Working Group (EWG 14-18) composed of 17 independent experts, and representatives from DG ESTAT, DG MARE and DG JRC, met in Brussels, Belgium, from the 25th to the 28th of November to: i) assess three amended National Programmes (NP) for 2015; ii) assess the 2013 Annual Report (AR) from Bulgaria which was not ready for evaluation in the previous STECF EWG 14-07 and iii) to provide expertise to the Commission for the preparation of the future EU Multi-annual programme, namely on issues such as: Regional Fisheries Management Organizations (RFMOs), Aquaculture, Availability of Data and Geographical Areas.

The EWG was requested to evaluate the proposed amendments to the 2014-2016 NP for the year 2015 submitted under the Data Collection Framework (Council Regulation (EC) 199/2008) and to determine whether a readoption of the 2014-2016 NP for the year 2015 is required. Latvian and Spanish NP have proven to have only minor changes, therefore without further need for an official readoption. The revised NP from the United Kingdom has been assessed as containing major revisions, namely for the collection of recreational fisheries and a new methodology to collect economic data on aquaculture,

therefore it should be subject to an official approval. This evaluation of NP amendments has been the first since the extension of MS NP for 2014-2016 by a rollover of the NP 2011-2013, and therefore this experience has led the group to draw some conclusion for the future, particularly on how NP are to be updated using the reference years, namely for selecting the metiers to be sampled.

The EWG was also requested to review the Bulgarian AR for 2013 in accordance with Article 7.2 of Council Regulation (EC) No 199/2008 and taking into account the execution of the NP for 2013 and the quality of the data collected by the Member State. The overall evaluation of the Bulgarian execution over 2013 is "partly", meaning an execution of about 10% to 50% of their National Programme. Bulgaria has failed to put in place most tasks planned in their NP, namely for the collection of biological data and research surveys at sea. However, the collection of economic data was implemented and the appropriate data were submitted for the economic data calls in 2014. A detailed evaluation has been performed and is included in annex 2 of the report.

Under the terms of reference on data collection for RFMOs, the group has performed a comparative assessment of the obligations Member States (MS) have towards RFMOs in terms of data provision and has also assessed how coherent the current DCF is on what concerns the provisions for collection of those data. A detailed table (Annex 3) has been prepared showing 1) data reporting obligations under RFMOs, 2) identifying if those data are included in current DCF and/or 3) if data should be considered relevant for the future DCF. Overall, this assessment has shown the presence of some gaps in DCF regarding data needs stemming from international obligations. These gaps essentially relate to the lack of DCF obligation on the collection of data on interaction with by-catch/protected species and on data on fish aggregating devices (FAD).

Also under the same topic, the group was requested to assess the derogations granted to the MS under their DCF NPs for the collection of fisheries data in areas managed by RFMO and the identification of any of these derogations that could be in contradiction to the obligations under RFMOs. A thorough evaluation of the derogations in place was done; the complete list of derogations together with the EWG judgement for each of them on that regard is included in the report. The exercise has shown that most derogation currently in place are not in conflict with data collection obligations under RFMOs, although a few of them are.

For the data collection on the aquaculture sector, the EWG was requested to address the need to eliminate data collection duplication between Statistical legislation on aquaculture (hereafter referred to as the "EUROSTAT" framework) and the DCF and in particular to address concerns raised in a Special Report of the European Court of Auditors, "The effectiveness of European Fisheries Fund support for aquaculture" that production data from Eurostat (based on the Statistical regulation on aquaculture) and the STECF (based on DCF data) are different. With regard to both data collection frameworks, EUROSTAT and the DCF, the group has thoroughly discussed the two scenarios currently in place to identify differences and overlaps in order to find the best compromise for the future, considering also major information needs from DG MARE. A scenario considered the most preferable has been established (section 5.2.2), and details on how to align the following specific points are given in this report: scope of data collection, segmentation, unit of data collection (enterprises vs production units) and calendar vs accountancy year. Additional questions that deserve further reflexion, such as data sharing protocols and collection of livestock data, were identified. Previous advice from STECF regarding the collection of aquaculture data was duly considered and the current output is presented in line the context of that earlier advice. In addition the EWG has also elaborated a comment on the outcome of the Special Report of the European Court of Auditors.

In view of moving away from the current system of data calls, towards a system where data are made available by Member States for end-users to access, the Commission has requested the EWG to discuss the recommendation from the DCF Database Feasibility Study that data should be made available at the most disaggregated level to enable end-users to aggregate the data to meet all their different needs. The issue was thoroughly discussed, a list of pros and cons on the usage and provision of such detailed data

was identified, a generic schema depicting the current flow according to the level of data aggregation was devised and conclusions were drawn. The EWG consider that there is not much room for providing data at higher resolution compared to the current data provisions. The group also concluded that the benefits of supplying more disaggregated data would require the existence of critical knowledge further down in the chain, in order to aggregate and prepare data according to different end-users' needs, which is unlikely to exist given the differences between MS approaches and therefore very specific knowledge being needed. Therefore, the main conclusion is that focus and effort should now be on methodologies, processes and new approaches to process and further process data so the datasets available can be adequately used by different end-users and for different purposes.

Finally, the group was requested to assess the implications of using the definition of geographical areas in the Basic Regulation for the Common Fisheries Policy (CFP, Reg. 1380/2013, Article 4.2), as opposed to the current definition under Commission Decision 2010/93/EU (Annex II), in particular regarding the geographic coverage of Regional Coordination Meetings, RCMs, (in view of identifying the geographic scope of future Regional Coordination Groups, RCGs). A comparison between CFP fishing areas and RCM and current DCF areas was performed and a proposal on the areas that each RCG should cover has been putted forward in the report (section 5.4). Some adjustments have been proposed to the spatial coverage of the regional coordination, mainly for the need to include the international waters. Further advice is also given on the supra regions coverage for the purpose of collecting economic data, namely to accommodate the specific need on the revised CFP regarding the outermost regions.

### 5.3 STECF EWG 15-10

The STECF Expert Working Group (EWG 15-10) met in Gdynia, Poland, from the 22nd to the 26th of June to assess Annual Reports (AR) of the 23 non landlocked Member States. Under the process of evaluation and approval of the outcomes of the National Programmes (NP), the European Commission is legally bound to consult STECF about the execution of the NP approved by the Commission and about the quality of the data collected by the Member States (MS) in accordance with Articles 7.1 and 7.2 of Council Regulation (EC) No 199/2008. The task of assessing the Member States AR constitutes the Term of Reference 1 (ToR1) of this EWG.

In addition, annually the Commission needs to evaluate the level of compliance of the DCF Data Transmission (DT) by the Member States to the end users and its ability to meet the criteria set up by the end users. The EWG was requested to assess the feedback from nine end users on 2014 data transmission. Those end users are: ICES, GFCM, ICCAT, JRC, DG MARE, IOTC, IATTC, WCFCP and the Regional Coordination Meetings (RCM). The total number of data transmission issues the group had to assess was 813, unevenly divided over the 23 MS. This task constitutes the ToR2 for this EWG. Annual reports and Data Transmission reports were assessed by a group of pre-screeners before the EWG meeting.

As in previous years, the pre-screening exercise took place beforehand and has proved to be an extremely important step to facilitate the EWG evaluation. Furthermore this year, due to the change on the organization of the pre-screening exercise the outcome was found to have been enhanced on regard to the consistency and coherence across pre-screeners. The outcome of the pre-screening was presented to the group at the beginning of the meeting; a summary of the exercise is included in this report under section 3 and the comments from the exercise are included in annex, Annex 1. The results of the pre-screening were made available to the STECF EWG experts by the 19th of June.

During the EWG, the assessment of the AR and DT issues were carried out in subgroups. The 28 experts attending the meeting were split into four subgroups and tasked with different modules from the annual report and subsets of the DT issues, in accordance with the expertise in the subgroup. The

expertise was split into two subgroups of biologists, one subgroup of economists and a subgroup of economists and biologists.

To thoroughly comply with ToR 1 and ToR2, the EWG was requested to produce two types of outputs, one template (excel file) for each Member State (MS) with the evaluation of their Annual Report and an evaluation of the data transmission to end users, via the new online platform for exchanges on data transmission. The EWG was able to thoroughly address ToR 1 and ToR2 and according to the request, the outputs were produced for each MS. Those are included in the report under Annexes 3 and 4, and organized by MS in alphabetical order. Also as requested as feedback from the EWG, it has been identified the comments that require a reaction by the MS and those that are for information only.

The conclusions from ToR 1 - Evaluation of the Annual reports, are:

- The annual reports from 23 MS were duly evaluated; overall, the level of achievement of the 2014 Annual Reports shows an improvement compared with previous years; it shows a significant improvement in quality for both the achievements attained by MS and their reporting procedures.
- Six MS scored with an overall evaluation of Yes (compliance level >90%), fourteen MS with an overall evaluation of Mostly (50 %<compliance level<90%), and three with Partial (10%<compliance level <50%).
- However two MS have been downgraded on the evaluation of their outcomes when compared with last year's evaluation. These MS are Belgium, and France.
- Evaluation templates were produced for each MS and are incorporated in the report under Annex 3.

The conclusions from ToR 2 – evaluation of Data Transmission Issues are:

- 813 data transmission issues were evaluated;
- From these, 600 issues were judged as satisfactorily justified by MS, 82 unsatisfactorily explained or justified, and there were 129 issues, that due to their nature, were not possible to judge and therefore were identified as unknown (Not possible to Assess).
- The output of this evaluation has been integrated afterwards integrated in the new online platform for exchanges on data transmission; however during the EWG the work was carried out in excel files since the platform is not yet developed on the level needed to support the work and the needs of the EWG.

Even though the task has been accomplished, the group concluded that the exercise on the assessment of the data transmission compliance still needs to be fine-tuned by the Commission; this was already a conclusion from last year's assessment. The EWG would like to urge the Commission for the importance of the revision of the exercise before next year's assessment. Moreover, there are several issues for which its clarification is paramount for the good development of the work. The EWG urges these issued to be clarified and/or solved before next year's evaluation. These issues are identified under Section 5.

Apart from the exercise on the assessment of the AR and on the data transmission compliance, the group was also tasked with a ToR3 and a ToR4.

In specific Tor 3 aimed at collecting the EWG feedback on regard to three main points: suggestions to improve the way in end-users provide feedback to the commission in the future; identify recurring issues arising in several Member States and identify Member State-specific issues relating to data collection or transmission. The feedback on regard to these three points was prepared and is presented in sections 6.1 to section 6.3 of the report. Important suggestions/comments were putted forward by the EWG. Fundamental questions are:

- The importance of getting an objectively described issue from the end-user. The lack of clarity
  undermines the work of the group because not only is impossible to be assessed but also may
  jeopardize issues of main relevance.
- Several issues are recurrent in MS Annual reports. Issues such as moving toward the
  implementation of Statistical Sound Sampling Survey (4S) and the problems in assessing this
  implementation; the provision of data collected before MS accession and/or DCF
  implementation, the discrepancies between DCF provisions and the RFMO requirements,
  amongst others.
- For each MS an independent feedback on specific-issues in the AR and DT was prepared and is presented in annex 5.

Lastly, ToR4 aimed at collecting a set of comments and suggestions and identify actions that could improve this exercise in the future. Important conclusions and recommendation from the group were drawn:

- The guidelines and the evaluation template still need some additional work in order to be fully aligned, this work must be carried out in advance of next year's assessment and the observations from this EWG together with comments from the pre-screeners team (annex 6) must be used as input;
- The online platform for exchanges on data transmission was found to be of major relevance and usefulness, however some adjustments are still need in order to make this tool of good use by this EWG;
- The pilot project on the production of the AR standard tables was found useful and must be kept. On the extent of the possibilities it should be enlarged to other variables (biological and transversal). This exercise can be further elaborated under forthcoming EWGs.
- A database to support the preparation, management and assessment of the AR is the optimum solution to ensure efficiency and transparency on this process. Other solutions will always be suboptimal compared to the one that has been identified and requested for several years now.

