

# **Report of the 13<sup>th</sup> Liaison Meeting**

**Meeting between the chairs of RCMs (and sub-group on Large Pelagics), PGECON, STECF meetings on DCF, PGMED, PGDATA, RDB steering group, key end users (ICES, RFMOs), JRC and the Commission**

## **FINAL REPORT**

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## **1. Introduction**

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### **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 (application of which was extended by the Commission Implementing Decision C(2013)5243) 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 5<sup>th</sup> 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);
4. 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, biologists and economists from each MS involved in the DCF programme. The key objectives of the RCMs are to identify areas for standardisation, collaboration and co-operation between MS.

A Liaison Meeting (LM) between the chairs of STECF DCF EWGs, the chairs of the different RCMs, the chair(s) of the PGECON, PGDATA (formerly PGCCDBS), 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.

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 8<sup>th</sup> 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.

The 13<sup>th</sup> Liaison Meeting (LM) was held at the DG Maritime Affairs and Fisheries (DG MARE), Brussels, from 4<sup>th</sup> to 5<sup>th</sup> October 2016. Isabelle Garzon, DG MARE, opened the meeting by welcoming participants. She stressed the importance of the LM in ensuring that all involved in the DCF are moving in the same direction.

The LM recognised that in 2016 both RCMs and MS are working under the extreme time pressure when planning data collection for 2017 and beyond. Based on the consultation which took place over the previous 4-5 years, it was expected that new legal regime for data collection ('DCF re-cast', follow-up of Reg. 199/2008) would be adopted at the end of 2016 the latest. It took however, much more time than expected. A new EU Multiannual Programme<sup>1</sup> (EU MAP) was adopted only in July 2016, followed by the adoption, in August 2016, the format for a new Work Plans for data collection<sup>2</sup>. As a result, MS are left with very short time to prepare the new Work Plans regarding sampling designs (under the new regime), which must be provided to the Commission by the end of October. Prior to acceptance by the Commission, Work Plans of 26 MS will be subject to an evaluation process by the STECF EWG 16-16 (7-11 November), based on the evaluation criteria to be agreed on by STECF Plenary during the last week of October. As a consequence, such a time frame leaves an extremely short time window for MS to react in case their Work Plans would require significant modification as a result of the evaluation exercise. Thus, all parties involved in the sampling design planning and evaluation (MS, RCMs, LM, STECF) are put in a very uncomfortable situation due to the delay in the EU legislative procedure.

Without going into details, the Commission informed the LM on the call for tender issued for a study on the development of data platform and data exchange system at the EU level and that the contract for that study will be signed by the end of 2016 with a tenderer selected out of many who applied.

The meeting in 2016 will most probably be the last LM meeting under the regime of a current DCF Regulation<sup>3</sup>. The Commission informed the participants that the consultations between the Council and Parliament on the revised DCF regulation are moving smoothly and that the adoption of the new DCF regulation (Recast) is expected reasonably soon.

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<sup>1</sup> COMMISSION IMPLEMENTING DECISION (EU) 2016/1251 of 12 July 2016 adopting a multiannual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors for the period 2017-2019

<sup>2</sup> COMMISSION IMPLEMENTING DECISION (EU) 2016/1701 of 19 August 2016 laying down rules on the format for the submission of work plans for data collection in the fisheries and aquaculture sectors

<sup>3</sup> COUNCIL REGULATION (EC) No 199/2008 of 25 February 2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy

## 1.2 Terms of Reference

The 13<sup>th</sup> Liaison meeting was held in Brussels on 4<sup>th</sup> and 5<sup>th</sup> October 2016 to address the following Terms of Reference:

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

- A. The 2016 RCMs - specific recommendations addressed to the Liaison Meeting
- B. PGECON, PGMed – outcomes and recommendations from their 2016 meeting
- C. PGDATA, WGCATCH, WGBIOP – key outcomes and recommendations from their 2016 meetings (2nd day)
- D. STECF EWG and STECF Plenary - outcomes and recommendations from their 2016 meetings
- E. Data end users (ICES, STECF, RFMOs – GFCM, IATTC, ICCAT, IOTC, WCPFC, NAFO, SPRFMO, CECAF, WECAFC) (2nd day)

### **TOR2. Work plans**

*[With reference to final reports of MARE/2014/19 'Strengthening Regional Cooperation in the area of fisheries data collection']*

- A. Discuss main issues that came out of the RCMs
- B. End user data needs: links to Work Plans
- C. Criteria for evaluation of Work Plans

### **TOR 3. Regional cooperation**

*[With reference to final reports of MARE/2014/19 'Strengthening Regional Cooperation in the area of fisheries data collection']*

- A. RCM data calls – overview of how MS responded (1<sup>st</sup> day)
- B. Overview of use of the Regional Databases for RCMs in 2016 and problems identified (1<sup>st</sup> day)
- C. Future developments for Regional Databases (1<sup>st</sup> day)
- D. Future role of RCGs: rules of procedures, regional work plans, timing

### **TOR 4. AOB**

- A. Agree on a list of recommendations relating to DCF (that MS will need to report on in their AR2016)
- B. Review and prioritize DCF-related study proposals from RCMs, PGECON, EGs etc
- C. Potential list of recommended meetings for 2017 as guidance for MS
- D. EU MAP (Discuss main issues that came out of the RCMs) - *Time allowing*
- E. Data calls - main changes in data calls anticipated next year - *Time allowing*
- F. Landing obligation (Discuss main issues that came out of the RCMs) - *Time allowing*
- G. Format of report

### 1.3 Participants

The 13<sup>th</sup> Liaison Meeting met with the following participants:

Name	Role
Christoph Stransky	Chair of STECF EWGs (on DCF issues)
Sieto Verver	Chair of RCM on Long Distance Fisheries (RCM LDF)
Uwe Krumme	Chair of RCM Baltic
Katja Ringdahl	Co-Chair of RCM North Sea & Eastern Arctic (RCM NS&EA)
Alastair Pout	Co-Chair of RCM NS&EA
Jon Elson	Co-Chair of RCM North Atlantic (RCM NA)
Estanis Mugerza	Co-Chair of RCM NA
Jernej Švab	Chair of the RCM Med&BS
Jon Ruiz Gondra	Chair of the RCM Med&BS Sub-Group on Large Pelagics
Ivana Vukov *	Chair of PGECON
Marie Storr-Paulsen *	Chair of PGDATA and incoming Co-Chair of RCM NS&EA
Ireneusz Wójcik	Chair of Liaison Meeting-2016
Cristina Morgado *	ICES secretariat
Neil Holdsworth *	ICES secretariat (Data Centre)
Federico DeRossi *	GFCM secretariat
Jann Martinsohn	JRC
Venetia Kostopoulou	European Commission
Bas Drukker	European Commission
Isabelle Garzon*	European Commission
Simkje Kruiderink*	European Commission
Rodrigo Ataide*	European Commission
Amanda Perera Perez*	European Commission
Franco Biagi*	European Commission
Zsuzsanna Koenig*	European Commission
Celine Frank*	European Commission
Anna Cheilari *	European Commission
Magdalena Urbanska*	European Commission
Rafael Eliseu*	European Commission
Jennifer Reeves*	European Commission

\*part-time

## **2 Main outcomes from meetings on DCF in 2016 (ToR 1)**

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### **2.1 Main outcomes of RCMs**

#### **2.1.1 RCM Long Distance Fisheries**

The 2016 RCM LDF meeting was held from June 7 to 10 in Vilnius, Lithuania with the aim to address the general Terms of Reference set for the RCMs 2016 meetings 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 area of data collection

The group reviewed the progress in regional coordination since 2015, the outcomes of the 12th Liaison Meeting and feedback from the end-users. Also, the group reviewed the Long Distance Fisheries activity by MS in CECAF and SPRMFO areas with the use of updated 2015 data provided by MS. There were relative limited EU fishing activities in the SPRMFO area in 2015, as was in 2013 & 2014. For the first time, all EU non-landlocked countries were addressed through a data call. The response provided improved insight in the coverage of the data the RCM LDF is using. To streamline future data provision, as well as to address the expressed interest and need stemming from the DG MARE International Directorate to support the development of database holding the data for fisheries in non-EU waters, RCM LDF is of the opinion that the inclusion of data relevant to the RCM LDF into the current RDB is to be preferred.

In order to check whether there were any substantial changes in the fishing pattern in the CECAF area in 2015 which would highlight required amendments to the procedures and programmes as they currently stand (and will be continued under the new DCF, starting from 2017) the group updated last year's ranking and compared the updated version to the 2015 version. Based on that comparison, the RCM LDF concluded that there is no need for amendments to the NPs for 2017 in respect of the long distance fisheries in CECAF area.

In relation to the evaluation of the impact of the introduction of the EU landing obligation in the context of the Long Distance Fisheries, the RCM LDF is still of the opinion that the obligation itself is not expected to have an impact on the work as most of the long distance fisheries are operating under the applicable rules for the specific areas where the fishery is conducted. The landing obligation or discard plans (if and when in place) are thus dependent on the specific management measures adopted by the relevant RFMO or SFPAs. The main concern addressed by the RCM LDF in this context is the added potential risk of changes to the vessel behaviour when an observer is placed on board as this could lead to substantial bias in data collected. Despite not being LDF specific, RCM LDF stresses again that it remains of key importance that data collected by scientific observers are used for scientific purpose only and not used for surveillance or prosecution purposes in order to not undermine the trust and relationship between the fishing industry and scientific community.

The group discussed the future data collection set up in CECAF and SPRFMO area for pelagic fisheries. No regional sampling plans could be set up at this stage, but the current multi-lateral agreements cover for the most important elements of the future regional sampling plans, such as cost-sharing and application of similar methodologies. As the current multi-lateral agreements terminate by the end of 2016, new agreements have to be established. The group discussed various options and the preferred option was to continue a similar set up as in 2016, though the sampling will be coordinated by 2 MS instead of one. This option will be explored further by the two MS involved (POL, NLD) during the second half of 2016. A proposal for renewed multi-lateral agreements will be sent to all partners involved.

RCM LDF 2016 made 4 recommendations:

- To continue to address the RCM data call to all EU non-landlocked countries
- To include the RCM LDF data into the regional database

- To intensify the contact between data collectors and end-users in CECAF area
- To renew the multi-lateral agreements covering the sampling of pelagic fisheries in CECAF and SPRFMO areas

The next RCM LDF meeting is planned for June 2017, and Germany kindly offered to host this meeting in Hamburg.

### **2.1.2 RCM Baltic**

The RCM Baltic 2016 met in Rostock (Germany) between August 29 and September 02, 2016. Overall, 31 participants from all Baltic countries (except Russia), ICES and the COM joined the meeting. After adoption of the agenda, the progress since the 2015 RCMs and 2015 liaison meeting (12th report) and results from expert working groups were reviewed.

Recent progress of DC MAP and related regulations were presented and member states' concerns about cost-efficiency issues were discussed (e.g. rationale of the COM regarding blockage of funding for pan-regional development of key tools such as the Regional Data Base (RDB) or Web services for support of Growth and Reproduction Studies (WebGR); uncertainties about funding for additional tasks imposed on the future Regional Coordination Groups (RCGs)).

The outcome of the FishPi project and recent tools developed within this project were presented in detail (e.g. skype connection with Joel Vigneau, IFREMER). The exemplary character of the regional grants MARE/2014/19 (fishPi and Med and Black Sea reports) for future regional collaboration and data analyses was emphasized. The group agreed that intersessional work should be devoted to the development of R scripts that allow routine analyses of the RDB data.

The uncertainties of the member states regarding parts of the National Work Plan (NWP) templates for 2016 provided in late summer by the COM and to be completed by October 2016, were expressed. A subgroup dealt with a detailed analysis for the inconsistencies, uncertainties and potential improvements of the National Work Plans templates. RCM Baltic recommends that ICES, as a major end user, provides a list of parameters (by fish) stock that needs to be collected so that member states can consider this in their NWPs.

The Evolution of RCMs toward RCGs was another major topic of the meeting. Many additional tasks will be imposed on the group with the new DC MAP which the group considers a very positive development. However, several practical issues are rather unclear yet, such as the rules of procedure of the new RCGs or the funding for additional works. Moreover, it is unclear if the COM expects that this additional work load and costs are covered as part of the existing DCF money or if additional funds will be made available. Therefore, RCM Baltic recommends that the COM clarifies how the 2 Mio Euro dedicated to the regional cooperation will be spend in the future.

Inspired by the progress achieved in the fishPi project, the usefulness of the development of pan-RCM R tools was highlighted (e.g. R tools to prduce standard outputs from the RDB data). In addition, new intersessional work groups were suggested, e.g. a group on (1) rules of procedure of RCGs and subgroups, (2) cost-sharing of fisheries research surveys, (3) development of R tools for routine analyses of the RDB data, (4) eel-salmon-sea trout issues. Given sufficient support from the national fisheries institutes in terms of man power and expertise, these intersessional groups will present their advances at the next RCMs.

Experiences from the Landing obligation, in place in the Baltic Sea since January 1st 2015, showed that discarding in sprat and herring continues to be negligible, but that discarding still occurs in the two cod stocks, mainly in eastern Baltic cod (data for SD24-25). The official ammounts of landings of the categories "below minimum conservation reference size" in cod are, therefore, negatively biased and cannot be used for stock assessment. Observer data still provide the most reliable discard data.

MS may try to get access to the data from the “last-haul project” of the national control authorities to increase spatial and temporal coverage of data.

Data needs and end user requirements were summarized by ICES.