# 6 End-user feedback (ToR 2)

#### **6.1 ICES**

According to the **EU-ICES MoU**,

"ICES will communicate to the EU any problems encountered regarding access to data, data quality and completeness of data. This shall in particular apply to data collected through the DCF.

ICES will provide information on coverage and quality of collected data which are of relevant use for the advisory deliverables and the timeliness of its submission.

The information on the coverage and quality of data available for the advisory process will consist of an account of the types of data available for each stock and comments regarding their quality and coverage where the specific shortcomings will be highlighted for each Member State separately, using a suitable categorisation of encountered problems. ICES will indicate how these shortcomings need to be addressed to obtain a dataset sufficient for scientific advice.

ICES should not only provide feedback on data transmission problems concerning Member States, but also provide assistance to the Commission in clarifying the responses of Member States to these ICES comments to the extent that these responses relate to ICES' use of the data."

Following a discussion at the ACOM meeting in 2012, ICES bases its feedback to the European Commission of DCF data transmission on i) issues highlighted as data quality in the single stock advice sheets; and ii) on the compliance with the data calls (type of data and timeliness).

#### Feedback on 2013 data

The feedback provided by on 2013 data transmission is based on the data calls and the advice sheets prepared in 2014. This feedback was provided by ICES to the European Commission beginning of 2015. The process is according to the scheme depicted in Figure 6.1.

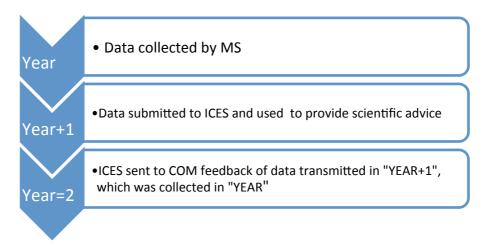


Figure 6.1. Scheme of the data transmission process.

ICES was requested to submit the feedback on data transmission according to a given template. The feedback included the following items for each issue:

- Members State
- Data call where the data was requested
- Issue

- Issue type (coverage, timeliness, quality)
- Severity (high, medium, low)

Several aspects were considered on this year's feedback:

- a) <u>Identification of the Member States</u>. In several cases, when the issue of data transmission was identified in the advice sheets but described as generic (e.g., "discard data is not available for this stock"), due to time constrains, it was not possible to identify the if the issue is common to all MS exploiting the stock or only for a particular Member State. In this case all the Member States where included in the feedback, meaning that Member States might have been pinpointed wrongly.
- b) <u>Identification of the Member States</u>. ICES did not considered the data collection derogations, meaning that some MS might have been identified in the ICES feedback but could not transmitted data, as it were not collected due to a derogation.
- c) <u>Issue type timeliness</u>. To assess the timeliness of the data ICES based its feedback on the log stamp of InterCatch database. Following an informal guidance from the European Commission, if data submitted on time were revised after the data call deadline, this should be considered as the initial data transmission were of poor quality and should be considered as a failure of data transmission. ICES in a few cases might have misidentified this as "Timeliness" when it was in fact "Quality".
- d) Severity. As no guidance were provided to ICES on the criteria to use the different types of severity, ICES considered that all items included in the advice sheets of "high" severity, excepted if the experts group chairs informed the ICES secretariat for a different type. Also, the timeliness was considered as "medium-high", as the ICES EG ToRs request that the update assessment are conducted prior to the start of the meeting.

## Feedback on 2015 data

In 2015, ICES sent a data call for all ICES fish stock assessment working groups. ICES is planning to use the data call files as the main document to provide feedback on data transmission. See Table 6.1 as an example. However, the recommendation to do this process through the regional database is the more cost-efficient and error prone way. See section below on this issue.

ICES is also querying in the provision of the InterCatch log stamp to the European Commission could be considered as sufficient to provide feedback on the timeliness issues of data transmission.

### **Recommendations from ICES Expert Groups**

The ICES secretariat representative explain that ICES Experts Groups' recommendations were already presented to the respective RCMs. Therefore, if recommendation were considered relevant from the RCM they are already included as RCM recommendations. An overview of all the recommendation was available to the LM participants.

Data submitted to IC highlighted in (green) Data submitted to AC highlighted in (light green) Data submitted to IC and AC (dark green) Aggrega Quantity Age Length Quantity Age Data received to IC Date of submission to tion landed comp comp discarde comp comp data missing landings landings d discards discards the Stock Country ▼ ch dat ~ ~ 25., 26.2. 6.3.2015 Q Catch, ag quarterly catch by rectangle, AC her-3a22 Denmark AC IC+AC her-3a22 Belgium IC+AC her-3a22 Germany discard 26.2.2015 Q IC AC AC no catch this yea her-3a22 Lithuania 10.3.2015 Q IC+AC quarterly catch by rectangle, AC IC her-3a22 Norway Q IC ΔC IC+AC quarterly catch by rectangle, AC her-3a22 Poland IC+AC Q Catch, ag quarterly catch by rectangle, AC Catch, ag quarterly catch by rectangle, AC her-3a22 Sweden 27.2.2015 Q AC AC IC+AC quarterly catch by rectang mediun mean len quarterly catch by rectangle, AC her-3a22 Faroe Islands 9.3.2015 IC IC+AC email Q her-47d3 Denmark 25., 26.2. 6.3.2015 her-47d3 France AC AC IC+AC mean ler quarterly catch by rectangle, AC her-47d3 Germany Q IC+AC mean ler quarterly catch by rectangle, AC IC her-47d3 Netherlands AC IC+AC mean ler quarterly catch by rectangle, AC her-47d3 Lithuania 6.3.2015 fore 25.2.2015 her-47d3 Norway Q IC+AC her-47d3 UK-England & Wale Q IC AC AC IC+AC mean len quarterly catch by rectangle, AC her-47d3 UK-Scotland 26.2.2015 AC IC+AC mean len quarterly catch by rectangle, AC her-47d3 UK-Northern Irela ore 25.2.2015 O IC+AC quarterly catch by rectangle, AC her-47d3 Ireland 5.3.2015 IC+AC quarterly catch by rectangle, AC her-47d3 Sweden 27.2.2015 Q IC AC AC IC+AC mean len quarterly catch by rectangle, AC her-47d3 Belgium IC IC+AC quarterly catch by rectangle, AC her-47d3 Faroe Islands IC+AC quarterly catch by rectangle, AC her-irls Germany her-irls UK-England & Wale her-irls Ireland 6.3.2015 Q IC+AC mean len quarterly catch by rectangle accessions her-irlw Ireland 6.3.2015 Q AC IC+AC IC mean ler quarterly catch by rectangle accessions her-nirs UK-Northern Irelan IC AC IC+AC Q her-nirs UK-England & Wale her-nirs Ireland mean ler quarterly catch by rectangle. AC

Table 6.1. Example of the feedback on data transmission ICES is planning for 2014 data.

### Future role of the RDB on providing feedback on data transmission

her-vian Germany

Several errors were made by ICES on providing the feedback on data transmission of 2013 data (e.g. 1122). Those errors do not cause any financial implications to the MS, since it is possible for the MS to comment on the issues identified. However, ICES is aware of the workload for the National Correspondence and other national expert these errors may have caused.

IC+AC

The feedback prepared by ICES is a manual process. Until now, ICES did not put effort on an automatized manner to provide feedback on the data transmission. This is because the feedback format have changed several times in recent years. Manual process are error prone. The use of the Regional Database to provide the feedback on data transmission would overcome this issue.

Also, ICES identified errors / inconsistencies in the STECT 15-13 (e.g. id, 1121, 1011), which highlights the need to allocate resources on an automatized form to prepared the report of data transmission.

#### **6.2 GFCM**

In the light of exchanging information between EU and GFCM in the field of fisheries data collection and for aspects related to data reporting obligations of common Members, the representative of the GFCM Secretariat informed the meeting about the ongoing initiatives at GFCM level. To this purpose, he delivered a presentation about the current GFCM fisheries data collection and its future development (the GFCM Data Collection Reference Framework - DCRF), also focusing on the assessment of the received national data in compliance with the laydown GFCM decisions.

Participants were informed that each official data submission made by GFCM Contracting Parties (CPs) to the GFCM is acknowledged by the GFCM Secretariat within 48 hours from the receipt. On the basis of the received data, the Secretariat reports the compliance status of GFCM CPs, based on the submission status only (data transmitted or not transmitted), to the annual session of the GFCM Compliance Committee (CoC).

To the request of further information about data control made by GFCM, the representative of the GFCM Secretariat explained that the current data check controls are aimed at enforcing integrity of submitted information in terms of codifications of duplication avoidance. In addition to these data checks, the implementation of more elaborate controls is under way.

With reference to the GFCM feedback requested by the EU on the status of Task 1 datasets sent by the 10 common Member Countries, it was clarified that it was based on a preliminary quantity assessment which depicts the data coverage only. The result of this assessment was influenced by the Task 1 structure itself: five data sub-tasks (from Task 1.1 to Task 1.5) composed of 10 data tables which are interlinked to each other with an extensive breakdown of the requested information. This implied that any incurred problem in fulfilling one Task 1 data table was reflected (and expanded) in all the subsequent ones, thus influencing the final assessment of the data coverage.

The presentation also addressed data quality issues. In this regard, the meeting was informed that a first preliminary data quality assessment would have been carried out by the GFCM Secretariat in order to be presented at the next intersessional meeting of the GFCM Compliance Committee (January 2016). Furthermore, data quality related aspects would have been matter of discussion at the GFCM-DCRF meeting (February 2016) aimed at summarizing the result of the DCRF pilot study (from October 2015 to February 2016 to test the new online data submission tools with volunteer GFCM countries) and agreeing on common standards for the evaluation of the gathered information and feedback to GFCM CPs.

# 6.3 RCMs 2015 - Response of MS to data calls

In the framework of the RCM MED & BS – LP, no data call for the RDB has been carried out, as no RDB is currently developed neither in the region nor for LP. However, an official data call was launched asking for information to be used in the PGMed. The data call decided in 2014 was launched in May 2015. The data call was a clear success since all countries contributed to the data call although, as a first session, it may have required, at national level, the setting in place of new procedures to integrate variables coming from different databases managed by different organisations. Data were set in a common file for MED&BS and LP, respectively, and kept available to the group at the dedicated SharePoint for the PGMED and RCM. The RCM Med&BS-LP considered that the development of a regional database is urgent to allow an efficient use of the data received from the official RCM data call and to allow a correct management of the data used by PGMED and RCM.

MS participating in the RCM Baltic, RCM NS&EA and RCM NA uploaded data in the RDB-FishFrame as a response of a data call launched by the RCM chairs on 18 June 2015. The data call covered landings, effort and sampling data for (2009-)2014. One MS did not upload data, provided data to the RCMs but not in the required format and with a limitation that data should be deleted after 30 days. Requests by

the MS to the ICES secretariat during the uploading process were answered in due time, suggestions were helpful and MS appreciate the support they received. A notable feature of the response to the 2015 data call was the welcome addition, for the first time, of Spanish data. This enabled a far more complete picture of regional fisheries to be obtained and is a particularly welcome development in regional cooperation.

The accessibility to data resulted in that the RCM meeting time could be used more effectively. Nevertheless, important problems were detected in the data uploaded by several countries showing more work and quality aspects are needed to allow RCMs to do their tasks based on RDB data. Standard outputs from the RDB were produced by the various RCMs to explore the contents of the RDB, and a bespoke package of functions in R for the analysis of RDB data, were available. However, there is a continuing need for the development of software which can produce these standard reports. This would enable the RCMs to focus on examining the quality of the regional data as well as ideas for future regional sampling designs. Access to data initiated creativity in the groups and there are several ideas in the reports on what future regional data collection programmes could look like. It also became evident how important the regional database could be for the RCM work to be effective.

For the data collected from long-distance fisheries, for the time being, it is not possible to upload those data to FishFrame (e.g. not all long-distance fishing grounds are covered by FishFrame yet). All MS participating in the 2015 meeting provided the data requested. Data were also received from a MS involved in the fishing activity in the CECAF area and not participating in 2015 meeting. Data from one MS were not provided, however, without negative impact on the outcome of coordination due to a very limited activity of that MS in the CECAF area.