Upload logs and a summary of RDB data transmission of the 2015 data was presented.

A cost sharing scenario for fisheries-independent research surveys in the Baltic Sea was presented and further developments will take place in an intersessional pan-RCM group established on survey cost-sharing models. The ongoing EFARO research survey initiative was introduced to the participants.

All MS uploaded their national data according to the data call. Only minor failures occurred. Clear progress in data availability to the RCM has been achieved since Fish Frame evolved into a RDB. Now standard outputs including pre-produced reports, tables and graphs are available. However, the regional work could progress even faster and more efficient if all data compilations were available either as outputs from RDB Fish Frame or by using standardised R-scripts instead of manually producing the standardised result tables and result graphs. A fully functional RDB is sine qua non/condition precedent prerequisite

RCM Baltic strongly recommends further financial support of the RDB and as well as WebGR by the COM.

The regional database RDB underwent several updates and smaller improvements. Future developments will include new upload modules that will be adjusted to the new data format of EUMAP or other regional requirements, such as primary sampling units in the Baltic Sea.

The RCM Baltic suggested to implement open-source R routines for standard outputs and data analyses and test them in smaller groups (e.g. intersessional RCG subgroups or in an WKRDB). This would decrease the effort and increase data availability prior and during the RCG meetings.

The group also recommends that the sampling data should not only be uploaded to InterCatch, but also to the RDB prior to WGBFAS. The early deadline for the RDB upload (as part of the stock assessment data call) would enable data quality checks already during WGBFAS. Raising and estimating in the RDB should be done via R scripts that are documented.

There was no time to present and discuss the results of the RDB data analyses given a dense agenda. Yet, the report contains numerous standard diagnostic tables and graphs prepared during and after the meeting.

Overall, the group felt that there was too much discussion, too few data analyses and too few decisions due to the loaded agenda. Therefore, RCM Baltic recommends that in the future, generic ToRs suggested by the COM and ToRs specific to the region are to be prioritized and grouped by the chair in order to ensure an efficient process in the next meetings.

The complex of the sampling of marine recreational fisheries was presented in detail and general issues were clarified (e.g. the recommendation to sample all species both in telephone surveys and in surveys conducted at sea, to tailor the survey to the national characteristics of the recreational fisheries).

The results of an otolith exchange of western Baltic cod (SD22; very high agreement) and of Baltic plaice (SD21-26; poor agreement) was presented. An example of a data issues list for western Baltic cod and the project “Tagging Baltic Cod” (TABACOD) was introduced. TABACOD is a 4 year mark-recapture project, funded by the Swedish Foundation BALTIC2020, aiming at tagging (external with t-bar tags, internally with tetracycline to form a time-referenced band in the otoliths) and recapturing cod in SD24, 25 and 26 to solve the problems in ageing, growth estimates and stock assessment of the eastern Baltic cod stock. The usefulness of some bilateral agreements presently in place was

questioned while new or updated agreements may become necessary once a regional sampling scheme is developed.

The latest results from a national OF project to develop an electronic fish measuring board were presented. This was considered useful and the presentation was given again at RCM NS and NA. A specific meeting with experts from interested fisheries research institutes will take place in quarter 4 of 2016 in Rostock, Germany.

Sweden informed that a new national research vessel will be available in 2019.

The next RCM Baltic will be kindly hosted by LUKE in Finland. The meeting is planned to take place in early June. This should allow MS to consider and incorporate changes agreed during the coordination meeting into their annual work plans, which are to be submitted end of October.

### **2.1.3 RCM North Sea & Eastern Arctic**

The Regional Coordination meeting NS&EA met in Edinburgh from 5th to 9th September 2016. Thirty four participants from 12 members states, representatives from Commission and ICES were in attendance. The meeting was largely devoted to subgroup work relating to regional sampling, cost sharing models, data needs and the sampling of anadromous and catadromous species. A day was spent considering work plan templates.

RCM NSEA proposed the establishment of a regional sampling group, in the first instance looking at small pelagic fisheries as a possible example of a suitable shared stock. The need for different teams with varying roles was recognised and the skill-sets and time line for the process were outlined.

Data needs were examined in relation to ICES as the main end-user, with an emphasis being on the process by which end-users communicate needs and the extent of the existing dialogue with RCMs. The outcome of the subgroup's deliberations was that the RCM chairs will seek a meeting with ICES in the near to further discuss the issues.

Progress was made on defining generic criteria for cost sharing model for surveys with an agreement for the blue whiting and Atlanto-Scandinavian herring survey from being achieved for NESA participants; this agreement would seek to be concluded at the RCM NA.

A sub group to define rules and procedures for RCG operation, based on a proposal to RCM Baltic, was endorsed by NSEA. The group would include members from FIN DEU DNK, with participants from NLD and BEL to join as representatives from the RCM NSEA.

The particular requirements for anadromous and catadromous species sampling were also considered with a subgroup summarising the main issues.

The National Workplan templates were discussed and examples presented to plenary. An automation process for compiling the data required for table 1A was demonstrated and the RCM was in agreement that this approach was of general benefit. Other tables generated varying degrees of consensus as to how MS were to fill them in. Text to emphasise that different MS are moving at different speeds in the adoption of statistical sampling methodologies and the adaptation to the new requirements under DC MAP was drawn up.

Data analysis included a summary table of RDB sampling data. A intersessional data analysis group was proposed to develop R code and work on regional data.

The intersessional subgroup on the landing obligation reported back on efforts to collate MS experiences; DNK presented an analysis of experiences from the Baltic.

The 2016 data call was generally well met with all countries uploading landings and effort data to the RDB, Upload logs were completed by most countries and were in the process of being summarised.

The RCM also received presentations of the follow up of LM 2015 recommendations and of the work of expert groups and end-users from 2015-16: PGDATA, WGCATCH, WGBIOP, SCRDB, WKRDB, WKCOSTBEN, STECF, ICES, COMMISSION, and the RCM BALTIC. The work of the fishPi project (MARE 2014\19) was also presented to the meeting.

The next meeting is planned to be held in France, with co-chair Katja Ringdhal and Maire Storr-Paulson; the date is yet to be determined.

#### **2.1.4 RCM North Atlantic**

The 13th RCM North Atlantic (RCM NA) was held in Lisbon (Portugal) 12-16 September 2016. The main purpose of this RCM is to coordinate the National Work Programmes (NWP) of the Member States (MS) in the North Atlantic region. With the recast of the DCF expected in 2017 and publishing of EUMAP decision in 2016 including new templates for recording 2017 to 2019 National Work Programmes the main focus this year was on reviewing these templates and the evaluation process as well as the evolution towards Regional Coordination Groups (RCG). Developing regional sampling plans; communication, task sharing agreements, rules and procedures and the tools required to ultimately satisfy end user needs all formed the core of the discussions relating to the transition to RCGs. Some simple analysis of Upload logs and the data uploaded to RDB demonstrated the limits of the RDB data but also how it could be used to review achievements, the quality and the impact of current sampling levels relative to commercial landings and effort. The impact of the landing obligation on scientific sampling schemes was also reviewed. The participation of National Correspondents and the commission made it possible to consider these aspects at all levels however for the first time, for practical reasons, two MS (France and Belgium) were only able to attend by correspondence.

2017 to 2019 National Work Programmes.

RCM NA concentrated plenary effort on reviewing the guidance, completion and evaluation of the NWP templates. RCM NA divided the process into two tasks: Task 1 used MS recent experiences to identify issues with the tables, ambiguity in the instructions and provide solutions where possible; Task 2 asked how these tables might be used to evaluate NWPs. The first task identified marked differences in how some MS had interpreted the guidelines and the regulation. The process did bring consensus and resolved some of the issues but that resolution depends on whether the evaluators interpret the guidelines in the same way. The second task provided some guidance for the evaluators but also provided advice that the process in November could provide examples of best practice without penalising MS for misinterpreting the guidelines.

Regional Coordination Groups (RCG): developing regional sampling plans; communication; end user needs; task sharing agreements; rules and procedures.

The terms of reference were the same across all RCMs so rather than work independently in 2016, RCMs actively shared their ideas in relation to the pan regional issues and the RCM NA, where possible, tried to complement the work already carried out in the preceding RCMs. For example, the RCM Baltic (RCM BALTIC) penned draft Rules and Procedures for RCGs. RCM NSEA endorsed the drafting of these rules and proposed a small supra-regional team to continue drafting these intersession-ally with 2 participants from each RCM contributing. RCM NA reviewed this draft and contributed two members, Leonie O'Dowd and Maria Moset Martinez to contribute to the group. A Research Survey Group discussed how the regional coordination of research surveys fits in with the current international coordination of surveys and continued the review of proposed cost sharing

models. Despite thresholds provided within EUMAP this group considered the obligation and legal basis for these agreements. These cost sharing models could be considered alongside other task sharing or means of reallocating sampling effort which may be required based on design and analysis of regional commercial catch sampling plans. Considering the results of the MARE fishPi project a Regional Sampling sub group proposed a 3 stage process of 1) identifying candidate fisheries or stocks that could be sampled regionally; 2) consultation with MS and sampling design and 3) implementation and maintenance. The first stage endorses the need for an RDB analysis sub-group with the first stage being a clear term of reference. The RDB continues to be the key tool for any progress in implementing and monitoring any regional sampling plans and the WebGR is another tool which has improved regional cooperation and data quality. Both these tools are currently being maintained with voluntary contributions from individual MS and are in vital need of further investment to even maintain them.

The Data needs sub group considered the role of RCGs and the communications with the multiple end-users as defined in the re-cast of DCF 199. It looked at new data needs and proposed a more formal process putting the onus on the end-user to, in reference to other data needs and priorities, scope out requirements, resolution and using criteria defined by STECF (EWG 13-02), justify any needs.

Throughout 2016 RCM Chairs kept up a dialogue through Web meetings and e-mails improving consistency and communication between regions. Intersessional work is required to progress Regional coordination but with limited resources it makes sense that common issues are addressed in pan-regional intersessional sub-groups. As well as endorsing the Rules and Procedures sub-group RCMNA recommends the continued maintenance of sub-groups addressing Cost sharing; Data needs; landing obligation; upload logs and to adopt further intersessional sub-groups on Regional Sampling and RDB Data analysis.

Landing obligation, Data calls, Upload logs and data analysis and intersessional work.

There was very little time to spend on each of these ToRs. RCMNA continued with the landing obligation work proposed at RCMNA last year reviewing any changes in sampling procedures and landing practices. A joint data call was launched by the chairs of the RCM NA, RCM Baltic and RCM NS&EA. MS were requested to upload data for 2015 in the regional database (RDB Fishframe) hosted by ICES. For the first time, all MS complied with this request for the landings and effort data. For the sample data all MS except France uploaded data for 2015. A review of the Upload logs revealed that not all data collected is uploaded for technical reasons but the evaluation of the data on the RDB revealed consistency for most MS in their annual number of species in landings; species in sample data and métiers in catch and effort data. There was also consistency for nearly all MS in terms of the number of records in the catch data but it was apparent from the report that unbeknownst to the UK, their data was incomplete. If these QC reports were available at the time of upload, then this could have been rectified and the data reloaded.

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

New co-chairman and next meeting.

RCM NA decided to run in 2014 to a co-chairs system taking into account that it is expected that in the near future intersessional activities will increase. After a two years term, Estanis Mugerza is resigning as chair of the RCM NA and Leonie O'Dowd was appointed as new co-chair and therefore will join Jon Elson for 2017.

The 2017 meeting will be held in Galway, Ireland.

### **2.1.5 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 Pasaia (Spain) between 19-23 September 2016. RCM MED&BS-LP appreciated the facilities offered by AZTI. 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 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 have been beneficial for the final results. The 2016 meeting was therefore organized as a plenary sessions while subgroup sessions were held only when needed.

However, from the RCM LP perspective, it is particularly unfortunate that the annual meetings of this group takes place always in September, very close to ICCAT scientific activities, resulting in the absence to the meeting of some LP data end user (ICCAT), many EU scientist participating in tuna RFMOs and Commission Unit B1. RCM LP is of the opinion that these absences should be avoided in order to ensure that data needs from RFMOs are reflected in the national programmes for data collection. Considering that since 2011 DG MARE is organizing a two days meetings involving DG MARE desk officers dealing with international RFMOs and EU scientists participating in RFMO scientific activities at the beginning of the year, RCM LP support the idea that connection of this meeting with the next LP meeting will be advantageous. The aim of this meeting will be to identify and prioritize LP data needs and to improve communications between the EU scientists involved in data collection, scientist involved in stock assessment, DG MARE and end user.

Considering the increased number of regional tasks of the RCGs under the EU MAP for data collection, RCM MED&BS-LP in 2015 agreed to change the working scheme of the RCM and the PGMED ( i.e. previous PGMED meeting following the RCM MED&BS-LP meeting). This year, work of the PGMED was included in the ToRs and work of the RCM. PGMED carried out the technical and methodological aspects of the agenda. The PGMED was coordinated by a technical Chair. For ensuring good coverage of the work to be performed, intersessional work was carried out prior to the meeting.

The 14th RCM Med&BS-LP was attended by the National Correspondents and/or their delegates from Bulgaria, Croatia, Cyprus, France, Greece, Italy, Malta, Romania, Slovenia and Spain. EC-DG Mare representatives attended the meeting, while the GFCM Secretariat attended only part time through. RCM MED&BS-LP was also attended by the chairs of MEDIAS and MEDITS and representative of JRC.