### 6.4 JRC Report on DCF end-user feedback

The European Commission (JRC & DG MARE) briefly presented the JRC report on the end-user Feedback: "The DCF Reporting and Implementation Cycles and the Data End-user Feedback (JRC97782)". This is a report that builds on the findings and conclusion from the STECF EWG 15-10 and adds to these the details that allow identifying what should be aimed for on the data end-user feedback for the next years, so as to ensure efficiency and effectiveness to the whole DCF process.

During the STECF EWG 15-10, apart from the regular assessment of the MS' Annual Reports and Data Transmission issues, the EWG was also requested to carry out an analysis of the Annual Report and data transmission exercises in view of identifying feedback to be provided to the end-users in order to improve the way in which they provide data transmission feedback to the Commission in future.

Considering the various problems with the evaluation of DT issues identified by the EWG, the STECF has concluded in urging the Commission to review and amend the formats and procedures used for the end-user feedback on DT in dialogue with the end-users, taking the suggestions compiled by the EWG into account. Therefore this report comes in the sequence of this conclusion and has the objective to support the discussion between the Commission and the data end-users on the Data Transmission feedback.

# 7 Regional cooperation (ToR 3)

### 7.1 Grants for strengthened regional cooperation - state of play

Two projects are currently running under the Call for Proposals MARE/2014/19 "Strengthening regional cooperation in the area of fisheries data collection", one in the North Sea and North Atlantic regions and one in the Mediterranean & Black Sea region.

### FishPi project (North Sea & North Atlantic)

The project "strengthening regional cooperation in data collection" MARE2014-19 has been renamed "fishPi" and is a collaboration of 13 scientific institutions form 12 member states based on the RCM NSEA region. Members of the RCM NA and RCM Baltic have prominent roles within the project. There are two external experts with particular statistical and survey design experience involved. The fishPi project is running in parallel with a project with similar aims and objectives in the Mediterranean and Black Sea region. The project started in April 2015 and is due to run for one year. An overview of the project structure, work packages, aims, objectives and progress was presented to plenary.

Progress since April 2015 has covered the following: A kick off meeting with the commission was held in April, this has been followed by project start up meetings, statistical planning meeting and software planning meeting in Aberdeen in May. A case study start up meeting was held in June, and a data quality work package meeting in July in Port-en-Bessin. The work package dealing with by-catch, stomach sampling designs and small-scale fisheries held a workshop in Sukarrieta during July. These face-to-face meetings have involved the work package leaders and their core teams from different institutes across Europe. Numerous web based meetings between the work package and core teams have occurred to facilitate the progress of the work. A web-based meeting to explore mutual aspects of the fishPi project and the Mediterranean and Black Sea project was held in July.

The workpackage dealing with sampling designs has drafted a document outlining the statistical principles underlying design-based sampling and probability-based selection, and the use of appropriate statistical estimators. Software scripts to simulate two stage cluster sampling and scripts to run estimation software have been written. The four case studies within this work package (covering pelagic, demersal, flatfish and hake) have each collated a fine scale data set, based on logbook and sales note data has been assembled from 13 scientific institutions operating in the regions. These have been harmonized and checked for the various case study components and will enable simulation models of alternative sampling designs to be tested. This process was facilitated by the generation of software tools, scripts and functions which have been disseminated within the core team of the work package. The utilisation of existing statistical software within a standardised estimation process is a particular feature of this workpackage.

The csData format developed at the WKRDB 5 workshop in October 2014 has, with some additional refinements, has been defined as an R object and stored in an R package "fishPiFormats". The code lists for WoRMS species list, the FAO ASFIS species lists, the revised metier table, the UNLOCODE table, and the DCF vessel type codes have been collected into R and compiled into an R package "fishPiCodes".

Prior to the commencement of the work of the project a consortium agreement was drawn up and signed by the project partners. Prior to the collation of the data a data sharing agreement was drawn up and signed by the project partners. An interim meeting with the commission is scheduled for 21st October.

#### Mediterranean & Black Sea project

Maria Teresa Spedicato of COISPA presented the project MARE/2014/19 Med & BS - Strengthening regional cooperation in the area of fisheries data collection in the Mediterranean and Black Sea, funded

by the European Commission in the perspective of a more regionalised management of fish stocks while pursuing an ecosystem approach, as envisaged by the Council Regulation 1380/2013 (Common Fishery Policy -CFP). The project aims at simplifying the present rules and addressing needs identified through experience with the current implementation of Data Collection Framework (DCF). The ultimate project objective is to lay out a Multiannual Regional Work Programme – MRWP –including:

- 1. a Regional Sampling Programme for 2016 covering Commercial Fisheries (RSP-CF);
- 2. a Regional Sampling Programme for 2016 covering the Data Collection on Fisheries Impacts on the Ecosystem (RSP-DCFIE);
- 3. Procedures to Quality Assessment of Biological Data at regional level (PQA-BD).

The Work Package 1 of the project, which has been recently concluded, has developed a SWOT analysis to develop inputs and suggestions for possible changes/improvements in the future regional coordination activities. Results have emphasised that in the Mediterranean and Black Sea, some good examples of regional coordination already exist, but several areas still need improving: data quality, role of end users, regional database and future regional coordination. WP1 has also conducted an analysis of the current tools/models available in the region that has identified wide divergences in data storage systems and data transmission, incompatibility of IT systems between Member States, and quality controls run with different software tools.

The Work Package 2 is identifying and agreeing on guidelines and best practice for sampling, processing, analysing, managing biological data; setting code lists and developing methods for optimizing sampling size in Mediterranean fisheries, while assessing availability and quality of transversal data. The first results from reviewing and questionnaires highlighted scientific surveys as an important source of biological data and methods (e.g. MEDITS), but ageing is not an easy task for some Mediterranean stocks. The task 2.2 evidenced the complexity of the methodological context to collect transversal data in Med &BS and the importance of small-scale fisheries. For this sector there is the needing of complementing by ad hoc sampling programs the data collection, given the ineffectiveness of the declarative approach. Difficulties to compare transversal data in the Mediterranean and Black Sea emerged. Task 2.3, with case studies on hake and red mullet in GSA 7, and sole in GSA 17 proposes a (COST) tool to optimise the number of trips/samples. PGMED meeting was used to adjust the data collection (COST format) and get feedback.

The Work Package 3 is addressing the point 2 above pursuing the following objectives: a) design a sampling program targeted to gather data on stomach contents of fish; b) increase the collection of data on by-catch, especially of non-target species, such as protected, endangered or threatened species; c) proposing additional ecosystem indicators, which can be useful to improve the assessment of the ecosystem impact due to fishing activity. So far task 3.1 identified European hake in the north-western Mediterranean and turbot in Black Sea as the stocks more suitable for the sampling program on stomach contents, whilst in terms of sampling program of by-catch, fisheries targeting to small pelagics in GSA17 and the turbot fishery with gillnets in GSA29 were considered proper candidates.

The Work Package 4 has the objective of identifying possible bottlenecks in the current approach of checking data, classifying the checks to be carried out both at national and regional level for improving the data quality. It has a close link with WP2.

The Work Package 5 aims at developing interactions and collection of inputs from end-users and stakeholders. To this purpose a web-platform has been created and most of actors at Mediterranean and Black sea level have been invited to contribute.

15 partners from 9 countries are members of the Consortium led by COISPA and many are also members of the RCMMED&BS-LP, a condition that is facilitating the flow of information. The project is also conducted in cooperation with the twin initiative called FishPi that is ongoing in North Sea, North and East Atlantic areas.

## 7.2 Regional databases

# 7.2.1 Status of the Regional Database (RDB)

Harbour codes

This year only LOCODE should be used for harbour codes. LOCODE is a 5 alphanumeric code (typically only alphabetic characters) where the first 2 is the ISO country code and the last 3 is the harbour code. The LOCODE reference list is the Code-location under the EC's Master Data Register, the current version is Code-locatioon-v1.7.xls,

 $\frac{https://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp?FormPrincipal:\_idcl=FormPri$ 

#### ICES has

- Updated all existing LOCODE with correct harbour name (Gr+ñs+Â to Gräsö)
- Added missing LOCODE
- Automatically found the correct LOCODE where there was a match on the harbour and updated to LOCODE
- Deleted 1768 none-LOCODE harbours

There is still some harbour codes which have not been substituted with LOCODE, when an obvious LOCODE harbour have not been identified. It the coming time ICES will contact countries, which will be asked to map the outstanding harbour codes to LOCODE codes. ICES will then make the final update.

Species codes

This year was the last year with the scientific latin names for species. This year the only difference was that species, should be checked against the WoRMs species list and only species which was valid in the WoRMs species list should be used. As agreed in the Steering Committee of RDB (SCRDB) the species field will use the WoRMs AphiaId before next year's data call.

Metier acceptance per area

This year the only specific metiers was allowed depending on the area. ICES received a matrix of valid metiers and fishing grounds. ICES then changed the previous metier check in the RDB to a tailored metier check where each metier is checked based on the area. If a country have a metier, which is not accepted, it should be tried to find a substituting valid metier from the list send with the data call. If that is not possible the country should take contact to the RCM chair who maybe together with experts should be able to advice on what metier to use or if the metier need to be allowed, in such case ICES should contacted for adding the new valid metier.

#### Data exchange format document

A new version of the RDB exchange format document have been send out and it is available on the RDB website, <a href="http://www.ices.dk/marine-data/data-portals/Pages/RDB-FishFrame.aspx">http://www.ices.dk/marine-data/data-portals/Pages/RDB-FishFrame.aspx</a>, and in the RDB. It is not a new exchange format, it is the same data exchange format, but the document have been made simpler, references have been corrected and updated, and the document have been made consistent with the existing checks.

WKRDB 2014 and WKRDB 2015 will give guidance on a new format taking requirements for statistical sound sampling and regional sampling programmes into account.

Data Policy document

Before last year's RCM NSEA an updated version of the Data Policy document for the RDB was sent to all national correspondents for acceptance and support. All countries except France accepted and

supported the Data Policy document and a few countries had comments or questions. Since last year ICES have compiled all comments and questions and the SCRDB have given answers, which was send to all countries.

At the National Correspondent meeting in Brussels the 25th March 2015 the European Commission (EC) informed all Member States (MS) that EC sees the Data Policy as an important and the EC lawyers agreed in the content of the document. Therefore, the EC encouraged all MS to sign in for it - including France.

### EC feasibility study on storage and transmission

The EC's feasibility study on "Scientific data storage and transmission under the 2014-2020 Data Collection Multi-Annual Programme (DC-MAP)" concluded that the majority supported scenario 4 referred to as "Fisheries data hub", which is a structure not so far from the structure today, with data uploads to the RDB at ICES, see the Figure 7.2.1 below. However, with indications of in the future to have a more streamlined data flow.

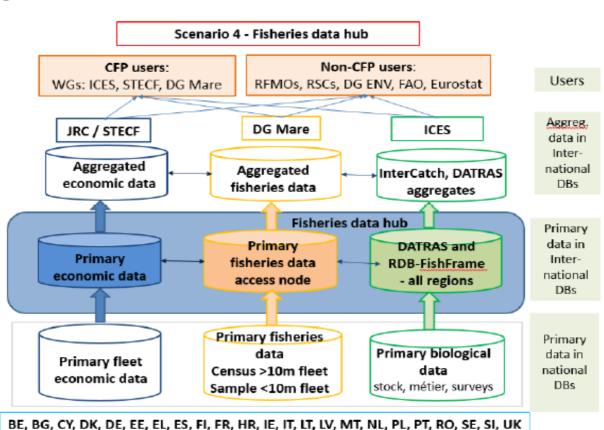


Figure 8. Scenario 4: "Fisheries data hub"

Figure 7.2.1 showing the preferred scenario 4 – Fisheries data hub

# The RDB strategy

There are many benefits of having a central system like the RDB; common quality check also across countries, standardised methods to raise/estimate fisheries data, efficient standardised reports and analysis. Looking at the raising/estimation methods it is essential to only be able to raise/estimate data

with approved and documented standardised methods, and it is also essential to be able to document all data processing steps. The move towards using statistical sound raising methods is ongoing in the fishPi project, WKRDB and WGCATCH. The starting point have been the R methods in the R survey. When the method have been approved and finalised, the most cost effective way to use these methods is to include the methods directly into the RDB using version control. Using standardised raising methods is one thing. But it is also essential that the national institutes after uploads and estimations can extract the data from the RDB, so they can verify the uploaded data and follow the data through the processing steps. In the Figure 7.2.2 below the future RDB system structure is shown.