During 2016, the chairs of the RCM Med&BS-LP and PGMED worked intersessionally for preparing the 2016 RCM Med&BS-LP Data Call, as well as for checking the data and interacting with NCs for clarifications.

The ToRs of the 2016 RCM Med&BS-LP were adjusted for including the ToRs of PGMED endorsed by 2015 RCM Med&BS-LP (which concerned mainly the analysis of the RCM Med&BS-LP Data Call data).

Particularly for the 2016 meeting, the chairs of RCM Med&BS-LP and PGMed decided that the analysis of the data submitted under the 2016 RCM Med&BS-LP data call should be made prior to the meeting, for the results to be ready to be presented during the meeting. This was necessary due to the heavy agenda of the meeting concerning the preparation and regional coordination of the 2017-2019 Work Plans, and also because the data call results is linked with the discussions on the Work Plans. Indeed, through correspondence, a small group was formed for allocating the work on data analysis and almost all data analysis was completed before the meeting. Inevitably, for this year the main role of PGMed was not to work as subgroup during the meeting, but to present its results from the Data Call. For 2016, the Data Call Results are incorporated in one single report.

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. RCM MED&BS welcomed the implementation of DCRF that could be beneficial also to increase the efficiency on data transmission procedures.

The results and deliverables of the project MARE/2014/19 Med & BS - Strengthening regional cooperation in the area of fisheries data collection in the Mediterranean and Black Sea, were presented. RCM Med&BS-LP appreciated the results and participants expressed that the deliverables will be very useful when preparing WP for data collection 2017-2019.

For the second time, in 2016 an official data call for RCM MED&BS-LP was launched. The data call was a clear success since all countries contributed the data.

Data were set in a common file for MED&BS and LP respectively and kept available to the group. However, considering that no regional database is actually present, RCM Med&BS-LP considered that there is an urgent need for development of a regional database 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 RCM Med&BS-LP. RCM Med&BS stated that it is 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 is "stopped" since more than three years. From the RCM LP perspective, the group was of the opinion that expanding the scope of the Regional Data Base FISHFRAME, to include EU Large Pelagic fisheries data will be the most efficient solution in the short term. This would imply the inclusion of specific fields and codes of interest for the LP fisheries.

During the teleconference with the Commission, a short presentation was made by the Commission representative concerning the EU Multi-annual Programme for data collection (EU DCMAP) and the EU Workplan template for DC. MS have to prepare WP for Data Collection for the period 2017-2019 by 31 October. Commission implementing decision laying down rules on the format for the submission of WP for data collection in the fisheries and aquaculture sectors was adopted on the 19 August 2016.

The main outcomes of the meeting are summarized in the recommendations and in questions for the evaluation of the WP. The Group agreed on the Metier and discard template for biological samplings, agreed on the data availability for the data calls and on table with the list of recommendations to follow on regional level. The group also agreed on the use of the data collected through the RCM data call for the column 'Share (%) in EU landings' (in case the threshold apply to the regional EU landings; in the case that the EU total landings apply, EUROSTAT data shall be used). It would be very useful if clear position from the COM would be given. The RCM reviewed the WPs tables and text boxes and provided several recommendations for the harmonized compilation of the WPs on regional level. Group also agreed on Pilot Studies.

In relation to data calls, the Group agreed on the time frame for data availability and proposed to JRC that data call issued by the JRC should consider the possibility given to a MS to merge the length classes for different métier and should allow the upload of data with merged length classes.

## **2.2 Main outcomes from PGECON**

PGECON 2016 met in Zagreb (Croatia) from May 30 to June 3 with 30 representatives from 18 MS (except BGR, CYP, DNK, ESP, EST & 5 land-locked MS), as well as DG MARE and JRC representatives.

The group reviewed the results and endorsed the recommendations of two workshops held in 2015 and 2016 – the „Workshop on aquaculture data collection“ (Gdynia, Poland June 2015) recommending changes in data-call design, segmentation and coding prior to JRC aquaculture data-call and „2nd Workshop on Transversal Variables“ (Nicosia, Cyprus, Feb 2016) recommending changes in data-call design and coding prior to JRC data-call, to allow linking economic and biological effort data(call) design.

The group also reviewed the results of three ad-hoc contracts which were developed prior to PGECON 2016 meeting in order to provide draft recommendations on economic variables definitions, best practices on methodologies and quality assurance framework. The group endorsed the recommendation on referencing agreed definitions and methodological documents in national work plans where appropriate. It was also concluded that further work is required to develop a quality assurance framework.

The PGECON recommended to organize five additional workshops:

1. Workshop /subgroup meeting on statistical issues and methodologies (SIM subgroup) (chair: Evelina Sabatella, Heidi Pokki; Rome, Italy or Zagreb, Croatia; 29 Nov -1 Dec 2016),
  - Establishment of subgroup and identifying standing subgroup ToR to ensure a more continuous and systematic approach
  - Additional work needs to be done in order to identify best practices in methodologies – further work on methodological and definitions documents to be reviewed by PGECON 2017
  - Preparation for workshops (or PGECON discussion) on social variables and aquaculture sustainability data (explore and provide existing international standards and legislation)
  
2. Follow up workshop on thresholds (PGECON 2015 rec.; chair: Hans van Oostenbrugge; Den Haag, Netherlands; March 2017)
  - Provide an overview of the technique to adjust reporting thresholds that could be used to ensure comparability of the resulting economic data from different MS and define possible thresholds for testing.
  - Address the regional adjustment for MS.
  - Test the effects of implementation of different levels of thresholds for the aggregated economic data for the Baltic and North Sea region for the data of 2013.
  - Develop a time frame for implementation of further stratification on activity levels and reporting thresholds on a regional basis.

3. Workshop on small scale fisheries (chair: tbd; Rome/Salerno or Zagreb; March 2017)

Description of the small-scale fisheries and fishing habits per macro-area (Nord Sea, Med. Sea & Black Sea, Atlantic, Baltic, etc.)

- Management measures per macro-area
- Data needs
- Definition of the variables
- Suggested data collection procedures

4. Follow-up Workshop on social data – education (chair: tbd; UK or Luxembourg; 2 days in June 2017)

- Identify end user requirements for education data (EU and MS level)
- Develop consistent core EU data collection (metadata, detail to be included, data structure, resolution etc.) in line with existing international standards where appropriate

5. Follow-up Workshop on aquaculture sustainability data – mortalities and medicines (chair: tbd; UK or Luxembourg; 2 days in June 2017)

- Identify end user requirements for education data (EU and MS level)
- Identify the detail collected under existing legislation
- Develop consistent core EU data collection (metadata, detail to be included, data structure, resolution etc.)

PGECON discussed EUMAP draft proposal (v. 31 May 2016) and provided comments to DG MARE regarding i) modification of the definitions including fishing day and population of vessels for the economic data collection; ii) introducing pilot studies for the collection of social variables; iii) suggestion on quality assurance table in WP template and draft methodological document template reviewed by STECF - requires further development

The group also reinforced its recommendations from 2014 and 2015 on studies required, dedicated to:

- Study to propose methodologies for estimation of intangible assets in EU fisheries
- Origin and Sources of Raw Material in the European Seafood Industry
- Handbook on sampling design and estimation methods for fleet economic data collection
- Harmonize quality reporting and propose methodology in the case of non-probability sample survey
- Study to disaggregate economic variables by activity and area
- Pilot study on social indicators

The next PGECON meeting is planned for 15-19 May 2017, in Vilnius, Lithuania, co-chaired by Edvardas KAZLAUSKAS (Lithuania) and Ivana VUKOV (Croatia).

## 2.3 Main outcomes from PGDATA, WGCATCH and WGBIOP

Planning Group on Data Needs for Assessment and Advice (PGDATA) along with the Working Group on Commercial Catches (WGCATCH) and the Working Group on Biological Parameters (WGBIOP) evolved from the ICES Planning Group on Commercial Catches, Discards and Biological Sampling (PGCCDBS) which established a quality assurance framework for collection and interpretation of fishery and biological data.

Planning Group on Data Needs for Assessment and Advice (PGDATA) met in March 2016 in San Sebastian, Spain. The remit and main goal of the group is to help ICES and other end users to understand the quality of datasets and to use them as effectively as possible, and to employ objective ways to identify and prioritise data needs. The main focus is the wide range of data that ICES uses to support its stock assessment and advisory process. The group intends to develop a framework to help end users evaluate changes to existing data collections or proposed new data collections in terms of their impact on assessments and advice in relation to costs, as well as addressing other aspects of data needs and end-use.

In June 2016, PGDATA organized a workshop on cost benefit analysis of data collection in support of stock assessment and fishery management (WKCOSTBEN). The group also organized Theme Session at the ICES Annual Science Conference in September 2016 on methods for optimising, evaluating, and prioritising of marine data collection.

PGDATA focuses on the following tasks:

- Design a Quality Assurance Framework to ensure that information on data quality is adequately documented and applied in assessments, particularly benchmarks;
- Develop and test analytical methods for identifying improvements in data quality, or collections of new data, that have the greatest impacts on the quality of advice;
- Engage with end users, including managers, to raise awareness of what types and resolution of management decisions (e.g. by fleet or area) can realistically be supported by present or proposed data collections;
- Advise on objective methods to apply criteria (e.g. as proposed by STECF) for evaluating requests by end-users for new or amended data collections;
- Plan workshops and studies focused on specific methods development.

Working Group on Commercial Catches (WGCATCH) met in November 2015 in Lisbon, Portugal. Main goal of WGCATCH is to ensure the quality of commercial catch data used by ICES, focusing on the science behind data collection and estimation. Data from commercial fisheries are often the basis for reconstructing historical populations and estimating fishing mortality. WGCATCH follows PGCCDBS, WKACCU, WKPRECISE, WKMERGE, SGPIDS and WKPICS and it closely collaborates with WGBIOP, WGRFS, PGDATA, WGBYC and the SC-RDB.

WGCATCH focuses on documenting national fishery sampling schemes, establishing best practice and guidelines for sampling and estimation, advising on the uses of commercial fishery data and developing indicators of fishery data quality for different end-users and promoting training courses and workshops.

WGCATCH also evaluates how new data collection regulations and management measures alter the way fishery data needs to be collected and estimated, and advises on how to deal with biases and disruptions induced in time-series of commercial data.

WGCATCH actively promotes and advises on exchange formats and the RDB development - accurate estimates require good data but also good data storage, capability of exchanging that data and estimation methods that follow from the sampling design.

At its 2015 meeting WGCATCH:

- Analysed the relevance of small-scale fisheries in the ICES area and compiled the methodologies used to estimate them,
- Reviewed the implementation of probabilistic sampling designs and the estimation of discards of some species and advised on best practice,
- Reviewed progress in simulations of regional sampling designs (FishPI), provided suggestions and recommended their use by RCMs,
- Reviewed the consequences of landings obligation – recommended BMS recording in logbooks distinguishing landings above and below minimum size,
- Worked with WGBYC to improve data collection on PETS and rare species on board commercial fishing vessels,
- Recommended funding to be available for RDB development and discussed recent developments in Norway,
- Promoted a new intermediate training course in statistical sound sampling of commercial catches in the ICES area.

Work plan for WGCATCH 2016 meeting includes:

- Commercial LPUE and CPUE usage in ICES and STECF;
- Estimation: Discussion of the outcomes of recent regional cooperation projects (FishPI)
- Small scale fisheries: Drafting the best practice guidelines for sampling of this fleet component
- Landing obligation: Discussing the Baltic and North Sea experience and advising the extension to the North Atlantic
- RDB and exchange formats: keep evaluating progress and advising on the way forward
- PETS and rare species: Discuss the limitations of DCF onboard data in estimation of PETS and rare species by-catch
- Evaluation of the past 3-yr workplan, planning the next 3 yrs
- Proposal: Optimization and cost benefits: working within WKCOSTBEN framework, a hands on workshop [joint WGBIOP?]
- Proposal: Advanced Training course in statistical sound Sampling [2018]

ICES Working Group on Biological Parameters (WGBIOP) met for the first time in September 2015 in Fuengirola/Malaga, Spain. Its core task is to act as support group for ICES assessments (single-stock and integrated) with regard to biological parameters. Not only 'traditional' parameters (e.g. age, maturity) have been considered by the group, but also additional parameters that could potentially be used, in particular for integrated ecosystem assessments. Regarding data for integrated assessments, the group started to construct a database holding information on where to find important parameters for single-stock and integrated ecosystem models. The group has evaluated issues put forward by the assessment WGs for stocks to be benchmarked in 2017 and anticipates progress in formulating quality indicators, specifically focussing on statistical indicators. WGBIOP will carry out case studies on two species selected from the relevant benchmark issue lists.

The needs and proposals for age reading and maturity workshops, as well as otolith exchanges, have formerly been dealt with PGCCDBS and are now handled by WGBIOP. The group, however, expanded the scope to ichthyology and ichthyoplankton work. Moreover, the group facilitates fast-track

establishment of workshops when immediate issues are raised by assessment WGs (*cf.* Norwegian spring-spawning herring).

WGBIOP endorses task-sharing in age reading and suggests that collaborative studies to standardise age reading and the development of cooperation between national institutes on a regular basis would be an essential tool for improvement of age data quality. Existing mechanisms such as the Age Readers Forum should be used and countries are encouraged to exchange staff for training, in addition to exchanging material. The widely used web-based platform for age and maturity calibration exercises, WebGR, urgently needs an update to fix bugs and to improve user-friendliness. The issue of funding a follow-up project is still not solved, but nevertheless, an updated project proposal has been included in the WGBIOP report.