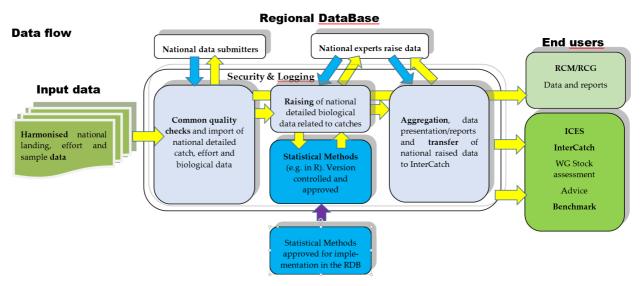


Figure 7.2.2 of the future RDB system structure

# ICES one time funding of development of the RDB

The RDB increases the data quality, ensure standardised raising methods and documentation. It is therefore very important that there is funding for development of the RDB, so there is progress and the RDB is able to adapt to new demands. The European Commission (EC) have so far not funded developments of the RDB. But in September 2014 the ICES council delegates approved a one time development of the RDB for 91 000 EUR, because ICES sees the need for development. The focus have been on new analysis reports.

### RDB funding in the future

The RDB have for several year been the essential system for data for analysis for the RCM Baltic Sea, RCM North Sea & Eastern Arctic and RCM North Atlantic, and it can support the Member states in raising national data and answering data calls. The RCMs depend on the RDB, and the data for stock assessment and advice to the EC also depend on data quality, standardised proven raising methods and documentation, it is therefore difficult to understand that EC is not funding developments of the RDB. The RDB is a large and complex system with a large relational database behind it and complex data manipulations, algorithms and methods. The RDB is the most cost efficient way to work with all the data from all the countries because the raising processing and processes for all data is more or less the same. Since the environment around the RDB is continuously changing with new needs and demands, it is essential that there is funding for development. The most natural way of funding RDB development would be to include RDB development in the existing Memorandum of Understanding (MoU)

agreement for the RDB between EC and ICES. This will ensure qualified resources, who would be able to implement new needs and demands, in the most cost efficient, safe and successful way. It would not be a sustainable approach not to have a longer term funding for development of a system like the RDB. If every developments had to be funded by projects, there would first of all be a long time delay from a need is identified to a call for tender, to a project proposal, to acceptance, to project start and finally the implementation. However, there will also be an overhead in writing a project proposal, as setup the organisation. People would have to be hired on short term contacts, with the risk of not knowing exactly the skills of the new project resources. Then there is the steep and long learning curve of the large and complex RDB system. Such a scenario is not cost efficient and would not benefit any parties. Therefore it is recommended that development of the RDB is included in the MoU between EC and ICES. It would also seem natural that EC is interested in progress and stabile development of the RDB, especially after the conclusions drawn from the feasibility study on storage and transmission.

#### 7.2.2 Visions for the RDB

- The RDB provides end-users with robust, harmonized data-sets and estimates. Estimates are produced in a transparent system, allowing the assessment of its quality.
- The RDB supports integrated regional data collection programs based on statistically sound sampling designs.
- The RDB continues to develop in accordance with end-user needs.
- The RDB increases the awareness of data collected under DCF, the overall usage of the data.

#### Background

The objectives for the revised DCF include a more end-users oriented data collection, improved data quality, improved availability of data and a stronger emphasis on regionalization of the data collection process. Coordination of data collection on the regional scale is primarily handled by the Regional Coordination Meeting (RCMs). These RCMs were the ones that expressed a strong need for a regional database and consider the RDB a prerequisite for efficient work. The RCM work has improved significantly in recent years after introduction of the RDB-FishFrame (e.g. RCM NS&EA, 2013). The RCMs have expressed their position, vision and mission for the future revised DCF in the Oostende declaration (RCM NS&EA, 2012).

"End users will receive relevant, high quality data collected through an efficient regional basis.

Data collectors will use statistically sound sampling schemes and operate under the guidance of Regional

Coordination Groups, in which end-user priorities are agreed and the coordination of data collection takes place to
meet those priorities."

RDBs are of central importance in the Oostende declaration. They are not only a repository of data but also a tool for efficient cooperation across countries, for the production of estimates, analysis and evaluation of quality.

#### The RDB and improved data quality

It is important to realize that the vast majority of data end uses i.e. catch estimates that are produced on the basis of data collected under the DCF are the result of a series of (complex) data transformations. Such estimates could for example be catch at age of discards from a given stock and fishery. To produce this catch at age, the data provider needs to combine information from sampling (métier related variables), age reading (biological variables) and data on the overall landings/effort for the given métier (transversal variables). Quality assessments need to cover all the different data types, including the estimation process in a transparent manner. The RDB constitutes a tool for this process. The movement towards a more thoroughly regional approach, in line with the new CPF, will add complexity. Under a

regional approach, as some data (e.g. transversal) needed to produce an estimate will be collected at the national level while other types (e.g. samples of trips, landings and fish) may be collected at a regional level. Recent work developed by ICES has focused on how we can move away from an ad-hoc based data national collection/estimation process to a more statistically robust and regional ones. This work will continue in ICES WGCATCH.

The implications for the RDB-FishFrame

- Data should be raised (calculation of estimates) within or in conjunction with the RDB to assure transparency.
- Estimates should be built on robust statistical principles.
- Close cooperation with methodological groups and sampling design such as ICES WGCATCH is needed to develop processes, tools and exchange format to meet up to date quality standards.
- Close cooperation with other RDBs to harmonize the development of exchange format and tools is needed.

# The RDB and strengthen regionalization of data collection

Regional coordination of data collection for fisheries dependent data has so far primarily been focused on regional compilations on fishing activities (métiers), landings and sampling within a region. Bilateral agreements on sampling are further established between the flag country and the landing country if landings take place in foreign countries.

The overall understanding of the geographical complexity of landings as well as where fish are accessible for sampling has greatly increased since the RCMs started to populate the RDB, because national data was available in a standard and common database (i.e. RDB-FishFrame (e.g RCM NS&EA 2013). The regional perspective and the aim to move towards a more statistically robust and cost-efficient data collection will most likely lead to cross-national sampling programmes, were MS share tasks and sampling obligations.

The implications for the RDB-FishFrame

- The RDB need to cater for cross-national sampling programmes.
- Close cooperation with groups (RCMs) dealing with coordination of data collection as well
  methodological groups such as ICES WGCATCH is needed to develop processes, tools and
  exchange format to meet requirements from data providers on regional task sharing without
  hampering the implementation statistically robust methods for estimation.

#### The RDB and improved data availability

The RDB-FishFrame is presently storing fishery dependent data originating from sampling (biological data and data that presently is called métier related data) and transversal data on landings, effort and value. Having all regional data in the database greatly increases the possibility for different end-users to get an overview on the amount of existing data and if the data meeting their needs are available . Such overviews are presently not available anywhere and will in itself increase the awareness and use of DCF data. Having all regional data in one database (detailed data as well as estimates) has further great potential to harmonize and simplify the process of submitting data to end-users, while data are owned by the MS and data availability is governed by current legislations. The issue of improved availability can thereby be facilitated by RDBs.

The implications for the RDB-FishFrame

- An open inventory on available data would have the possibility to increase the awareness and use of DCF data. MS would have to choose to make data available or not (in accordance with legislation).

The RDB have great potential to simplify and harmonize data submissions to end-users. Processes, including interactions with MS, for data submissions from the RDB need to be established.

#### The RDB and end-user oriented data collection

To get end-users more involved in the strategic planning of data collection is a needed for the overall development the scientific process in the advisory work but also for cost effectiveness in the data collection. The increased involvement of the end-users in what data to be collected as well as quality considerations, is of crucial feed-back to the data collectors. One of the current challenges is to build the bridges between the data collection community and the end-user communities. This is done in different ways, i.e. through data compilation workshops prior to benchmark assessments of stocks.

The RDB could have the role of "bridging the gap" by:

- giving end-users an overview on what data are collected, and thereby given the opportunity to respond if **needed** data is missing or if certain data collected are not used;
- ii) supplying transparent evaluations of the quality, associated with the estimates as needed by the end-user, and thereby create the possibility to the end-user to assess the quality of data and to respond to the data collection community whenf the quality is not compliant with the need;
- iii) easy access to harmonized data sets and/or estimates (under condition this is acceptable for the MS who owns the data)

#### Overall conclusions

The RDB concept is much broader than storage of data collected through the current and future DCF Regulation.

The RDB should be a central source of information (estimates, different types of aggregated and detailed data, metadata) for end-users working on the basis of DCF data.

It has the possibility to evolve into an integrated system bringing data collectors, data providers and end-users together, by supporting **transparent** collection, processing, quality evaluation and submission of data on the **regional** scale. The future development of the RDB needs to be continued in close cooperation with all RCMs, different methodological expert groups and all end-users.

## 7.3 Future DCF governance structure

As outlined by the Commission at the opening of the meeting (see section 1.2), a new forum will be established as 'umbrella' of regional co-ordination on a pan-European level. The LM briefly discussed the pros and cons and possible structure of such a group and its formal role in the decision-making process under the revised DCF and EU MAP.

In the current Commission proposal for a revised DCF Regulation ("DCF Re-cast", document COM(2015) 294 final), it is foreseen that the regional co-ordination process will be given a stronger mandate to e.g. conclude on regional sampling plans. In the accompanying working document (SWD(2015) 118 final), the Commission suggests that:

"This would be achieved through the establishment of Regional Coordination Groups (RCGs), to deal with regional issues (essentially, biological/stock issues), as well as an EU Coordination Group (EUCG), to deal with EU-wide issues (essentially socio-economic data, but perhaps also covering areas such as environmental impacts of aquaculture). The RCGs and EUCG would enable Member States to work on regional or EU cooperation throughout the year, rather than just through an annual meeting as is currently the case for RCMs and PGECON, and would no longer depend on the Commission, with the assistance of a Chair, calling and organizing the meetings."

(...)

"The EUCG would have similar tasks to the RCGs, apart from task 2 above which is not relevant for the EUCG, but for data sets for which EU-wide, as opposed to regional coordination is more relevant (essentially socioeconomic data and data on sustainability of aquaculture).

In terms of **governance structure**, one option would be to establish RCGs and the EUCG as legal entities (such as an Advisory Council or Regional Sea Conventions (RSCs)). This would increase clarity of the obligations or rights of participants, but would be less flexible and would require additional legal acts and delays in establishing such structures. Providing EU funding to such legal entities is not foreseen in the EMFF Regulation. Consultations with Member States revealed that such a formal set up for RCGs or EUCG would go beyond what they desire.

The preferred approach is therefore to rather strengthen the current RCM mechanism (established in the DCF with specific tasks), without giving them a legal entity, but extending their tasks as set out above. As opposed to the current provisions in DCF Regulation, whereby the Commission organizes the Regional Coordination meetings, the future DCF Regulation would specify that RCGs should be established by the relevant Member States in each marine region.

With regards to an EU Coordination Group, this would be established as an expert group of the Commission and would take over the current tasks of the PGECON, expanded as necessary into other areas (for example to allow for coordination between National Correspondents for data collection and to allow for coordination between RCG chairs on supra-regional issues, which was dealt with in the past through a so-called "DCF Liaison Meeting").

The Commission further mentioned that "experts" could be invited to support the EUCG. LM participants, however, raised concerns that this group should not circumvent established expert for such as STECF Expert Working Groups or ICES Expert Groups. In any case, the participation in the EUCG should be in accordance with the corresponding Terms of Reference.

In its closing remarks, the Commission explained that we are at an early stage of setting up such a new co-ordination group and acknowledged the ideas of the LM on this process. Ms. Garzon stressed that the new governance structure was still at an early stage and that rationalisation as well as transparency are important for policy needs and for scientific advice given to the Commission. The LM questioned the role of the new group compared to STECF and asked for clarifications regarding its purposes and functions. It was suggested that it could serve as a discussion forum between Member States, end-users and the Commission. Ms. Garzon stressed that the new EWG won't replace STECF, but that this group would rather ensure the continuity in terms of specific activities conducted separately until now.

# 8 EU MAP (ToR 4)

# 8.1 List of proposed stocks

Several recommendations were made by RCMs related to a revision of the list of stocks in the EU MAP, see recommendations LM 2 (RCM Baltic) and LM 9 (RCM MED&BS-LP).

## 8.2 Landing obligation

Several recommendations were made by RCMs related to the impacts of the Landing Obligation (CFP Basic Regulation 1380/2013, Article 15) on sampling of commercial fisheries, see recommendations LM 10 (RCM MED&BS-LP) and LM 15 (RCM NS&EA and RCM NA). In addition, especially the RCM Baltic has described the issues related to the implementation of the landing obligation for the Baltic Sea.

In the context of long-distance fisheries which operate under the governance of the RFMO-managed international waters or waters of third countries with which the EU has a Sustainable Fisheries Partnership Agreement (SFPA), the landing obligation or discard plans (if and when in place) depend on the specific management measures adopted by the relevant RFMO or SFPA and are fishing areaspecific.

## 8.3 Surveys

Several recommendations were made by RCMs related to a revision of the list of surveys in the EU MAP, see recommendations LM 8 (RCM MED&BS-LP) and LM 21 (RCM NA).

# 9 Availability of data (ToR 5)

As described in section 7.2, the development and extensive use of Regional Databases (RDBs) have facilitated the regional co-ordination process tremendously. A recently conducted feasibility study on "Scientific data storage and transmission under the 2014-2020 Data Collection Multi-Annual Programme (DC-MAP)" (MARE/2012/22 – Lot 2) has outlined four different database scenarios. A consultation process with Member States, Stakeholders and the RCMs has resulted in a favourable scenario (#4: Fisheries Data Hub), which will now be pursued by a follow-up study to be launched in the next call for tenders (to be published in the 4th quarter 2015).

The LM has every year since 2010 strongly recommended to the Commission the importance of financial support for further development of a RDB. Therefore, the LM expresses its concerns that the further development of the widely used RDBs is put 'on hold' for another 1.5 to 2 years until the results of the new study will be available and consolidated for a decision on the way forward.

The LM strongly emphasise that regional data collection programmes based on statistically sound principles that generate transparent data estimates require a common database and software tools to raise data from sample  $\rightarrow$  trip  $\rightarrow$  metier  $\rightarrow$  population level. Any delay in funding the development of the RDB(s) will seriously hamper further development of regional cooperation between MS and the movement from national data collection programmes towards regional data collection programmes and from RCMs to RCGs. Further, submission and preparation of data to end-users through the RDB(s) will 1) reduce the burden of data calls for and within MS and 2) make data transmission feedback less error-prone which reduces unnecessary work for end-users, for MS and finally for the Commission.

The LM was informed that the Commission, despite the outcome of the feasibility study "Scientific data storage and transmission under the 2014-2020 Data Collection Multi-Annual Programme (DC-MAP)" and the feedback from main data end-users and all the MS, still is considering the choice of database/IT systems. Apparently, the choice of database/IT system has become a wider issue than the DCF. This does however not imply that the long-term expressed need for RDB(s) as foundation for regional cooperation between MS has changed. A reasonable challenge for future would thereby be to examine *how* the RDB(s) fit into a broader IT/database system not *if.* Development of the RDB(s) needs, at least, to be carried out in parallel to a broader development.

The LM thereby strongly recommends that funding for development of the RDB is secured as soon as possible. Urgent needs are summarised in the study proposal in section 10.1.2.

# 10 Study proposals (ToR 6 AOB)

The LM participants expressed their frustration on the fact that no studies endorsed by the LM have been funded in recent years, and on the absence of feedback from the Commission on why studies were not selected. The Commission noted that the studies are now funded under the EMFF (Direct Management), with a limited funding volume, and that they are managed by a different unit within DG MARE. The proposed studies should satisfy, among others, the following criteria: importance and link to policy needs and end-user requirements for stock assessment, added value and absence of possible duplication of data from previous studies. Internal reflection is necessary within DG MARE on how end-user input regarding studies and pilot projects should take place and what the role of the LM should be in this regard. In any case, there is a need for a prioritisation process and a better dialogue between the groups proposing studies and the relevant units in the Commission. The LM expressed the wish to receive feedback from the Commission on the way how study proposals are being communicated, i.e. the template being used for providing details on e.g. the scientific and policy relevance, anticipated duration and costs, as well as planned workpackages. Based on the fact that the following study proposals had been presented in the LM last year, their detailed descriptions were not discussed by this year's LM.

In future, ICES plans to provide a priority list of the study proposals from ICES Expert Groups. The priority will be prepared by the ICES leadership.

## 10.1 Studies and pilot projects proposed by RCMs

## 10.1.1 WebGR (proposed by RCM Baltic)

The study proosal(s) related to WebGR are included in the 'ICES' section 10.2.

RCM Baltic comments: WebGR is a tool already frequently used in quality evaluation of age reading. The tool needs to be updated and a number of bugs to be fixed and these tasks will be carried out financially supported by the MS. Further, it is suggested that the tool is hosted, developed and maintained maintenance by an RFMO or an international scientific organization with adequate expertise like ICES. It will be an important tool in quality evaluation process expected to be implemented by RCG. The tool can be used supraregionally.

# 10.1.2 Development of the Regional DataBase for support of RCM/RCGs and other users (proposed by RCM Baltic, RDB-SC and ICES)

## Background

From the European Commission there is focus on regional coordination and cooperation, and using the Regional DataBase (RDB) have huge cost-benefit advantages for the regions. However, the full potential of the RDB should be used, and this can be done by developing the needed functionalities. With focus on coordinating the sampling of all relevant species in the regions, which are using the RDB, is it essential to draw conclusions based on the comprehensive data in the RDB. Therefore it is important that the RDB fully support the needs of the RCM/RCGs. This include common harmonised quality checks and data analysis reports. Furthermore the RDB can support countries in raising/estimating national biologic data, landings and effort for further international raising in InterCatch for ICES stock assessment and advice to EC. But ensuring the right raising/estimation of the existing methods and development a new statistical method are needed to support the countries in reducing the resources spend in raising/estimating data for data calls.

*Indicative budget:* € 450,000

#### Development

The main fields for development in 2016-17 are identified by the RDB-Steering Committee and presented in no specific order of priority:

# 1. Development of additional reports for analysis and data tabulating to support regional coordination. (10% of total budget)

Outputs: Specifications of reports, programming development

Development of output reports which provide:

- More advanced standard reports used by the RCM/RCGs
- Reports Overview of data status by region; data coverage;
- Overview of completeness of data uploads
- Support the planning of future regional based sampling schemes;
- Overview of potential areas for task sharing between member states.

## 2. Testing of trial species (12 % of total budget)

Testing of trial species from different stock assessment working groups for national raising/estimations, by borrowing age-length keys from own and/or other countries and correction of eventual issues. This should be done in two phases: Phase A: Where one or two stocks should make a comprehensive test of the system and corrections should be made. Phase B: Several representative stocks should be tested throughout the system for raising/estimation and eventually corrections should be made.

Outputs: Test plan, tests, coordination, reports, comparisons, issues, solutions, corrections

- All data submitters for the selected stocks raise data in the RDB in two phases
- Output compared and corrections made where needed in two phases

#### 3. Extended data logging - what have been uploaded when (12 % of total budget)

Implement a functionality, which makes it possible to see down to details what have been imported when, full data auditing

Outputs: Specification of functionalities, development, implementation, test

• Identify what is the optimal solution for this. User and time stamp in relevant tables or expand the existing logging. Develop functionalities that allows countries and end-users to see all details of what have been uploaded when. As it is now it is possible to see the first part of data uploaded by persons.

#### 4. Implement quality control functionality (12 % of total budget)

Taking a starting point in the quality control checks developed under the fishPi project. Identifying the best way to incorporate the checks and implement them. The functionality will allow the users to identify differences within a country and across the countries.

Outputs: Technical report, Technical meetings/workshops covering all regions, development and implementation of methods

- All relevant checks on country level and across countries should be documented
- All relevant checks should be developed and implemented

# 5. Explore options and cost implications of implementing of external tools (i.e. COST) in the RDB (10% of total budget)

Outputs: Technical report, Technical Workshop(s), conceptual development

Such analysis should include the following elements:

- An inventory to collate and examine the tools present but also tools missing
- Specification of relevant issues regarding data and format
- Conceptual development of an interface to RDB

## 6. Requirements and automation of Data calls procedures. (12% of total Budget)

Analysis of the different data calls and identify which can be extracted directly from the RDB, but also identify which data calls can be extracted from the RDB by changes to the RDB.

Outputs: Technical report, programming development

- Analysis of the data and aggregation levels of relevant data calls
- The present data and functionalities in the RDB need to be compared with possible data calls
- Develop functionalities which automatically created potential data calls

## 7. Development of statistical sound raising in the RDB. (20% of total budget)

Outputs: Technical report, Technical meetings/workshops covering all regions

- Identify the consequences of implementing the new exchange format for the existing methods, processes and data flow
- Specifications of the database changes to accommodate the new exchange formats in the RDB.
- Specification of new tables and fields to store the new processed data raised with statistical methods. Specifications of incorporation of statistical methods in R into the RDB.
- Identify which additional processing functionalities are need to be developed in order to comply with statistical raising methods
- Prove of concept for inclusion of the methods in R in the RDB

## 8. Update of the existing roles and access module. (14 % of total budget)

Outputs: Technical report, programming development

 Specification, test, development and implementation of updated internal structures final test

The LM again strongly supports this proposal and urges the European Commission to fund this development through appropriate budget lines as soon as possible.

## 10.2 Studies proposed by ICES

The LM notes that none of the studies proposed last year and endorsed by the LM 2014 were included in the Commission's EMFF work programme yet. The vitally important and urgent study on Baltic cod will now be conducted using national funds.

ICES endorses the proposal for development of the Regional DataBase for support of RCM/RCGs and other users (section 10.1.2).

#### WebGR

#### Background

WebGR is a set of Open Source web application services developed within an EU tender project in 2008 to support studies of fish Growth (age) and Reproduction (maturity). This tool assists fisheries scientists in the organization and data analysis of calibration workshops for classification of biological structures and provides means to analyse the results of such exercises. These standard calibration exercises of age and maturity have been conducted among EU Members States (MS) under the Data Collection Framework umbrella and also for the routine work of age and maturity quality assurance within a MS.

#### Current status

Currently WebGR 1.0 has 281 registered experts from 31 countries in Europe (6 of them on the Mediterranean coasts) and from 26 institutes. Studies using WebGR have been carried out on 41 species, across 61 workshops, resulting in 7195 images and 57412 annotations now stored on the database. The tool has **not been further developed since 2010**. Nevertheless, since 2010 more than 60 workshops and exchanges have used WebGR with variable success. Unanimously, the members of these expert groups saw a great potential in using this software and its tools.

Unfortunately, there has been no team of developers available to update the open source code of WebGR. Therefore, after seven years a cybersecurity audit at the hosting institute revealed that the WebGR server was presenting a large security weakness, and concluded that the system should be shut down by the end of 2015. Presently, the service is freely provided at http://webgr.azti.es, but without any warranties in case of problems, with a high risk of data loss.