Many of the discussions at WGBIOP dealt with ways to improve the links and communication between the relevant groups dealing with the collection, processing and use of biological parameters, including RCMs/RCGs. The group recommends using the recommendations template in the WGBIOP report and aims at improving the dialogue between the senders and recipients of the recommendations by direct correspondence beyond the recommendations database.

The next WGBIOP meeting will take place in Monopoli/Bari, Italy, 10-14 Oct 2016.

## **2.4 Main outcomes from STECF**

There were three STECF Expert Working Groups (EWGs) since the last LM that dealt with DCF issues:

- EWG 15-15: Evaluation of Proposals to Revise DCF National Programmes for 2016 (Hamburg, 23-27 November 2015)
- EWG 16-01: EU MAP and template for National Work Plans (Hamburg, 7-11 March 2016)
- EWG 16-08: Evaluation of DCF 2015 Annual Reports & Data Transmission to end-users in 2015 & Quality assurance procedures (Lisbon, 20-24 June 2016)

EWG 15-15 and 16-01 mainly focused on finishing the STECF advice on the EU Multi-annual Programme (EU MAP) for Data Collection and templates for National Work Plans. The new EU MAP includes a number of RCM/RCG tasks in terms of regional co-ordination of data requirements as well as agreements ("...agreed/coordinated at marine region level").

Other items dealt with by STECF with relevance to the RCM are:

- The EWG 16-01 recommended that a review of the list of surveys in the EU MAP should be undertaken in the near future and proposed a timetable for this procedure.
- STECF Plenary 16-02 (July 2016) provided suggestions on a procedure for the evaluation of National Work Plans and for the development and implementation of a Quality Assurance Framework accompanying the Work Plans.

## **2.5 Set up of pan regional subgroups**

To address pan regional coordination issues, fundamental to the setup of successful RCGs in the near future, RCM Baltic, NS&EA and NA have established subgroups that will address these issues intersessionally. The subgroups established so far are:

- Rules of procedure for RCG (lead: Heikki Lehtinen (FIN)),
- Development of regional sampling plans (lead: Alastair Pout (UK-SCO)),

- Cost sharing of surveys (lead: Sieto Verver (NLD)),
- RDB Data analysis subgroup (lead: Alastair Pout (UK-SCO)),
- Upload logs and RDB data (lead: Lucia Zaraus (ESP)),
- Data needs (lead: Mike Armstrong (UK-ENG)),
- Impacts of the landing obligation (lead: Jon Elson (UK-ENG)).

The leads for these sub-groups are provisional in some instances and yet to be confirmed by the RCG chairs and the appointees. Staff that led the subgroup work in 2016 might not be available in 2017.

The subgroup on rules and procedures is specifically invited to liaise with Commission's legal advisors to evaluate and improve proposed procedures and to ensure legal procedures are binding.

All subgroups will report back to the respective RCMs in 2017. Some of these groups are expected to be continuous groups (e.g. development of regional plans) while other groups like the cost-sharing subgroup are expected to terminate once the job is finished. While the RCMs expressed the wish to simply start the groups without stringent procedures, LM 2017 will evaluate the experiences with these subgroups to learn from these experiences for future development of the subgroups.

Given the geographical span as well as the regional need to organise and coordinate data collection of diadromous species, LM also discussed the need for a pan-regional subgroup on these species (eel, salmon, sea trout). LM wishes to initiate a subgroup on this:

- Diadromous species (lead: – to be confirmed)

This group will be asked to set up the subgroup to prepare advise what needs to be done for diadromous species in a Regional Workplan, including listing end user needs (variables required, frequency, intensity), including possible needs for regional agreements (e.g. setting index rivers) and time frame for implementation. This group can report back to the RCGs in case of an intersessional set up, but this group can also be scheduled to meet during one of the RCMs in 2017. This group shall act from a DCF perspective taking into account DCF/RCM needs. This approach differs from expert groups under e.g. ICES as these expert groups are considered as end-users and these groups usually encompass other country than EU MS as well.

People and resources are limited and most likely prioritisation in effort allocated to these groups is needed. As contributions to subgroups are currently paid for out-of-pocket by the MS, participants are requested to keep track of the effort invested in these groups in order to gauge the willingness of MS to invest in this set up and to compare effort spent with achievements as an indicators of what would be needed for the future. It was also suggested that the Chairs of all RCMs meet (physical or web-meeting) prior to the 2017 RCMs meetings to identify main issues, tasks and timetable.

In the light of restrictive resources, LM specifically addressed this issue to the Commission to request a view on funding possibilities, including funding of the development and enhancement of the tools needed. The specific question to the Commission was 'Is there a strategy/plans for the EC to support the process of intersessional work, including easier access to direct funding?'. As there are funds to support regional cooperation, the Commission will consider to explore to ease funding of the work on regional plans and the accompanying tools required.

## **2.6 End-users feedback**

### **2.6.1 ICES**

As a main issue, ICES highlighted that ICES is exploring possibilities to streamline the data transmission overviews as currently provided to the Commission under the standing MoU. The idea is that ICES can contact MS on data transmission issues prior to sending the overviews to the Commission. By contacting MS, transmission failures flagged as having a low impact can be discussed and probably solved already in an early phase while the issues with a high(er) impact are dealt with in greater detail.

LM sees the potential benefit of this approach, however, concerns were raised in terms of safeguarding the independent integrity of the responsible STECF EWG. By (partly) alleviating the responsibility to ICES, STECF EWG might not see the data transmission failures to the full extent and might not be able to act accordingly.

### **2.6.2 GFCM**

In the light of exchanging information between EU and GFCM in the field of fisheries data collection and, in particular, for aspects related to data reporting obligations of common Members, Mr De Rossi, representative of the GFCM Secretariat, informed the meeting about the current GFCM fisheries data requirements (topics, reference years and deadlines). He recalled that all the requirements derives from existing GFCM recommendations and therefore implies obligations to Contracting Parties and Cooperating non-contracting Parties of the GFCM (CPCs). Most of these decisions were amended by the GFCM Commission at its 40th session (May 2016) in order to incorporate the progress recently achieved by GFCM in strengthening its data collection framework with the aim to ensure comprehensive, reliable and timely information in support of the decision making process of GFCM. In this context, one of the major achievement was the adoption of the Recommendation GFCM/40/2016/2 in line with the Data Collection Reference Framework (DCRF) which requests the submission of national data on catch, incidental catch of vulnerable species, fishing effort, socio-economics and biological information, including stock assessment. In underlying the extreme importance of this new decision, Mr De Rossi also recalled that it would be in force for one year only (in alternative to the Recommendation GFCM/33/2009/3 on the GFCM Task 1 statistical matrix) and be applicable on voluntary basis by CPCs in order to give them time to overcome potential difficulties during its implementation. The GFCM Commission at its forty-first session (October 2017) would reconsider such recommendation on the basis of the elements collected and analysed in a dedicated meeting in November 2016. This important event, organized by the GFCM Secretariat with the participation of CPCs and the FAO regional projects, would also address aspects related to the definition of data quality indicators as well as the new online data submission protocols.

With reference to data quality issues, it was noted that a discrepancy between EU and GFCM on the applied procedures to assess the members' compliance existed. Mr De Rossi recalled that, at GFCM level, an official mechanism (the so called "Clarification process") was established by the GFCM Commission in 2013 in order to assess the status of implementation of GFCM decisions at CPCs level, including the compliance with data reporting requirements. Every year the official data compliance's status of CPCs is reported by the Secretariat to the GFCM Compliance Committee (CoC) on the basis of the submission status only (data "transmitted" or "not transmitted"). On the other hand, the feedback, as requested by EU, is based on different parameters. The future development of GFCM data quality indicators, to be discussed and agreed with CPCs, including EU, may contribute to overcome the issue of feedback from GFCM to EU by agreeing on common data quality standards. To this purpose, an enhancement of exchange of information between two organizations about the practices currently in place to assess data quality would be of particular importance. This would

allow GFCM and EU progressing together on the evaluation of data and information submitted by common members.

### **2.6.3 Data transmission evaluation**

As mentioned above, different end users operate different criteria for the evaluation of data transmissions in response to their respective datacalls. The criteria range from a complete and interlinked set of criteria based on quality, timeliness and completeness, to simple tests whether (any) data has been submitted. Moreover, different compliance ranges are used.

The LM concludes that this leads to an inconsistent approach by end-users resulting in different judgements throughout Europe. This is an unacceptable situation as severe financial implications might result from this. Because data transmission failures serves the Commission as a reference to compliance, the same criteria for compliance across all EU MS must be applied. There is clearly an urgent need for specifying common criteria and for rules how to evaluate and weigh these criteria.

Also, for the future, simpler and more robust end-user interaction is needed to facilitate the Commission to do its job by interacting with the end-user to evaluate MS performance. Despite this wish, the Commission stresses that they have a strong believe that MS comply with their given and agreed tasks.

### **2.6.4 End-user interaction**

As the EU-MAP is built around end-user needs, setting up the dialogue with main end-users is a critical need prior to the establishment of regional (and national) work plans. The interaction with end-users has been described at various occasions, recently e.g. at RCM NS&EA and LDF 2016. This process basically needs to spark the procedure around this. LM agrees that the RCM chairs shall initiate a meeting on end-user interaction to set up the basics for the interaction with end-users (procedures, participation, role of end-users at RCGs) and how to collate end-user needs (what, how & when data needs to be collected) and how to prioritize these needs. This will ultimately lead to defining needs as well guidelines for sampling schemes.

This meeting shall build upon current standing relationships with main end-users, however, consideration should be given on how to incorporate 'new' end-users and their needs in the procedures and how to address these efficiently without drowning the system with relatively minor players and needs. Some sort of fast-track incorporation of end-users and access to the data collectors should be possible.

### **3 Regional cooperation (TOR 3)**

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#### **3.1 RCM data calls – overview of MS' responses**

The RCM LDF launched a data call to all non-landlocked countries. The result provided useful info in the coverage of the remote fisheries. 3 MS did not respond at all to the call, while at least 2 of these MS are believed to have remote fisheries. 2 MS responded that they have fisheries, but they didn't provide (a complete) data set to the RCM.

RCM Baltic, NS&EA and NA launched a combined call which asked for an upload of all national data to the RDB and submission of Upload logs (which is currently the only means of knowing if the RDB contains all a MS data). This had the following responses:

- RCM Baltic – all MS uploaded their national data according to the data call. Only minor failures occurred.
- RCM NS&EA - the 2016 data call was generally well met with all countries uploading landings and effort data to the RDB. Upload logs were completed by most countries.
- RCM NA – all MS uploaded their national transversal data (landings and effort data) and only one country did not supply sample data. There were clear indications from a basic review that some of the transversal data was incomplete but the RCM was genuinely pleased that for the first time, all MS had managed to upload data in time. Not all MS completed the upload logs for their data so it is less clear how complete or useable the data is.

RCM Med&BS-LP - Data Call was launched by the co-chairs of the RCM Med&BS-LP and data were submitted by all Member States in the Mediterranean Sea and the Black Sea, as well as other MS with large pelagic fisheries in other regions. Following the deadline of the data call, and well in advance of the scheduled 2016 RCM Med&BS-LP, available data were reviewed, and clarifications on data values and coding were received whenever requested.

#### **3.2 Overview of use of the Regional Databases for RCMs in 2016 and problems identified**

One of the main concerns raised during the RCMs Baltic, NS&EA and NA was the recurrent problem that data from foreign vessels can't be uploaded to the database by the country responsible for sampling. This issue is again forwarded to the RDB Steering Committee. Solving this issue is also part of the larger database update as described in detail in section 3.3.

Whilst the RDB is in development, upload logs are a means of communicating data shortfalls or limits to the structure of the RDB which stop MS from uploading some sample data in a useable format. In some cases, MS have taken shortcuts to be able to upload their data which could then be misinterpreted by end users. In the absence of anything else, the Upload Logs qualify MS data. The SCRDB does not have the time to interrogate the Upload Logs and issues do need to be communicated better – a role for the Upload Log intersessional group is to offer solutions to the process.

The RCM LDF used excel sheets to exchange and compile data sets, but expressed the clear wish to include this data in an RDB in the near future.

### **3.3 Future developments for Regional Databases**

Brief description of the current status quo of the RDB, including achievements so far, main challenge as well as shared vision for the RDB and the development tasks are given in Annex 1.

Based on the above mentioned future developments, LM discussed the issue of funding these developments with the Commission. Based on the current outstanding calls for tender, the Commission expressed the need for EU-wide development of a database system of some kind to facilitate data flows, storage and quality control. Meanwhile, RCMs, MS and Commission need to progress with current tools already in use by the RCMs and MS. In case of the RDB currently hosted at ICES, funding for further development can possibly be included in the updated MoU for 2017. The steering Committee for the Regional Database needs to highlight priorities and key improvements for further consideration by RCGs as done earlier.

### **3.4 Future development of RCGs**

#### **3.4.1 rules of procedures**

Based on the chicken-and-egg principle, a decision making procedure is needed to decide on the rules of procedure. This initial issue might already pose problems at the very beginning of regional cooperation, setting up rules of procedure. The rules of procedure for the RCG are to be established by the RCGs themselves.

As described in section 2.5, a pan regional subgroup on rules of procedures is set up. The aim for this subgroup is to come up with workable procedures for decision making, recommendation procedures, end user interaction and common working standards. Setting up the procedure around what is currently known as recommendations (despite the possible need for a different solution) is a crucial part of these rules as these recommendations of any kind need to be binding to the best extent possible. Binding agreed recommendations are a prerequisite for the fundamentals of the regional approach. How to reach and conclude on the agreements is up for many discussions.

Ultimately, the decision making power lies with the Commission, however as the ownership and initiatives for the RCGs lie with the MS, the MS are the first to come up with solutions, preferably through consensus. The rules of procedures should accommodate for decision making procedures, by consensus or not, and also describe what to do if a (single) MS doesn't agree. Formally there is no need to coordinate regionally and there is no legal basis for the RCG to impose tasks to MS. A MS can always submit a work plan on its own. This would however jeopardize the regional approach and would definitely lead to failure of this approach. The incentive of avoiding duplication, cost benefits and increase in quality and credibility should make regionalisation appealing to MS, thus willing to make the most out of it. Only when tasks described in the work plan are not completed, possible enforcement procedures might start.

Despite the current, somewhat reluctant, confidence, good and well thought through rules are needed, not only for the good times, but especially for the bad times.

LM discussed future possibilities on legal aspects with Commission. More specifically, LM raised the question: 'What is, or could be, a legal basis for decisions of the RCGs to be binding?'. Technically, unless under a Treaty or law, there are no legal binding possibilities for RCG decisions, recommendations nor agreements. Only the proposed regional work plans are to be considered as legally binding and that is what they are there for. The Commission will enforce the implementation of regional plans once these are established and replacing parts of national work plans. Despite the limited legal possibilities, simple approaches based on trust building shall be initiated first.

### **3.4.2 regional work plans**

In general, the development of regional work plans is a time and effort consuming process that will not and cannot be done overnight. This development and its implementation is the main task for the RCMs in the upcoming years. However, well implemented rules of procedures are crucial to the success of the regionalisation. Next to this, potential budget and effort implications are to be taken on board by MS to be able to fully implement the regional approach. These implications range from setting aside expert time to develop the programme and its supporting needs to possible implications for national obligations. Currently, no funds to support the development are available to the MS, apart from the already over-claimed EMFF budgets. Based on the outcomes of the FishPi project, MS are in principle willing to contribute to the development of regional sampling schemes.

RCM NS&EA mapped out a 3-year process required to implement a regional sampling programme for one of sub-populations. This will facilitate the workflow for the upcoming years in preparation of regional work plans. As part of this work plan, several subgroups will be established each having a specific task and role in this process.

RCM NA summarised the process and independently confirmed a 3 stage framework, the first stage of which is to identify candidate sub-populations of fleets or fisheries for consideration for regional sampling design - a clear role for the RDB data-analysis sub group.

### **3.4.3 timing of RCMs in 2017**

LM discussed the timing of the 2017 RCMs. Common expectations were that there is a need for RCGs in the first half year to accommodate for the inclusion of their conclusions in National Workplans. Various options were explored and end of May till early July is considered as the least problematic time window in the overloaded agendas. The RCM chairs will finalize the timing by the end of the year. Where possible consideration shall be given to the sequence of the RCGs (slight preference to have RCM NA before RCM NS&EA, or to have an alternating scheme); the possibility to have meetings back-to-back; to have a week off in between meetings for most participants by choosing a logic combination of meeting such as having RCM Baltic and North Atlantic at the same time.

### **3.4.4 Position of RCM Large pelagics**

LM discussed the position of RCM Large pelagics as a separate entity under a parental RCM. Given the geographical separation of all RCMs, RCM Large pelagics sits naturally under the RCM Med. LM concludes that this logic setup can be continued.

## **4 Work Plans (TOR 2)**

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### **4.1 Main issues raised**

The main issues raised at the RCMs related to the potential misinterpretation of the guidance. The RCMs were a good forum for discussing the issues and coming to consensus where possible on how best to complete the templates.

Involving the RCMs was a process of consultation and therefore could not provide strict evaluation criteria. All RCMs submitted concerns and potential solutions, post meeting, to the commission and this has helped the comm. provide further guidance to MS and a FAQ document. These templates by their own admission, are work in progress involving a transition to new evaluation criteria so the 'evaluation' process could be used to gain a range of examples of what is acceptable. This will provide feedback to MS and stricter criteria could apply in a resubmission of WPs in 2017.

### **4.2 Criteria for evaluation of Work Plans**

LM discussed in general terms the possible criteria for the evaluation of Work plans. The Commission will set up ad-hoc contracts with experts to set up specific criteria for the various parts of the Work Plans.

LM highlights the following considerations for the criteria:

- Continuation of current time series where and when needed
- Allow MS to progress in different speeds, while addressing all legal obligations. There are many ways to achieve the goals and the different phases MS are in have to be acknowledged.
- Improvement and increase of end-user interaction and addressing end-user needs
- MS are encouraged to show what they do and show improvement, rather than building up a nice façade
- Evaluation of the 'science behind the numbers' is not easy. A target sampling number in itself doesn't have a value without its context, the survey design behind it. The current format doesn't allow for this.
- Documentation of procedures is likely to be an issue for MS. As for other points, progress needs to be shown over the upcoming years without imposing time constraints.
- Current recommendations and agreements are carried over to the new Work plan to avoid a data collection vacuum.

## 5 Recommendations and LM comments (TOR 4)

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Given the short time lag between the most of the RCMs in 2016 and the LM, final reports were not available from the RCMs. Recommendations presented to the LM are based on their draft reports and, therefore, the exact wording might differ from the final RCMs reports.

In total 38 recommendations were presented by all RCMs (LDF - 4; Baltic – 3; NS&EA – 3; NA – 11; Med&BS – 13; LP – 4). Given the time available, it was far too many recommendations to be addressed by the LM with due attention. In this context it was recalled that already 8<sup>th</sup> LM in 2011 took the position that: ***“In order to deliver an effective and efficient meeting, the LM recommends that for future presentations of RCM reports, the chairs present no more than 5 key recommendations for consideration and discussion by the LM”.***

Furthermore, in the view of the LM, some of recommendations presented for 2016 meeting were rather comments or suggestions than recommendations. The chairs of those RCMs which provided the highest number of recommendations were requested to filter them in order to pick up the most important. In total, out of 38 recommendations presented, 22 recommendations were endorsed or commented by the LM.

The full list of recommendations from the 2016 RCMs, grouped into nine thematic groups, including both those addressed and those not specifically addressed by the LM, is presented in an Annex 2 to this report.

RCMs need to manage their recommendations better. There is direct relationship between the number of ToRs and the number of recommendations RCMs might be tempted to put forward. There will always be work to do and a recommendation might not be the most appropriate way of communicating it, equally a rec. from the previous year might not be completed which could lead to an unnecessary resubmission. RCMNA proposed that these could be better managed in a recommendation database and asked ICES if it was appropriate to use theirs. ICES have no issue with the idea but perceive there might be an issue with managing the list of recipients. They would check and respond.

## **6 Any other business**

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### **6.1 Legal status of RCM/RCG and its recommendations**

The DCF Expert group on fisheries data collection as established in 2016 is the umbrella group for at least 4 subgroups:

- sharing of information and coordination of the implementation of DCF;
- regional coordination of biological data collection, management and use under the DCF;
- coordination of collection of social and economic data for fisheries, aquaculture and the processing industry;
- sharing of information and coordination on data storage, exchange and dissemination.

The LM is covered under this expert group and as such, the report of the LM is public as are the procedures for the establishment of the LM. The EU horizontal rules for Expert groups apply to the LM.

LM also discussed the role of the RCG in relation to this umbrella group. The RCG have a legal background other than through the expert group, once the DCF recast is adopted. Hence, the RCGs are not bound to the horizontal rules of procedures as are in place for the LM.

Regarding recommendations, LM concluded that recommendations from RCGs can't be considered as legally binding as no legal basis as such exists. The only instrument having a legal background is a regional sampling plan as these are to be adopted as implementing acts (Section 3.4.1).

### **6.2 Recreational fisheries**

Due to time constraints, the issue of recreational fisheries (RF) were only briefly discussed by LM. Requirements for recreational fisheries are specified in EUMAP. It was a general view that assessment working groups need to include calls for validated RF data in their data calls. In some instances, the recreational fisheries data can be as good as commercial catch data, however, point was also raised that there are some limitations to how the RF data can be used - some studies only provide quantitative measures whereas the EUMAP requires length/age for assessments.

## 7 ANNEXES

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### 7.1 Annex 1. Regional DataBase Development

#### ACHIEVEMENTS

The RDB has been hosted and maintained by ICES under agreement with the European Commission (MoU) since 2012, in addition ICES have provided funds for the further development of this system. Based on this funding model the following has been achieved:

Maintenance:

- Operational system, actively used and maintained
- Regional standardisation of codes and quality control of input data
- Helpdesk for data providers and users
- Delivery of regional data for the three RCM's committed to its use
- Agreed data provision (data call) and data access (data policy)
- Main work platform of the three RCM's with all respective countries uploading data to the RDB

Development:

- Regional standardisation of codes and quality control of input data, improvements of uploads, and report outputs
- Support for the new landing categories (i.e., landings above and below the minimum conservation size) resulting from the EU landings obligation

#### THE MAIN CHALLENGE FOR THE RDB

In order to use the fisheries dependent data collected by member countries to provide a documented, quality assured and accurate description of the fisheries and their catches to be used in scientific advice on management of fisheries, there is a strong recommendation from ICES expert groups (PGDATA, WGCATCH, WKRDB), the EMFF funded fishPi project, and the wider ICES end user community to make it possible to raise the collected data to fisheries levels using statistically sound methods. To accomplish this the RDB must be further developed to ensure that:

- The input format support design based sampling and probability information (data need for statistical raising);
- The raising method support statistical raising.

In Figure 1 the current process for raising data is demonstrated. The first vertical arrow from the left hand side shows that data are exported from the RDB for use by the RCM's. The dotted blue line indicates that the system cannot raise/estimate biological data using statistically sound methods for the international stock assessment. This creates a system that falls short of its aim to allow multiple uses of the data, and where countries deliver data twice; Detailed data to the RDB for the RCMs and raised/estimated data to InterCatch for the stock assessment, and where the end user (ICES) is not able to make full use of the RDB as a tool to evaluate the quality of the data since there is no documentation of the national raising/estimation methods.

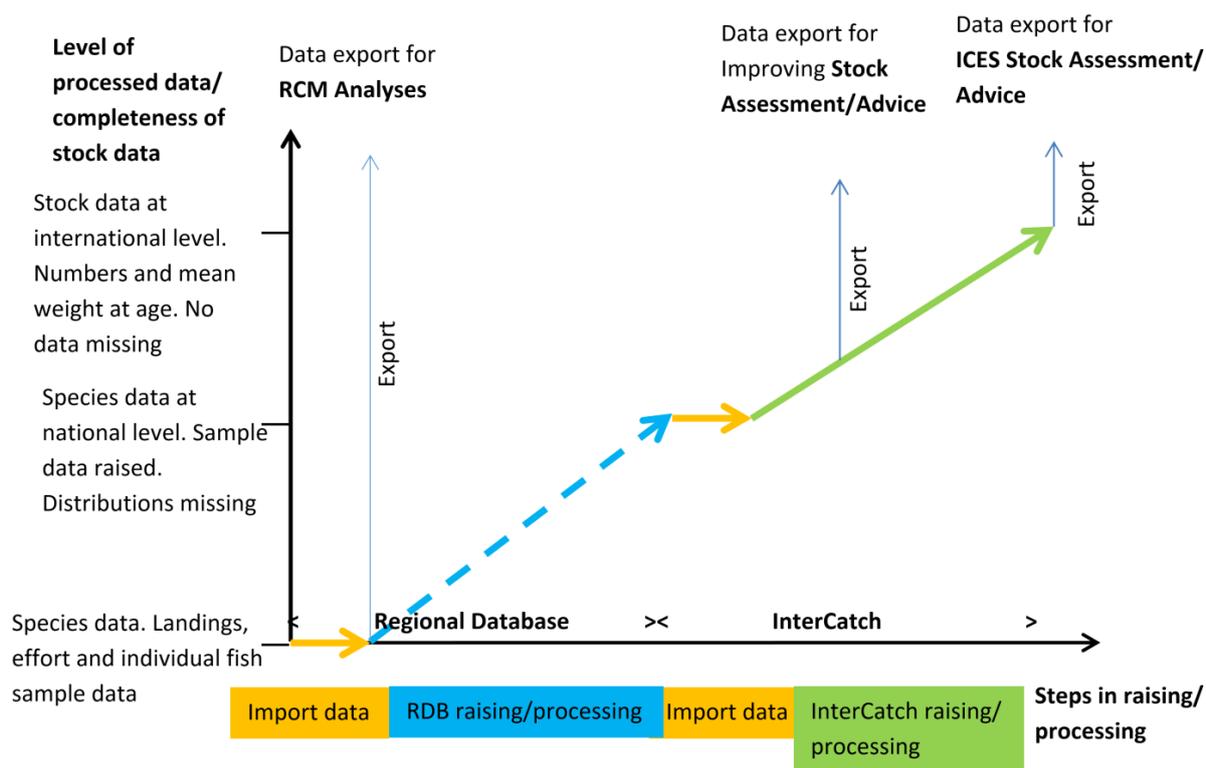


Figure 1 The current process for Stock Assessment

## THE SHARED VISION FOR THE RDB

- Reduce the workload for the countries in estimating and providing data, as the RDB would contain (or can utilise from R libraries) all needed methods
- Ensure quality assured standardised statistical methods (expert driven) are used for estimating the data for the stock assessment
- Describe and document data quality by using common quality checks across all countries' data
- Reduce the workload for the countries submitting data, as the data raised in the RDB by a button click automatically will be made available to InterCatch for the ICES stock assessments
- Support the Regional Coordination Groups/Meetings with data and reports for their work
- Data are encapsulated within the RDB (the data is safeguarded in the RDB and the end user understands every change to the data)
- Leverage the body of work already existing in R code projects and developed further by the experts
- Links to other databases e.g. the VMS/Logbook database used by WGSFD, ByCatch regulation, Fisheries independent data (i.e. DATRAS)

The vision is illustrated in Figure 2. Not only would the RDB support the planning and reporting work of RCGs/RCM's, but it would be able to directly support the data needs for scientific advice on fisheries management including stock assessments and provide outputs at all levels in the process in a quality assured manner.