In recent years, several study proposals on WebGR developments have been proposed by the ICES PGCCDBS and the RCMs and endorsed by the 10<sup>th</sup> and 11<sup>th</sup> Liaison Meetings. The final proposal submitted last year is available below.

It is unanimously recognized that ICES would be the preferred host of the programme, taking in to account the ICES activities on data quality assurance throughout the age reading and maturity staging workshops. Having the programme hosted at ICES would guarantee a wider dissemination of this useful tool, and ensure a continued site management and support. To avoid the loss of important ageing and maturity calibration exercises and to aid in greater internationalize of the system, a "Rescue Plan" has been suggested to be implemented.

#### Proposed rescue plan

The final aim of the Rescue Plan is to have a virtual machine on a GNU/Linux Debian LAMP server with all the latest security updates and with an updated (not upgraded) WebGR server running on it. The total cost is estimated to be 5 800€ excl VAT, and the transfer will be performed by the SME created by the original developer of WebGR (Rauthe IT) with the help of AZTI and ICES IT specialists.

After the LM, the Netherlands and Belgium have agreed to cover the required costs for the rescue plan.

In any case, following the original spirit of WebGR, the code and virtual machine will be publicly available through the typical Open Source Repositories (SourceForge) in order to be used by any user.

## Detailed work plan

- Update ZendFramework 1.9 to 1.12.
  - o The Zend Framework is an open source, web application framework implemented in the programming language PHP 5. The update fixes security issues, bugs and performance issues of this framework.
- Update PHPIDS
  - o This is an open source PHP Web Application Intrusion Detection System. The main goal is to give the ability of finding intrusion data coming from client/hacker to php web application and stop it. The update includes the latest filter description for new kinds of attacks.
- Publishing the new source code to sourceforge.com
  - Sourceforge is a platform for hosting Open Source projects like Berlios. Berlios was used for WebGR but it was closed last year, therefore, the project needs a new home for further developing.
- Making WebGR a virtual machine and deploying to the ICES server
  - o Make the WebGR application work on the ICES server.
- Update Database
  - o The MySQL database server have to be updated to the latest version to make the application secure. For this reason the WebGR database, with all the data, need an update to be compatible with the new database server.
- Check WebGR Source code for deprecated functions and security issues and refractor deprecated functions
  - The source code which was written by the BLE needs to be checked, whether old and outdated functions from PHP (because the new Version 5.4 of PHP will be used) or the ZendFramework are to be used. If so, the functions have to be replaced or rewritten.
- Testing the new version
  - A check of all functions of the WebGR UI; whether they work as expected with all the changes and new components of the WebGR application.

#### Prerequisites for hosting at ICES

There are 2 possible models for hosting of the WebGR system at ICES. In brief, the 'virtual hosting only' approach which would not incur significant costs and resources at ICES, and the 'full hosting' approach which would imply a major revision of the software and application to fit to the ICES core software and competences.

## Virtual hosting

In this scenario, the virtual machine with all of the security fixes and developments outlined above would be transferred to a virtual machine hosted on the ICES infrastructure. The maintenance of the software and applications would continue to be the responsibility of AZTI or another 3<sup>rd</sup> party. ICES would primarily be responsible for maintaining the infrastructure that the virtual machine is placed within. This would incur a small cost to ICES in providing the infrastructure and a small amount of technical support – costings have not been calculated but an estimate would be in the region of 2-3 000 Euros.

# **Full hosting**

In this scenario in order to benefit from a continued development of the WebGr system and full support from the ICES IT resources, the entire application would need to be rethought as ICES does not currently support – or use as standard - the following components/languages:

- Zend framework and PHP5
- PHPIDS
- MySQL server

The ICES IT development strategy is to consolidate and to work within a finite number of tools/frameworks. The main development environment of ICES is .NET and SQL Server, it would be a major undertaking to recode into these systems, and this may not be desirable if the wish is to keep the code as open as possible. It is very difficult to estimate a cost of such a development but it would be a substantial amount – upwards of 30 000 euros.

WebGR 2 Study proposal submitted to the European Commission, 30th October 2014

#### TITLE OF STUDY:

WebGR 2 - Improvements on the Web application interface and technical infrastructure for supporting Growth and Reproduction Studies

**APPROXIMATE COST:** 350 000 €

**DURATION: 24** Months

#### **DESCRIPTION OF WORK PROGRAMME**

#### **OBJECTIVES AND OUTLINE OF THE STUDY**

The objective of this study is to substantially improve the first version of WebGR developed within an EU tender project in 2008 [FISH/2007/07]. WebGR is a web application interface linked to a GUI and a database developed to support fisheries scientists in the organization of calibration studies for biological structures classification providing means to analyse the results of such exercises. Those studies could be the standard age and maturity calibration exercises conducted among EU Member States (MS) under the Data Collection Framework umbrella and also the routine work of age and Maturity quality assurance within a MS.

The project aims to improve the Open Source software previously developed to support studies of fish growth and reproduction. This will facilitate the improvement of the quality of growth and reproduction studies, by guaranteeing a consistent application of age reading protocols and maturity scales, ultimately influencing fisheries management advice. However the use of this tool is not necessarily limited to age and maturity studies.

Presently, one WebGR consortium member provides the Internet service in http://webgr.azti.es. The service is provided without cost to users, but without any warranties that the tool will be available or maintained for a long term. Further, the tool has not been developed since 2010. Nevertheless, since 2010 42 age and maturity workshops and exchanges have used WebGR with variable success. Unanimously, the members of these expert groups saw a great potential in using this software and its tools. However they experienced different problems while using it and at the same time had several requests on how to improve this tool and obtaining more complex outputs.

This feedback highlighted the strong need for further improvement of WebGR and is the basis for this study proposal.

The desirable improvement of WebGR is 2-fold. On the one hand it is necessary to upgrade the user interface, improve picture uploading and enhance exploring tools, in terms of new measuring tools. Moreover, developing an extended statistical output will give a more complete evaluation of potential differences among readers/stagers. At the moment the most basic features are implemented and the easy export procedure allows users to use the data on a standard statistical package or spreadsheet. The

intention is to develop an *R* package and implement a set of statistical methods.

It would be beneficial both for ICES and the WebGR-users, if ICES could host and maintain the WebGR application service. This would guarantee a wider availability of the tool and ensure a robust platform management. Having WebGR under the supervision of an international organization, such as ICES, is an important step in the future maintenance of this key tool to assess the quality of biological parameters collected under the Data Collection Framework.

WebGR is used as a pan-European tool. The objective of moving the WebGR platform, and its maintenance, to ICES is to ensure the longevity of this tool. Access to WebGR will be granted to all European countries. It is undoubtedly a key tool on the regional and cross-European cooperation, and essential for data quality assurance. Using the same tool across all EU MS will facilitate alignment of the methods used to estimate biological parameters across stocks and national institutes.

The study should consist of 7 Work packages:

WP 0: Coordination

WP 1: Improving WebGR for age calibration workshops

WP 2: Develop WebGR for maturity staging calibration workshops

WP 3: Implementation of statistical methods

WP 4: Software development and testing of the WebGR 2.0

WP 5: Site establishment and maintenance

WP 6: Training and dissemination

WP 1, WP2, and WP3 will feed into WP4 through an iterative process, in which the software is developed concurrently with the emerging results from the first WPs to match the new demands of the web application interface.

#### SPECIFIC WORK PACKAGES AND SUB-TASKS

#### Work Package 0. Coordination

#### **Tasks**

This WP has the objective to keep track of the study development between all partners and to prepare interim and final reports.

# Work Package 1. Improving WebGR for age calibration workshops

This WP has the objectives to develop and improve the user interface of WebGR for age calibration workshops. Furthermore, the WP will correct and improve the currently detected flaws and bugs of the system. Facilitating this work, the original software developers of WebGR will be subcontracted. Three main objectives of this work package are:

#### WP 1.1. Implementation of new features.

Otoliths come in many different sizes and ages and different life stages of one individual fish may need to be handled differently, however, WebGR is currently unable to deal with such variability. In several cases it has been very difficult for the reader to annotate correctly due to i.e. too large magnification, size of the symbol marks, too low resolution of images and lack of double ageing fields for diadrome fish. The possibility to group several images would also be an advantage for some species. Implementation of new features to make WebGR more diverse and user friendly for the reader and fix all the problems identified above is therefore much needed.

#### WP 1.2. Improvement of current features of WebGR and correction of bugs

There are several identified features in the current version of WebGR in relation to e.g. uploading images, handling workshops, etc. which need major improvements. Further a list of bugs has been compiled

during the past years and these need to be corrected in order for WebGR to be operational.

# WP 1.3. Developing new measuring procedures

It is recommended to perform an analysis of distances between annotated growth structures in age calibration workshops. Currently it is not possible to quantify the distance between marked growth increments in WebGR given the non-guided marking procedure among readers. To facilitate this, a tool enabling the insertion of a line going from the centre of the otolith to the edge will allow annotation on a common axis.

#### Work Package 2. Develop WebGR for maturity staging workshops

Objective: expand the tool to cope with maturity calibration exercises. The data from maturity calibration exercise are different (i.e. not a consecutive number of a given identified class) and the main relevant output for fish stock assessment is the differentiation of immature and mature individuals. It is therefore, needed to translate the results into binomial classification, and developed the follow up analysis.

#### Work Package 3. Implementation of Statistical methods

This WP has the objective to extend and improve the present statistical analysis implemented in WebGR and it is divided into the following subtasks

- WP3.1 Define suitable statistical outputs from WebGR as inferred from the state-of-the-art recommend by the Workshop on Statistical Analysis of Biological Calibration Studies [WKSABCAL]
- WP3.2 Test methods with *R* and develop a *R* package or alternatively link existing *R*-packages with the set-up of input data in WebGR and define a suitable output format
- WP3.3 Implement statistical analysis in WebGR
- WP3.4 Test statistical analysis on categorized maturity data

#### Work Package 4. Software development and testing of the WebGR 2.0

This is a continuous WP as developing and testing will be needed during the whole duration of the project. Moreover, when a beta version is available, a workshop for reproduction and another for ageing will be organised where all partners and users of WebGR 2.0 will participate in order to test the new application and provide feedback. Subsequently a fine tuning of the new software will be performed by the subcontracted IT company.

## Work Package 5. Site establishment and maintenance

This work package has the objective to transfer the site from Azti server to ICES and outline the maintenance demands of the site.

The increasing amount of pictures uploaded and stored on the server during each exercise intensifies the demands for the site hosting capabilities and maintenance. An agreed content and technical governance model needs to be developed, for which all partners have a stake in. This will outline practical issues of who does what and when, i.e. updating of WIKI as well. This will also outline the future management plan of the ongoing upkeep of the application, its services and content.

# Work Package 6. Training and dissemination.

The objective for WP6 is to disseminate WebGR, train users and channel feedback.

It will divided into the following two subtasks:

- WP 6.1. Training by the means of a widely used web conferencing tool (i.e.Webex). This will include at least three online meetings, one for coordinators and two open trainings.
- WP 6.2. Dissemination through flyers to be distributed to different fora and through the Age Readers Forum (ARF).

## 10.3 Studies proposed by PGECON

LM regards all studies as suggested by PGECON relevant and in general supports them all. In parallel LM does not feel to have sufficient expertise to endorse or prioritise the requested studies. However, aside from the suggested study/handbook on sampling design and estimation methods for fleet economic data collection all other studies as detailed in the 2014 PGECON report have been suggested and supported repeatedly through several bodies.

PGECON realized that a considerable number of studies that have been recommended through the years have piled up without having been addressed in any way. This jeopardises the usefulness of DCF economic figures that are to be collected under the DCF (DCMAP) with substantial effort.

Some of these studies are listed below. This list is not claimed to be complete nor does the order imply any information on urgency. Moreover, it is not regarded as a PGECON task to follow up on the status of proposed studies. In fact, the lack of the results of the studies listed has impeded the use of DCF data and the development of recommendations for DCMAP.