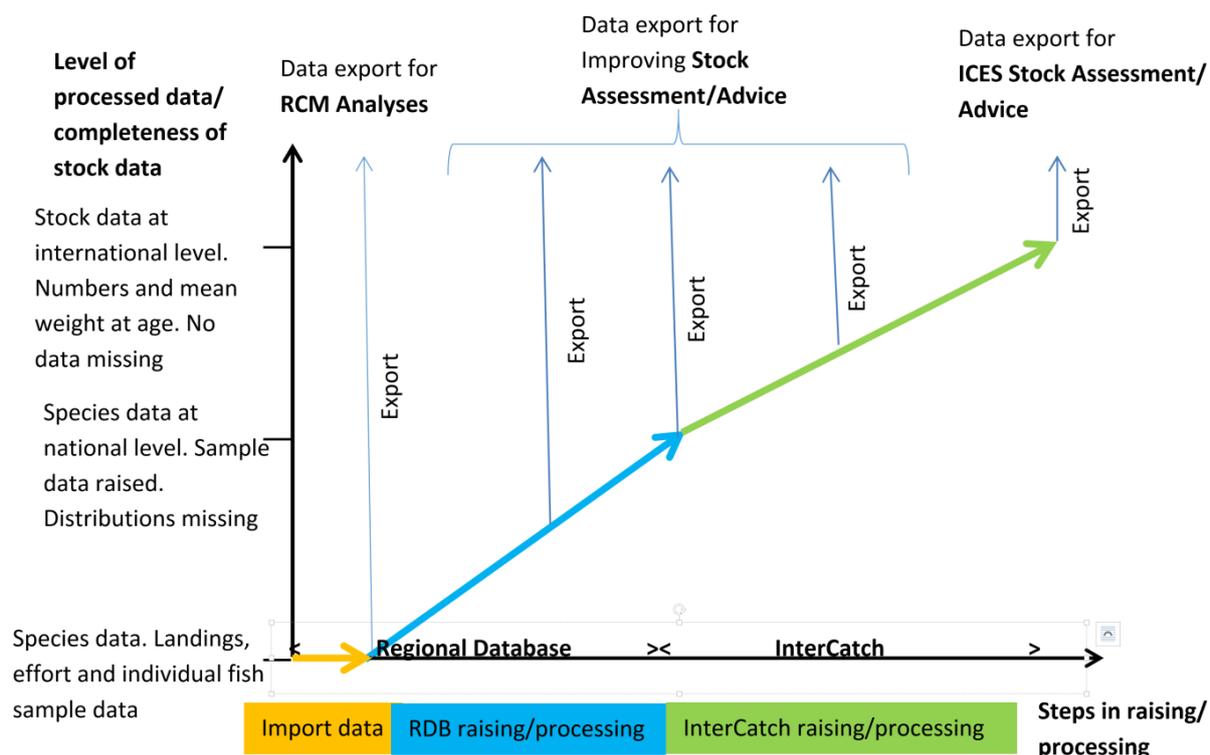


Figure 2 The vision for Stock Assessment

## HOW TO GET TO A STATISTICALLY SOUND RDB

WGCATCH, WKRDB and the fishPi project recommend to update the data exchange input format with the necessary information that would enable statistically sound raising. The extra information concerns the sampling design and probabilities on all levels of the sampled imported data.

The raising should be based on statistical sound methods instead of the existing methods combining age-length-keys, etc. These statistical methods are documented and available already in  $R^4$ , so currently the existing RDB is implementing the raising methods 'behind the scenes', the new approach should be to call on the existing statistical methods available in  $R$ . This would make the raising more transparent, and easier for the experts to update the methods, if needed. It is important that the data providers and expert groups take an active part and are involved in a transparent process to ensure the RDB fulfils the needs for uploading their design based sampling information and raising data using statistical methods. Therefore, workshops involving all relevant groups should be considered to scope the further development of the RDB. **Error! Reference source not found.** below gives an overview of the flow of information and the interaction with the national experts to the two main end users, but data could also be extracted for other relevant end users e.g. STECF.

<sup>4</sup> <https://www.r-project.org/>

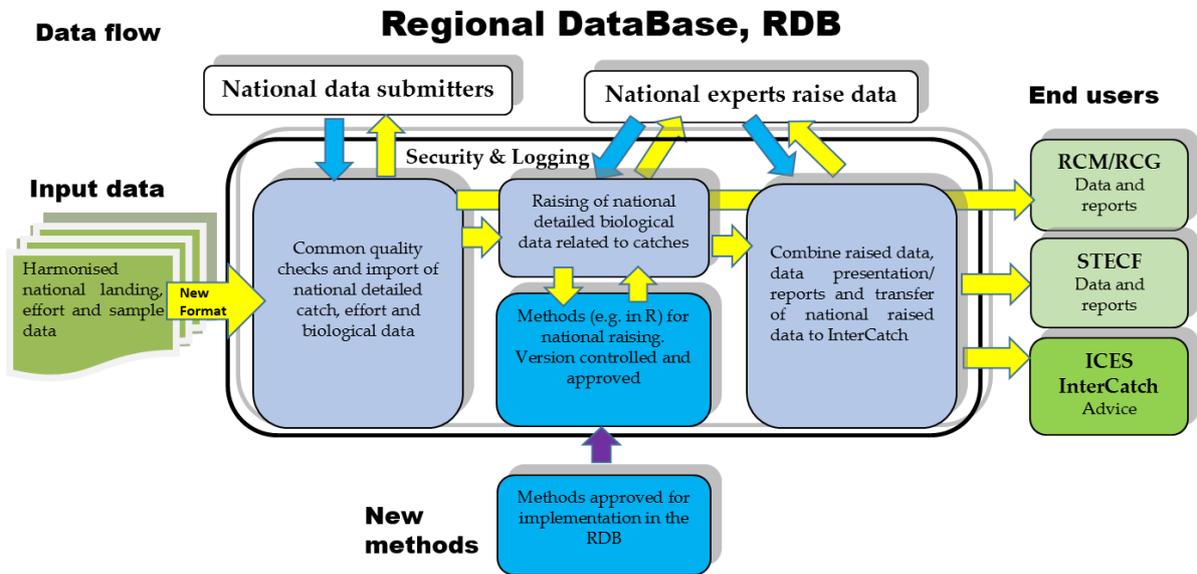


Figure 3 Architecture of the proposed RDB

This vision could be realised in 2 years. The project is estimated to require 4.5 person years in total effort.

Effort (person months)	Tasks completed	Workshops
16 PMs	RDB system specification, 1 <sup>st</sup> phase design and development modules	1 <sup>st</sup> Workshop
15 PMs	Database design and development 2nd phase, upload and checks, version control of approved methods in R-script	2 <sup>nd</sup> Workshop
13 PMs	Raising methods process, overview and deletion of uploaded data, download of data including RCG reports	3 <sup>rd</sup> Workshop
11 PMs	Approval of raised national data and transfer to InterCatch, stock splitting	

## LINKING TO THE TRANSPARENT ASSESSMENT FRAMEWORK

Both ICES and the GFCM are working on assessment framework systems – the ICES version is under development and will start to be tested on a number of stocks in 2017. The goal of the transparent assessment framework is to have a fully encapsulated system – from the input data, to the stock assessment models, to the eventual stock assessment result outputs. Therefore, the proposed RDB development is a major building block in ensuring that there is a seamless link between the input data and the assessment modelling (See Figure 4)

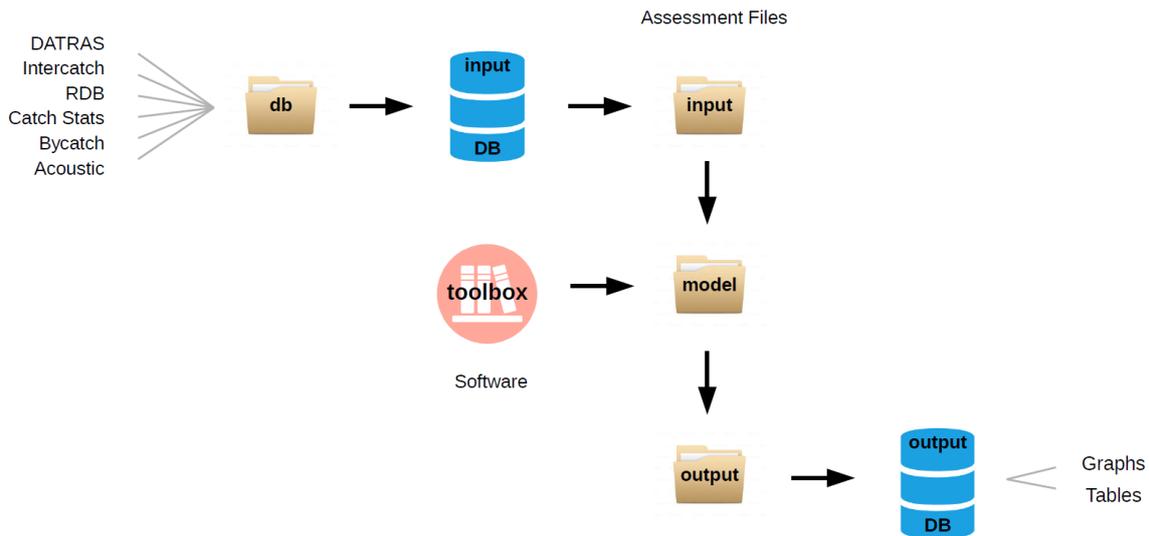


Figure 4 The Transparent Assessment Framework

## OTHER CONSIDERATIONS

### *The technical architecture of the RDB website*

The current RDB web interface is built on outdated software architecture, in moving to a statistically sound RDB it would be logical to redevelop the interface at the same time using up to date technology, which will offer more functionality. It will be possible to reuse some of the existing code and logic, which will make the development faster, but it will be a good investment to spend the time developing the RDB using the latest software framework.

### *Consequences of not developing the RDB*

If the RDB is not developed to support statistical raising, then the countries will have to use other tools to raise their data according to statistically sound principles. This could result in an uncoordinated and undocumented approach within each region. The data, which are used for the stock assessment and subsequent catch advice, will not have been prepared or checked to the same uniform standard across countries. It will not be possible to fully document how the raising has been done, or which methods and data have been used. This would result in poorly documented data quality, which will affect the resulting assessment and advice.

## DEVELOPMENT TASKS OF THE STATISTICAL RDB

The following is a more detailed description of the tasks for developing the RDB, so it fulfils all the requests of the RDB and support the countries in statistical raising of the data.

### *RDB system specification*

Overall system specification of what functionalities the RDB should have. Coordination of approval and dialogues with a group of experts, who can approve/help with the specification of the functionalities and later perform the testing of the developed functionalities.

Specification            Interact with ICES RDB statistical expert group  
                                  Identify the latest version of the updated exchange format  
                                  Identify the outputs from raising methods in R  
                                  Specification document on upper level of the overall RDB

### *Database design and development*

Specification            Write detailed specification according to the latest exchange format and user security in the first round, the other modules will follow.  
 Development            Develop and implement the database design for the uploaded data and the user security in the first round, the other modules will follow.  
                                  User id and creation date and time added to all import tables  
 Test                        All of the above including unit and integration test

### *User security*

The user security will be based on country, region, and a few needed roles

Specification            Write detailed specification of the user security and maintenance  
                                  Write detailed specification of the menu structure  
 Development            Develop and implement:  
                                  • Setup the RDB in the TFS  
                                  • User security maintenance  
                                  • Login  
                                  • The user security on pages  
 Test                        All of the above including unit and integration test

Note: Maybe a role for updating the methods, but I think it should be in the hands of ICES, since we have the responsibility for making sure the R-script is working.

### *Code maintenance from ICES internal code system RECO*

Specification            Write detailed specification of the code maintenance from RECO to lookup tables in the RDB  
 Development            Develop and implement the code maintenance from RECO to lookup tables in the RDB. Use procedures from the acoustic db.  
 Test                        All of the above including unit and integration test

### *Upload and checks*

The checks are the existing using XSD and with extra field dependency range checks (e.g. WECA) written in C# in the RDB. Maintain a list of checks, which are implemented in C#, so the users know which checks are performed.

Specification            Write detailed specification of the upload and checks  
                                  Write detailed specification of the menu structure  
 Development            Develop and implement the data upload from the file to the database, data will not be deleted, data will be added and the latest version will be used for further raising  
                                  Develop and implement the checking of the data: XSD, convert XQuery checks to C#

Test                                      Develop and implement an overview of checks implemented in C#  
All of the above including unit and integration test

Issues to look into:

- Should the overwrite rules include institute? This will open up for the possibility of having duplication of data, which should be avoided.