#### Origin and Sources of Raw Material in the European Seafood Industry

Max. Budget: 550.000 Euro

<u>Objectives and expected results</u>: The study shall evaluate the feasibility of data collection on raw material by species and origin (catches/aquaculture and domestic/EU/non-EU), also assess the consequences of including semi-processed products (problems of double counting, etc.)

The study shall take into consideration existing data collection in order to assess the possibility to link these sources, as there are EU market observatory, trade statistics, Prodcom statistics, control regulation, input-output tables, data from producer associations, EU traceability regulation. Some fish and fisheries products are used in the pet and farming sector, maybe also in the cosmetics and pharmaceutical sector. The proposed study shall also assess the volume of fisheries and aquaculture products going into these sectors and the importance of those purchasers. Furthermore, small size enterprises may be more linked to regional production of fisheries products or integrated enterprises, e.g. aquaculture producers with processing facilities. This should also be taken into account.

#### Terms of Reference of the proposed study

- Investigate the volume and value of raw materials by species being used in the fish processing industry in a sample of at least eight Member States (MS) and also investigate their source and origin. Raw materials should include fish and other aquatic species.
- Investigate the type of processed material used in the fish processing industry
- Investigate the price of raw materials used in the processing industry in the respective countries
- Investigate the percentage of income coming from processing and that coming from other activities
- Assess the feasibility of linking raw material use in the fish processing industry with the fishing and aquaculture sector for the respective MS
- Estimate the costs of regular (could be e.g. every 2 or 3 years) data collection of raw materials used in the fish processing industry
- The selection of countries or the study shall be done by several criterions, leading to different country groups. Those criterions might be:
  - Market size
  - o Production volume
  - o Important main products (relevant for European market)
  - o Main regions, in order to have a cross over approach by commodity and country/area
  - Countries with established data collection and countries with less developed data collection on raw materials

Type of activity and types of bodies/organizations that could carry it out (pilot project, study, collaboration between X MS): The study could be executed by national statistical offices and research institutes involved in the data collection framework of the CFP. The study shall be done in cooperation of at least 5 MS being involved in the current DCF.

**Duration:** 18 months

Policy relevance/need this activity addresses/end-users of outputs: Data on raw materials purchased from European fishing companies may provide information on outlet and ex-vessel prices which may be of interest for the fleet policy, while data on imported raw materials should provide information on sourcing (including intra-firm trade) which may be of interest for the external side of the CFP. Furthermore, in order to have the connection to the fleet and to evaluate impacts of management measures for the fleet on the fish processing industry, the study may deliver the necessary empirical data basis.

<u>Is output needed by a certain time?</u> Yes, results should be available at least 2 years before the proposed start of regular data collection on raw material by origin and species under the new DC-MAP in order to enable the EU-Commission to change legal provisions and MS to adapt to this new data collection needs.

Activity recommended by whom? Numerous, e.g. SGECA 10-03, PLEN 10-03, SGECA 10-04, STECF-EWG 13-05, PGECON 2013, Liaison Meeting 2013, STECF 13-31

## Study to disaggregate economic variables by activity and area

Max. Budget : 300.000 €

Objectives and expected results:

- Determination of cost structures within disaggregated units (e.g. metiers): Thus far, cost structures of operations of the same vessel in different fisheries (e.g. metiers) are regarded constant. This is not necessarily realistic, particularly when both passive and active gear operations are compared. The study should provide a method to break down cost structures with respect to the fishing activity performed. The method should as much as possible operate with data that are already available.
- Procedures to derive proper correlations of variable cost data with transversal and capacity data to be applied for specific disaggregation tasks (having specific requirements of spatial, temporal or activity-related resolution): The outcome of this point should be a tool, requiring only standard software, which allows for modelling correlations, including an indication of the reliability of the result. The end-user should then be able to calculate correlations using data which is by default available (e.g. through the DCF or the logbook regulation). The end-user should also be able to assess the robustness of the estimated correlation. The method should be applicable to all DCF segments, allowing the end-user to disaggregate variable cost data.
- Validation procedure: A method should be provided to enable MS to validate the results of the disaggregation procedure. Specifically for the purpose of validation more disaggregated input might be required, e.g. daily cost data.

Type of activity and types of bodies/organizations that could carry it out (pilot project, study, collaboration between X MS): Study, involvement of at least 4 research institutes from different MS advisable to reflect different data collection environments

Duration: 12 months

Policy relevance/need this activity addresses/end-users of outputs: A wide range of applications for fleet economic data has emerged requiring data on a resolution level higher than provided by DCF specifications. In order to find a solution for this problem two workshops have indicated that transversal data which are in several cases available at the requested resolution could serve for disaggregation of fleet economic data. This approach has to be further elaborated. All stakeholders /end-users of fleet economic data will benefit from the outcome of that study as it will allow to use a common approach for the numerous applications which require disaggregation (see also PGECON 2014 compilation).

Is output needed by a certain time? End of 2015 highly desirable

Activity recommended by whom? (RCM, PGMED, PGCCDBS, PGECON etc.)

PGECON 2013, LM 2013, PGECON 2014

## Handbook on sampling design and estimation methods for fleet economic data collection

Max. Budget: 30,000 euro

## Objectives and expected results:

Produce a practical manual to be used as supporting guidelines in the production process of key fisheries statistics according to EU legislation. Report will contain methodological and technical materials, worked examples and case studies plus annexes (SAS program codes, numerical results).

## Expected content of the handbook:

Approx.50-60 pages

Contents:

- 1. Introduction
- 2. Survey planning
- 2.1. Basic concepts and definitions
- 2.2. Survey strategy
  - 2.2.1. Overall survey design
  - 2.2.2. Sampling design
  - 2.2.3. Estimation design
- 2.3. The role of auxiliary information
- 2.4. The role of statistical models
- 3. Techniques for sample selection and estimation
- 3.1. Preliminaries
- 3.2. Basic sampling techniques
  - 3.2.1. Simple random sampling
  - 3.2.2. Systematic sampling
  - 3.2.3. Sampling with probability proportional to size (PPS)
  - 3.2.4. Stratified sampling and allocation techniques
  - 3.2.5. Worked examples
- 3.3. Use of auxiliary information in estimation phase
  - 3.3.1. Ratio estimation
  - 3.3.2. Regression estimation
  - 3.3.3. Generalized regression estimator (GREG)
  - 3.3.4. Calibration techniques
  - 3.3.5. Worked examples
- 4. Treatment of nonresponse
- 4.1. Types of nonresponse
  - $4.1.1.\ Unit\ nonresponse$
  - 4.1.2. Item nonresponse
- 4.2. Adjustment for unit nonresponse
  - 4.2.1. Response Homogeneity Groups method (RHG)
  - 4.2.2. Post stratification
  - 4.2.3. Logistic modelling
- 4.3. Worked example
- 5. Case studies
- 5.1. Italy
- 5.2. Finland
- 6. Quality assessment of estimates
- 6.1. How to evaluate the quality of sampling and estimation procedures?
- 6.2. How to improve quality?
- 7. Software
- 7.1. SAS tools

7.1.1. SAS SURVEY procedures

7.1.2. SAS macro CLAN

7.1.3. SAS macro CALMAR2

7.2. Other tools

7.2.1. SPSS Complex Samples module

7.2.2. R program SURVEY

References

Web links

Annexes

<u>Type of activity and types of bodies/organizations that could carry it out Study</u> - Joint project by RKTL (Finland), NISEA (Italy) and University of Helsinki (UH)

Duration: 3 months, first month of 2015

Policy relevance/need this activity addresses/end-users of outputs

The handbook will provide methodological guidance for MS when planning their data collection scheme and analysing data collected. It will advise on reporting of data quality and in improvement of data quality, thus considerably increasing the efficiency and effectiveness of data collection.

Is output needed by a certain time?

Preferably prior to the fleet economics data call to be launched in 2015

Activity recommended by whom?

The handbook was proposed by the DCF workshop on statistical issues and recommended by PGECON 2014 and then STECF EWG 14-02

## Harmonise quality reporting and propose methodology in the case of non-probability sample survey

<u>Max. Budget</u> : 40.000 €

Objectives and expected results:

Terms of References of the study

- Investigate examples of the assessment of the quality of non-probability sampling strategies applied in other sectors which could be adapted to fisheries
- Propose a suitable methodology for the estimation of economic variables in case of nonprobability sampling
- Propose indicators for the assessment of the quality of estimates of economic variables in the case of non-probability sampling
- Propose a common format for the presentation of these methodologies in the NP and in the TR in order to harmonise quality reporting
- Propose methods to evaluate the impact of non-response in case of non-probability sampling and also in case of probability sampling and census with low response rates
- Perform a comparative impact on data quality of different sampling strategies (e.g. is sampling preferable to census with low response rate? When a response rate should be considered too low with respect to the reliability of final estimates?).

Type of activity and types of bodies/organizations that could carry it out (pilot project, study, collaboration between X MS)

Study, preferably at least 3 research institutions from different MS should be included

**Duration:** 4 months

Policy relevance/need this activity addresses/end-users of outputs

Non-probability sampling and low response rates are rather common in the collection of economic data of the fleets. However, there is hardly published information how this affects bias and variability estimates. Any end-users of DCF fleet economic data should have strong interest in this kind of quality information on the data provided by MS. MS in turn would finally be able to provide this kind of information in a standardised manner.

Is output needed by a certain time?

End of 2015

Activity recommended by whom? (RCM, PGMED, PGCCDBS, PGECON etc.)

STECF-SGECA 09-02 and numerous subsequent meetings, e.g. LM2013

## Pilot study on social indicators

<u>Max. Budget</u> : 200.000 €

Objectives and expected results:

It has been intended to include social variables in the DCMAP legislation. Before social data are included in the new DCMAP and in order to avoid redundant effort possible end-users and applications have to be clearly defined in a first step. Moreover, it has to be clarified how data should be collected, which data are available through common sources and what are the applications/end-users and requirements.

The study should clarify the data needs and, subsequently, elaborate existing sources for social variables and the feasibility of linking them to fisheries. Then it should be specified which data are required but not available through other sources. It has to be born in mind that the use of social indicators might be related to a regional level rather than to a fleet segment level.

The study should cover all 10 variables as listed in EWG 12-15 and should cover all relevant MS.

Type of activity and types of bodies/organizations that could carry it out (pilot project, study, collaboration between X MS)

Pilot study, consortium of research institutes from at least 4 MS

Duration: 9 months

Policy relevance/need this activity addresses/end-users of outputs

The outcome of the study is a prerequisite to set up an efficient DCMAP. DCMAP has to be specific to the end-user needs and has to ensure that existing sources are exploited as much as possible to achieve the requested information prior to demanding additional effort on data collection.

Is output needed by a certain time?

Preferably before adoption of new DCMAP legislation

Activity recommended by whom? (RCM, PGMED, PGCCDBS, PGECON etc)

EWG 12-15, p.20; EWG 13-05, p.15

#### Methodologies for estimation of intangible assets in EU fisheries

<u>Max. Budget</u> : 275.000 €

Objectives and expected results:

- Identify different types of fishing rights and identify the available data in relation to fishing rights
- define a methodology for estimation of the value of different types of rights (license, quota, transferable and non-transferable, etc...); specify the input as required for the estimation
- define a methodology to separate the intangible part of capital (quota, license, etc...) from the overall capital value when this value is not directly observable;
- investigate factors determining changes in values of intangible assets.
- ensure a coverage as large as possible so to address all the possible types of fishing rights present at EU level.
- Provide guidelines for estimation which allows the estimation for all circumstances which have been observed in MS

Type of activity and types of bodies/organizations that could carry it out (pilot project, study, collaboration between X MS): Study, involvement of at least 4 research institutes from different MS advisable to reflect different legal circumstances

Duration: 10 months

Policy relevance/need this activity addresses/end-users of outputs: Fishing rights are an essential part of total assets in many fisheries and thus, amongst others, also important for the estimation of capital cost. Implementation of the CFP in the various MS has led to an introduction of various types of rights (licenses, ITQs, etc.). Some of these rights are freely tradable; others can be only transferred together with the vessel to which they are attached. Still other rights are officially not transferable, but in reality they too can be transferred. In many countries the value of these intangible assets approaches or even exceeds the value of the tangible assets and it plays an important role in operational decision of fishing companies.