Note: Based as much as possible on web services so we in the future easily can let countries upload data automatically using a web service. Design the upload so it accommodate for adding extra information without huge changes to the RDB. The upload have to be optimised and using the fastest technics. The existing code is not optimal and it can takes more than an hour to upload a file.

#### *Checks in R for data upload*

Interface with version controlled checks programmed in R.

Specification                      Write detailed specification of the version control and interface to checks written in R

Development                      Develop and implement a direct import of the uploaded data into temporary import tables for R checking  
Develop and implement of the version control and interface to checks written in R, so the checks are stored, can be viewed and executed

Test                                      All of the above including unit and integration test

Issues:

- Ensured that the checks written in are harmonised way or are using a template and can just be plugged in
- In case of errors how detailed are each check in feedback of the error to the user

#### *Overview and deletion of uploaded data*

Overview for countries and RCG

Specification                      Write detailed specification of the filter and overview of the uploaded data with a functionality to delete the selected data. The deleted data will be flagged as deleted  
Write detailed specification of the RCG specific page with an overview of aggregated uploads

Development                      Develop and implement the filter and overview of the uploaded data with an option to delete/set a bit in the deleted field of the selected data  
Develop and implement the RCG specific page with an overview of aggregated uploads

Test                                      All of the above including unit and integration test

#### *Download of data*

Country and RCG

Specification                      Write detailed specification of the filter for the data which should be downloaded

Development                      Develop and implement of the filter for the data which should be downloaded and the download functionality

Test                                      All of the above including unit and integration test

Note: Should be based on a service, so countries in the future can download data using a service.

#### *Version control of approved methods in R-script*

Create a version of the new method and wrap it in to a stored procedure. Link to the method to the previous version of the same method or create it as a new method. Testing of the method inside the RDB would be needed. A person from an ICES statistical methods group (E.g. WGCATCH), who is authorised to approve methods should acceptance test and approve the method. The script will be

save both in a SP and also in TFS. The method written in R would be in the ICES GitHub and from there the script would be evaluated, tested, outputs compared, and when approved it should be send to ICES. The final approved version would then be included in the RDB.

Specification	Write detailed specification of the version control of raising methods written in R
Development	Develop and implement the version control of raising methods written in R
Test	All of the above including unit and integration test

#### *Raising process*

A snapshot of uploaded data used for raising is taken, which makes it possible to reproduce the raising in exactly the same way, independent of later uploaded updates of data. It will also be possible to use other methods on exactly the same data and compare the output.

Specification	Write detailed specification of the execution of the version controlled methods in R, the snapshot of the sample data used for the raising, a page for settings for the raising method, the output data from the raising methods and logging of everything. have to be specified
Development	Develop and implement the execution of the version controlled methods in R, the snapshot of the sample data used for the raising, a page for settings for the raising method, the output data from the raising methods and logging of everything
Test	All of the above including unit and integration test

Note: Differences in sample data can limit the statistical methods used, this should be incorporated in the selection of available methods.

#### *Stock splitting*

Specification	Write detailed specification of the stock splitting functionality
Development	Develop and implement of the stock splitting functionality
Test	All of the above including unit and integration test

#### *Approval of raised national data and transfer to InterCatch*

Specification	Write detailed specification of the approval of raised national data and transfer to InterCatch
Development	Develop and implement of the approval of raised national data and transfer to InterCatch
Test	All of the above including unit and integration test

#### *RCG reports*

Specification	Write detailed specification of the existing reports, selection and execution of a report
Development	Develop and implement the existing reports and the selection and execution of a report
Test	All of the above including unit and integration test

#### *Project management*

Specification	Guidance, decisions, coordination internal and external, meetings, status.
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#### *Reports from R scripts*

Specification	Write detailed specification of the version control of approved reports from R scripts and the execution of the reports
Development	Develop and implement of the version control of approved reports from R scripts and the execution of the reports
Test	All of the above including unit and integration test

### Workshops

There should be three workshops during the development of the RDB, the aim is both to get all countries involved, but also to focus on the latest improvement of the exchange format and raising methods.

#### 1<sup>st</sup> workshop

The first workshop should focus on the latest exchange format for statistical raising, at one point it has to be determined that the format can fulfil the needs, and that format will then be frozen until a significant change has to be included. The workshop should also work through the RDB system specification, which include the overall functionality of the RDB. If functionality is missing or not clear the workshop can specify needs. Finally the workshop should approve the specifications.

#### 2<sup>nd</sup> workshop

The second workshop should focus on checks, the version control of methods in the RDB and the use of the methods for raising.

#### 3<sup>rd</sup> workshop

The second workshop should focus on the development of the RDB at the stage it is, and identify issues, which need to be dealt and suggest solutions, with special focus on the data raising process. Standard reports should also be specified.

## THE PROJECT TIMELINE

The project could be achieved in 2 years. The project is estimated to require 4.5 person years in total effort.

Effort (person months)	Tasks completed	Workshops
16 PMs	RDB system Specification Database design and development 1st part User security Code maintenance from RECO Checks in R for data upload	1 <sup>st</sup> Workshop
15 PMs	Database design and development 2nd part Upload and checks Version control of approved methods in R-script Project management	2 <sup>nd</sup> Workshop
13 PMs	Raising process Overview and deletion of uploaded data Download of data RCG reports	3 <sup>rd</sup> Workshop
11 PMs	Approval of raised national data and transfer to InterCatch Stock splitting Reports from R scripts	

## ARCHITECTURE

### *Development methodology*

Web application: MS Visual Studio 2015 using ASP.NET Core web application with the .NET framework

Database: MS SQL Server 2016 with R services

### *Project steering methodology*

Agile project management

## 7.2 Annex 2. Recommendations from 2016 RCMs presented to the 13th Liaison Meeting

(Recommendations addressed by the LM are shaded in grey)

### 1. RCMs transition to RCGs

<b>LM 1. RCM Baltic 2016. Financial support for RCM/RCGs</b>	
<b>RCM Baltic 2016 Recommendation 1</b>	The RCM Baltic recommends that the Commission clarifies the action grant (2 Million Euro) of the “Commission Implementing Decision concerning the adoption of the work programme for 2016 and the financing decision for the implementation of the European Maritime and Fisheries Fund: Strengthening regional cooperation in the area of fisheries data collection”.
<b>Justification</b>	The role of the RCMs is strengthened in the new DCMAP by delegating more tasks to them. However, there is no additional funding available to tackle these tasks. The Call for proposals was to be launched in the 2nd quarter of 2016 but presently it is unclear how and when this money is made available to the RCMs, e.g. for funding overall key issues such as the RDB and WebGR.
<b>Follow-up actions needed</b>	The recommendation is forwarded to the LM and the Commission.
<b>Responsible persons for follow-up actions</b>	The Commission.
<b>Time frame (Deadline)</b>	Prior to the first RCM in 2017.
<b>LM Comments</b>	Transferred to a question to the Commission (see section 3.3 of the LM Report)

<b>LM 2. RCM Baltic 2016. Determine Generic and Regional Terms of Reference</b>	
<b>RCM Baltic 2016 Recommendation 2</b>	The RCM Baltic recommends that the Commission approves a limited number of general and regional terms of reference.
<b>Justification</b>	The list of ToRs submitted by the COM to the RCMs is usually too long, unspecific and overloaded. MS feel that the meetings therefore are ineffective and that there is not enough time to discuss and decide on regional issues.
<b>Follow-up actions needed</b>	The Commission should provide a feasible number of general and regional terms of reference.
<b>Responsible persons for follow-up actions</b>	The Commission.
<b>Time frame (Deadline)</b>	Prior to the first RCM in 2017.
<b>LM Comments</b>	LM is of the opinion that the Chairs are to decide the ToRs and consider input from MS and the Commission but to prioritise

<b>LM 3. Establishing an EU-MAP web repository for RCGs</b>	
<b>RCM NS&amp;EA 2016 Recommendation</b>	RCM recommends that the Commission sets up a web-based repository for use by each RCG.
<b>Justification</b>	There is an urgent need for an EU-MAP web-based repository for RCGs to archive files documenting the process of collaboration with end users, decisions made and actions arising, in addition to documenting the wide range of other activities foreseen and other materials and resources needed for the RCGs to function. This is needed to ensure transparency as well as facilitating RCG work programmes. A JRC repository exists at <a href="https://datacollection.jrc.ec.europa.eu/docs-links">https://datacollection.jrc.ec.europa.eu/docs-links</a> but the RCM would prefer separate sites for individual RCGs to use.
<b>Follow-up actions needed</b>	RCM NS&EA to contact Commission.
<b>Responsible persons for follow-up actions</b>	RCM NS&EA and Commission
<b>Time frame (Deadline)</b>	Set up web links and access protocols in advance of establishment of RCGs in January 2017.
<b>LM Comments</b>	LM endorses this recommendation however JRC has not the resources to manage this. RCG Chairs should consider also other options available (e.g. CIRCA) as a forum.

<b>LM 4. RCM NA 3: Pan-regional intersessional work</b>	
<b>RCM NA 2016 Recommendation</b>	<p><i>The RCM NA strongly recommends the continuation of the pan regional intersessional work groups already proposed</i></p> <ul style="list-style-type: none"> <li>• <i>Cost sharing of funding surveys</i></li> <li>• <i>Impact of landing obligation</i></li> <li>• <i>Reviewing the ICES list of data needs as input for designing regional sampling plans.</i></li> <li>• <i>Review and follow-up on upload logs</i></li> </ul> <p><i>and adopt further intersessional work groups</i></p> <ul style="list-style-type: none"> <li>• <i>Rules and procedures</i></li> <li>• <i>RDB Data analysis subgroup</i></li> <li>• <i>Regional Sampling</i></li> </ul>
<b>Justification</b>	<p>This intersessional work will facilitate the transition from RCMs to RCGs. Setting up these task groups will establish common working procedures between multiple RCGs, prepare ground for future cooperation on a supra regional level and develop the work that is needed to fulfil future coordination tasks in the broad sense.</p> <p>These groups will work on analysis and development and allow the core of the RCG meetings to review the work, plan and progress any regional coordination.</p>
<b>Follow-up actions needed</b>	All RCM Chairs to consider ToRs, contributors and provide assistance where required. (RCM LDF, Baltic, NSEA, NA and MED)
<b>Responsible persons for follow-up actions</b>	RCM Chairs - RCM LDF, Baltic, NSEA, NA and MED
<b>Time frame (Deadline)</b>	December 2016
<b>LM Comments</b>	LM endorses this recommendation (also reflected in LM report – section 2.5)

<b>LM 5 RCM NA 9: RCG status</b>	
<b>RCM NA 2016 Recommendation</b>	<i>The RCM NA recommends the commission to clarify the status of the RCGs (and their subgroups), their obligation, decision making rules and procedures under the DCF recast.</i>
<b>Justification</b>	The DCF recast will refer to RCGs role and function if not directly. The pan-regional or supra-regional intersessional groups will not be mentioned per se but the RCGs may need to devolve some of the decision making to them. The responsibility might remain with the RCGs but the status and responsibility of the appointed Intersessional Groups will need clarification. There is a particular need to clarify the applicability of the Commission Decision “establishing horizontal rules on the creation and operation of Commission expert groups” to regional groups and sub-groups (e.g. with respect to appointing chairs, decision making, etc.).
<b>Follow-up actions needed</b>	Commission to provide clarification
<b>Responsible persons for follow-up actions</b>	Commission
<b>Time frame (Deadline)</b>	RCMs 2017
<b>LM Comments</b>	This has been covered in a question to the commission in relation to Rules and Procedures (see section 6.1 of the LM Report)

## 2. Data calls

<b>LM 6. Recommendation 2016-1 : RCM LDF Data calls</b>	
<b>RCM-LDF 2016 Recommendation</b>	<p>RCM LDF recommends to continue the data call as initiated in 2016, and as such, data calls related to long distance fisheries are to be addressed to all non-landlocked EU MS in order to ensure that all active fisheries in the areas in the competence of the RCM LDF are covered, including fisheries under private arrangements, but excluding fisheries for large pelagics.</p> <p>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.</p>
<b>Follow-up actions needed</b>	<ul style="list-style-type: none"> <li>• RCM LDF Chair to launch data call</li> <li>• All non-landlocked Members States to respond</li> <li>• Based on responses received from MS, an inventory of EU fisheries outside the EU waters shall be set and all identified end-users shall be contacted in order to obtain information on what data are required and actually provided and what action should be taken by the members of the RCM LDF in order to fulfil their obligations under the DCF</li> </ul>
<b>Responsible persons for follow-up actions</b>	Chair of the RCM LDF and non-landlocked Members States. RCM LDF 2017 to follow up.
<b>Time frame (Deadline)</b>	RCM LDF Data Calls from 2017 onwards
<b>LM Comments</b>	LM endorses this recommendation

<b>LM 7. RCM MED&amp;BS-LP 2016: Proposed Changes to STECF DCF Data Calls &amp; Pilot Data Call in 2017</b>	
<b>RCM MED&amp;BS-LP 2016 Recommendation N</b>	<p>The RCM MED&amp;BS – LP recommends that:</p> <p>The 2017 data call for transversal data should be drafted according to data format and codification already agreed at regional levels and taking into account the results of MARE 19 project, deliverable 2.4 report on methodologies used in MED &amp;BS member states to collect transversal data (assessment, comparison, identification of gaps) and also deliverable 2.2-2.7;</p> <p>The draft of the 2017 data call (requirements and format) should be circulated among National Correspondents and RCM chairs before its finalization</p> <p>The 2017 data call should be launched at least two months before the deadline for submission of data;</p> <p>The 2017 data call should be launched in the second semester of 2017</p> <p>The Data calls from 2018 should consider the timing for data availability agreed at regional level</p>
<b>Justification</b>	<p>Even if there is a clear need to streamline STECF data calls, this will imply a greater effort in 2017 for answering the additional data call.</p> <p>The 2017 data call is not completely clear in terms of requirements and codification. Therefore, it would be useful to circulate a draft among MSs to assure that it can be answered according to the provisions of National Programs for data collection.</p> <p>The data call cannot be launched in the first semester because in this period MSs have to answer to a lot of other data calls (GFCM, ICCAT, STECF fleet economic, STECF med biological data, RCM MED&amp;BS-LP data call).</p> <p>RCM MED&amp;BS-LP considered that several issues have been already discussed and agreed at regional levels in terms of: identification of métiers, standard coding for geographical areas, variables, etc. These can be found in RCM Med&amp;BS-LP and PGMED reports. In addition, a specific deliverable of MARE19 project a complete proposal for data format and codification (Deliverable 2.4 report on methodologies used in MED &amp;BS member states to collect transversal data (assessment, comparison, identification of gaps) and also deliverable 2.2-2.7).</p>
<b>Follow-up actions needed</b>	<p>Circulation of 2017 data call on transversal data among NCs and RCM chairs</p> <p>Deadlines to be set according to RCM recommendations</p>
<b>Responsible persons for follow-up actions</b>	DG MARE, JRC, Member States
<b>Time frame (Deadline)</b>	Before the official submission of the 2017 data call on transversal data
<b>LM Comments</b>	LM notes this recommendation. However, it is rather a communication issue which needs to be clearly stated in the WPs.