Price information on intangibles is scarce and estimations of their value when linked to tangibles are far from simple. Further research in valuation of intangible will be essential, as their value probably exceeds the value of tangible assets in many fisheries. In addition, estimation of intangible assets is required by the DCF and common methodologies should be defined.

Is output needed by a certain time? Preferably before adoption of new DCMAP legislation

Activity recommended by whom? (RCM, PGMED, PGCCDBS, PGECON etc) Workshop on Evaluation of data collection connected to Fishing Rights and Capital Costs 2013, PGECON 2014

# 11 Any other business (AOB, ToR 6)

#### 11.1 List of recommendations for AR 2015

From the this LM report, the recommendations addressed to Member States will be extracted by the Commission and published on the JRC Data Collection website. These are to be included in Member States' Annual Reports 2015.

## 11.2 Meetings in 2016 of relevance for DCF

The LM notes that because of the change in the financing of the National Programmes from direct management to shared management (EMFF) in 2014, a list of meetings eligible for funding under the DCF is not required anymore and will not be provided centrally. Apart from the usual co-ordination and planning group meetings, stock assessment working groups, RFMO meetings and economic workshops, more meetings could be relevant for the support of the Common Fisheries Policy (CFP).

## 11.3 ICES Workshop on Concurrent Sampling (WKISCON2)

The LM did not have time to review the outcomes of this workshop. A presentation and executive summary was made available by ICES. The RCM NA, who detected last year the potential problem around the lack of consistency in the implemention of a regional common strategy to sample, analysed the results of WKISCON2 in its 2015 meeting and recommends to investigate this problem further based on WKISON2 results. The LM agrees on the importance of such future discussion.

#### Background

The ICES Workshop on Evaluating the Implementation and Statistical Aspects of Concurrent Length Sampling (WKISCON2) was established to address a recommendation from the 11th LM (recommendation LM9), as a follow up of a recommendation from the RCM-NA. This recommendation was addressed by the WGCATCH, which recommended to establish a workshop to address the issues with the following ToRs:

- a) Identify the current use of concurrent length sampling data by end users.
- b) Review information on types and extent of concurrent sampling carried out on shore or at sea by Member States as part of national DCF programmes, the practical issues encountered, the additional costs involved, and the quality of concurrent length data from each source. Evaluate the difference in the data collected before and after implementation of concurrent sampling.
- c) Identify the statistical arguments for concurrent sampling to characterize the length composition of species in mixed-species landings rather than the use of independent (nonconcurrent) sampling for this purpose.
- d) Identify any benefits concurrent sampling can provide considering the new and broader scopes of the revised DCF, such as the evaluation of impacts of fisheries on marine biological resources and on the ecosystem, and if these benefits can be achieved more cost effectively from nonconcurrent sampling of all species of interest.
- e) Evaluate the implications of not carrying out existing concurrent sampling at-sea and/or on shore, in relation to costs and provision of fishery management advice.

The meeting was chaired by Liz Clarke (UK) and Nuno Prista (Portugal) and took placed in Sukarrieta, Spain, 16–19 June 2015. Both chairs are familiar with the DCF regulation and have good sampling statistic background.

The aims of the workshop were to review the implementation of concurrent sampling for lengths by Member States (MS), identify current uses and benefits of data collected in this way, consider the statistical arguments for carrying out concurrent sampling of landings, and evaluate the implications of

discontinuing current at-sea and on-shore concurrent sampling. In the preparation for the workshop, two questionnaires and a data call were sent to 23 DCF National Correspondents (with replies from 17 institutes) and 45 ICES Expert Groups (30 replied). The responses to the questionnaires were analysed in subgroups and complemented with plenary discussions during the meeting.

The report of the meeting is not available yet. However, draft conclusion were agreed at the meeting and are presented here. The LM participants will be informed when the report is published.

#### Conclusions

- a) Stock assessment and discard estimation and management are the major current uses of concurrent sampling data. Other uses like scientific catch estimation, advice to local, national and international authorities, research on MSFD descriptors, mixed fisheries and gear interactions and on mortality of rare species, data-poor stocks and protected, endangerous and threatened (PETS) also take place in ICES EGs and national institutes. WKISCON2 notes that many of these uses do not specifically require length data that have been sampled concurrently on a trip and that models have not been developed yet to make full use of concurrent data at trip-level.
- b) Concurrent sampling for lengths of discards and landings at-sea is a long-established practice in most MS and haul-level and trip level data is already available for current and future uses albeit sometimes limited by the lower sample size of these programmes.
- c) Fewer MS carry out concurrent sampling of landings on-shore, those that do not citing increased costs and workload as the main practical issues. Where it was applied, concurrent sampling of fishing trips onshore resulted in substantial increases in the number of species sampled for lengths without jeopardizing the main uses of the data.
- d) Concurrent sampling of landings on-shore is a simple and effective way to estimate species composition (in weight and length) of landings. However, it is prone to bias caused by incomplete sampling and can be an inefficient method of obtaining length distributions of specific stocks when officially reported species compositions (e.g. from logbooks) are considered accurate. Other statistically sound methods of selecting species to sample are not yet fully developed or tested in the field but may provide useful alternatives in these cases.
- e) Increased information on by-catch species, general catch composition, and improved data on mixed-fisheries were considered by EGs to be the major benefits of concurrent sampling.
- f) Full species concurrent sampling of the catch at a haul-level is the best way to provide data to measure the interactions between all species caught and evaluate the impacts of fisheries on marine biological resources and on the ecosystem. WKISCON2 considers sampling at-sea is the ideal way of sampling commercial fisheries. At-sea sampling is generally more costly and displays lower fleet coverage than on-shore sampling, but currently, it is not usually possible to sample the discarded component of the catch on-shore.
- g) To take full advantage of the benefits of concurrent sampling, both at-sea and on-shore, full-species concurrent sampling should be implemented without resort to species lists such as the current G1 and G2 lists. Incomplete sampling events need to be flagged in national and international databases. The sampling should be regionally coordinated to ensure implementation is consistent and data are comparable at a regional level.

Overall, WKISCON2 concludes that the implementation of concurrent sampling of landings onshore and at-sea has provided benefits in terms of provision of data for more species. However, more than concurrent sampling itself, statistically sound sampling of the full range of species caught should be the overall aim of future revisions of the DCF and a return to strict stock based sampling should not be an option. To achieve statistically sound sampling of commercial catches various statistical approaches may be valid, concurrent sampling being one among them.

The conclusions above reflect the view of WKISCON2, which is an Expert Group under the auspices of the International Council for the Exploration of the Sea and does not necessarily represent the views of the ICES Council.

## 11.4 ICES-EFARO evaluation of surveys

This information was made available to the LM by ICES, but not discussed in detail.

#### Background

At the 2015 General Assembly of EFARO in Bergen, June 2015, it was suggested that ICES and EFARO should cooperate to streamline surveys and data collection and it was agreed to recommend the setup of a joint EFARO – ICES meeting in November in ICES headquarters to develop two regional pilot studies for developing joint data collection plans using vessel surveys. The recommendation was approved by the ICES Bureau at its June 2015 meeting.

## Draft ToRs for joint EFARO – ICES meeting on cooperation in surveys and data collection

The EFARO – ICES meeting on cooperation in surveys and data collection (EIMSD) chaired by Tammo Bult, EFARO, and Eskild Kirkegaard, ICES, will take place in ICES Headquarters, Copenhagen on 20 January 2016 to:

- a ) Review the position paper prepared by Paul Connolly, Fritz W. Köster, Tammo Bult, Jørgen Dalskov, Philippe Moguedet and Eskild Kirkegaard;
- b) Develop proposals including ToRs for two regional pilot studies.

EIMSD will report by 27th November 2015 for the attention of the ICES Bureau, EFARO, SCICOM, and ACOM.

## Additional information

In advance of the meeting a position paper will be drafted by Paul Connolly, Fritz W. Köster, Tammo Bult, Jørgen Dalskov, Philippe Moguedet and Eskild Kirkegaard. The paper will form the basis for discussions at the meeting and help select two pilot studies where it would be assessed how to build/design surveys used in stock assessment. The pilot studies should also address the integration of MSFD related monitoring activities in the survey plans.

The aim of the two pilot studies should not be to coordinate national survey plans but to examine from a broader perspective how much sampling is needed and if efficiencies can be realised for the important data management side. The results of the pilot studies should be available for March 2016.

EIMSD is open to participants nominated by EFARO or ICES delegates. Chairs of Liaison Meeting, SSGIEOM, SCICOM and ACOM will be invited.

#### 12 Annexes

Annex 1. Draft Recommendation for an ICES Workshop on cost benefit analysis of data collection in support of stock assessment and fishery management (WKCOSTBEN)

WKCOSTBEN - Workshop on cost benefit analysis of data collection in support of stock assessment and fishery management

#### 2015/2/SSGIEOMXX

The Workshop on cost benefit analysis of data collection in support of stock assessment and fishery management (WKCOSTBEN), chaired by Mike Armstrong\*, UK and Jon Helge Vølstad\*, Norway, will meet in ICES HQ, 28 June to 1 July 2016 to:

- a) Propose options and analytical methods for an objective framework to evaluate the benefits vs costs of data sets used to support stock assessment and fishery management advice, where the benefits are in terms of accuracy (bias and precision) of assessment results and derived management variables, and risks to stocks associated with management under uncertainty. This framework should be able to evaluate existing data sets, new data requests from end users, and options for focusing elements of funding, survey design, spatial and temporal coverage, and sampling effort towards components of data collection that have greatest influence on quality of assessments and management decisions for particular stocks or groups of stocks.
- b) Identify a range of stocks for detailed case studies, including those with full analytical age-based assessments and data-limited assessments, and contrasting stock status and biology. Describe the data used in the assessments, the design of fishery-dependent and fishery-independent sampling surveys providing the data, including hierarchical cluster sampling designs and analytical methods for quantifying precision reliably. Evaluate sampling rates and allocation for given survey designs that are required to derive estimates with adequate precision. Specify how simulations of the sampling schemes could be used to relate precision to sampling intensity and costs.
- c) Develop a proposal for a longer-term (3-year) project to develop a general methodological framework and open-source software to carry out cost-benefit analysis and provide proof of concept using the case study stocks. Identify potential sources of funding.
- d) Identify the need for follow-up workshops in 2017 onwards in the event of no funding for a dedicated project.

WKCOSTBEN will report by 7 August to the attention of the ACOM, SCICOM, and PGDATA.

# **Supporting Information**

Priority	This workshop is considered to have a very high priority for establishing data requirements under the DCF and for ensuring the cost effectiveness of data collection.
Scientific justification	International agreement to exploit all stocks at MSY means that a range of assessment methods is needed to determine MSY reference points and stock status relative to these, including for many data-limited stocks. This will lead to requests for improved or additional data that may not be feasible within existing DCF and national budgets for data collection. It is imperative that objective methods are developed to allow the most cost-effective use of data collection funds to help achieve these management goals. This may involve identifying areas of data collection that have relatively large influence on ability to assess the stocks and those that have relatively little influence, and the costs of collecting these data. Where new data are requested, it must be possible to make an informed judgement on the benefits these will bring to the assessments and management in relation to the feasibility and costs of data collection. Without such a decision framework, the ability to achieve MSY goals may be unnecessarily impeded. This framework will help the European Commission and its Regional Coordination Groups to make informed decisions on regional data needs under the revided DCF and help coordination between countries.
Resource requirements	The principal resource requirements are people with the skills needed for the workshop. Historical data needed for the case study evaluations are already collected and must be made available.
Participants	To be arranged
Secretariat facilities	Some secretarial support will be needed.
Financial	Member States may fund this through their EMFF programme.
Linkages to advisory committees	ACOM and SCICOM
Linkages to other committees or groups	PGDATA, WGCATCH, WGRFS, WGBIOP, WGISDAA.
Linkages to other organizations	RCMs