## LM 8. RCM MED&amp;BS – LP: Data availability and official data calls.

RCM MED&BS - LP 2016  
Recommendation N

RCM Med&BS-LP 2016 agreed on common dates after which the data sets will be made available to the end users, and requests the relevant MS to refer to these when completing Table 6A – Data availability in their Work Plans. MS and end users are recommended to respect the relevant dates of availability, especially when official data calls are issued by DGMARE and deadlines are set.

The agreed Table 6A on data availability is the following:

MS	Data set	Section	Variable group	Year(s) of WP implementation	Reference year	WP	
						Final data available after	WP date of submission
							31/10/2016
	Biological data			N	N	N+1 June 30	RCM recommends to maintain 6 month delay following GFCM DCRF calendar, the availability of fishing activity data (landing and effort data), work process for data management and not enough resources to carry out all requested activity (age reading).
	Recreational data			N	N	N+1 June 30	
	Anadromous & catadromous spec.			N	N	N+1 June 30	length every year, age every 3 years
	Ecosystem data incidental by-catch			N	N	N+1 June 30	
	Ecosystem data impact of fisheries			N	N	N+1 June 30	
	Fishing activity data			N	N	N+1 May 31	
	economic data for the fleet			N	N-1	N+1 March 1	
	economic data for the aquaculture			N	N-1	N+1 June 30	
	Processing data			N	N-1	N+1 June 30	
	Survey data MED/TS			N	N	N+1 April 30	
	Survey data MED/AS			N	N	N+1 March 31	RCM recommends to maintain 6 month delay following, the availability of fishing activity data (landing and effort data), work process for data management and not enough resources to carry out all requested activity (acoustic data processing, age reading).
	BS survey BTSS5			N	N	N+1 May 31	
	BS survey PTSS5			N	N	N+1 May 31	
	social data fleet			N	N-1	N+1 March 1	
	social data aquaculture			N	N-1	N+1 June 30	
	social data processing			N	N-1	N+1 July 30	

RCM Med&BS-LP 2016 reiterates previous recommendations to JRC/DGMARE on maintaining stable format of the official data calls, and requests that regional agreements on codes are respected.

With regards to the JRC/DGMARE proposal on setting the deadlines of official data calls for the Mediterranean and Black Sea at earlier dates than the current ones, for allowing the associated STECF EWG meetings to convene earlier in the year, the group expressed its concern on the ability of the MS to respect more strict deadlines and on the implications this would have to the quality of the data provided. As an alternative solution, RCM Med&BS-LP recommends DGMARE to shorten the data-handling procedure after the legal deadline of the data calls, for allowing the STECF EWG meetings associated with the data calls to convene no later than one calendar month after the deadline. Specifically, and in line with the data-handling procedure for STECF Expert Working Groups circulated by DGMARE, a two weeks period after the deadline (instead of two months in some cases) should be spent for data checks by JRC, followed by two weeks of operational deadline.

<b>Justification</b>	<p>The regionally agreed availability dates of the different data-sets are based:</p> <ul style="list-style-type: none"> <li>i.) on the time required for finalizing other related data (e.g. fishing activity data required for finalizing biological data),</li> <li>ii.) the available resources (limited for some MS) for data handling, considering also the timing of DCF reporting obligations,</li> <li>iii.) the required work for processing the data and ensuring their quality for their scientific use.</li> </ul> <p>Fixed deadlines of the various official DGMARE data calls should be specified according to the agreed availability dates, for allowing MS to plan in advance the work required for meeting their obligations.</p> <p>The existence of different formats and codes for reporting DCF data through various Data Calls increases the workload of Member States to prepare and provide data according to each data requirement. It increases the risk of not complying with each requested coding and threatens the quality of information provided. Formats and valid codes of a data call may differ from year to year, obliging MS to resubmit the same data provided in previous years in accordance with the updated format and code requirements.</p> <p>By shortening the data-handling procedure after the legal deadline of official DGMARE data calls, STECF EWG meetings associated with the data calls may convene earlier in the year than they currently do, for providing management advice on due time, without setting the deadlines of official data calls for the Mediterranean and Black Sea at earlier dates.</p>
<b>Follow-up actions needed</b>	<p>Follow agreed availability dates by MS and end users. Respect recommendations on the format of data calls</p>
<b>Responsible persons for follow-up actions</b>	<p>MS, JRC/DGMARE, end users</p>
<b>Time frame (Deadline)</b>	<p>Before launch of 2017 data calls.</p>
<b>LM Comments</b>	<p>Recognizing the rationale behind this recommendation, the LM notes that MS will need to comply to EUMAP.</p>

<b>LM 9. RCM MED&amp;BS – LP 2016</b>	Merging of length classes
<b>RCM MED&amp;BS – LP 2016 Recommendation N</b>	The Mediterranean and Black Sea data call issued by the JRC should consider the possibility given to a MS to merge the length classes for different metier and should allow the upload of data with merged length classes.
<b>Justification</b>	<p>The RCMed&amp;BS-LP group recalled that sampling for the collection of biological data should be statistically planned and designed, so as to avoid problems of under-sampled and non-sampled strata or domains requiring imputation of missing data. Following this issue, the procedures adopted should lead to the optimum stratification of sampling for reducing bias and variance, and should draw on previous experience elsewhere in defining, for example, the métiers. The definition of the 48etier does not include vessel length classes. EU Decision 1251/2016 under Chapter III (data requirements), paragraph 2(a) requested catch data at the aggregation level 6 (corresponding to mesh size).</p> <p>However, metiers may be linked with fleet segments based on vessel length classes, as it is presented in Table 2 of the EU-Decision 1251/2016. In order to optimize the sampling programmes, RCM MED&amp;BS-LP considers the possibility to include length classes (LOA) as defined in Table 2 of the Commission Decision 1251/2016 and to merge different classes of the LOA for sampling purpose.</p>
<b>Follow-up actions needed</b>	<p>MS to merge vessel length classes according to proper scientific justification, if needed.</p> <p>JRC to adapt data call in order to accept merged vessel length classes</p>
<b>Responsible persons for follow-up actions</b>	LM, JRC, DGMare, MS
<b>Time frame (Deadline)</b>	<p>Data collection activities from 2017</p> <p>Before data call 2018, related to 2017 data</p>
<b>LM Comments</b>	This relates to linking the biological data to economic data and this is a good move, ultimately, but there needs to be further dialogue between end-users before these economic length groups are imposed. The MS are obliged to provide the data as required under EUMAP and end-users have an influence on that.

## 3. Databases and data strategy

<b>LM 10. RCM-LDF 2016 -2 and RCM LP 2016: Inclusion of RCM LDF data into Regional Database</b>	
<b>RCM-LDF 2016</b> <b>RCM LP 2016</b> <b>Recommendation</b>	<p>RCMs LDF and LP, in line with the expressed interest from the Commission to set up a data base system holding all relevant fisheries data in the RCMs LDF and LP regions, recommends to set up a database system serving the RCMs LDF and LP needs. These needs are to be combined with the need to improve data transmission to end-users of data collected through the DCF and coordinated by those RCMs. A strong preference of both RCMs is to build upon currently established systems to ensure short term progress and minimize development needs, thus being cost-efficient.</p> <p>The time spent before the meetings and during the meeting correcting data, merely highlight the importance of automating and standardizing the data transmission and its previous checking. Tools for data format conformity checks, such as those developed under project DGMARE 2014/19, can be considered a first step towards this standardization.</p> <p>However the RCM LP agrees that a Regional Database would facilitate even more the work of the Data Provider and would be a crucial step in the process of standardization and data exchange. Thus, RCM LP recommends expanding the scope of the Regional Data Base FISHFRAME, hosted by ICES, to include EU Large Pelagic fisheries data. This would imply the inclusion of specific fields and codes of interest for the LP fisheries.</p> <p>RCMs LDF and LP recommend the inclusion of their areas of competence into the Regional Database Fishframe as currently hosted by ICES and governed by the RCMs through a Steering Committee. This would imply the inclusion of areas outside the EU waters as well as the inclusion of the relevant species and metiers involved.</p>
<b>Follow-up actions needed</b>	<p>RCMs LDF's and LP's chairs to contact the Steering Committee for the Regional Database Fishframe. Upon acceptance, both RCMs to provide representation and support to the Steering Committee.</p> <p>ICES to facilitate the inclusion of data from the RCMs LDF and LP areas.</p>
<b>Responsible persons for follow-up actions</b>	Chair of RCMs LDF and LP, SC-RDB, ICES, Commission
<b>Time frame (Deadline)</b>	Prior to the 2017 data call
<b>LM Comments</b>	LM combined this with a similar recommendation from the RCM LP and endorses it.

<b>RCM LP: RCM LP recommends expanding the scope of Fish Frame RDB to Large Pelagic specificities.</b>	
<b>RCM LP 2016 Recommendation</b>	<p>The time spent before the meeting and during the meeting correcting data, merely highlight the importance of automating and standardizing the data transmission and its previous checking. Tools for data format conformity checks, such as those developed under project DGMARE 2014/19, can be considered a first step towards this standardization.</p> <p>However the RCM LP agrees that a Regional Database would facilitate even more the work of the Data Provider and would be a crucial step in the process of standardization and data exchange. Thus, RCM LP recommends expanding the scope of the Regional Data Base FISFRAME, hosted by ICES, to include EU Large Pelagic fisheries data. This would imply the inclusion of specific fields and codes of interest for the LP fisheries.</p>
<b>Justification</b>	<p>This will help to:</p> <ul style="list-style-type: none"> <li>• To avoid many coherence issues in the data by providing a mandatory check on the data before submitting, thereby ensuring a minimum level of conformity of the data with the assurance that all the analysis can be performed.</li> <li>• Reducing national data producers work by having only one year of data to provide to the RCM.</li> <li>• Ensuring the data to be backed up</li> </ul> <p>Furthermore, this option goes in line with the expressed interest from the DG MARE International Directorate to support the development of database holding the data for fisheries in non-EU waters. Thus, in order to facilitate data provision for the future regional coordination, RCM LP is of the opinion that the inclusion of data relevant to the RCM LP into the current RDB is to be preferred. This would lead to a short term and cost effective solution. In order to be in line with the rest of the RCMs, RCM LP recommends expanding the scope of the Regional Data Base FISFRAME, hosted by ICES, to include EU Large Pelagic fisheries data. This would imply the inclusion of specific fields and codes of interest for the LP fisheries, as well as some LP expertise should be add to the SC RDB</p>
<b>Follow-up actions needed</b>	Contact RDB CS to assure that the RCM LP is represented in the next RDB SC meeting.
<b>Responsible persons for follow-up actions</b>	RCM LP chair, SC RDB, COM,
<b>Time frame (Deadline)</b>	Next RDB SC meeting
<b>LM Comments</b>	LM combined this recommendation with similar one from the RCM LDF (above)

<b>LM 11. RCM Med&amp;BS: Speed up the process of setting up a Regional Database RDB for Med&amp;BS (Med&amp;BS-RDB)</b>	
<b>RCM Med&amp;BS-LP 2016 Recommendation N</b>	RCM Med&BS-LP 2016 recommends that the Commission should give clear indications on the possibilities to implement the Med&BS RDBs, hosted by GFCM secretariat, as soon as possible.
<b>Justification</b>	<p>The RCM Med&amp;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.</p> <p>The process of development of the Mediterranean RDB started in 2011 and important steps were implemented.</p> <p>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.</p> <p>However, RCM Med&amp;BS would like to proceed on the implementation of the RDB and in particular, considered fundamental to receive a clear feedback from the Commission in order to understand how to involve officially the GFCM as host (as already agreed by all participants MS), and then to be able to proceed with the development of the system that now it is “stopped” since more than two year.</p>
<b>Responsible persons for follow-up actions</b>	Commission, LM, GFCM, MS
<b>Time frame (Deadline)</b>	ASAP
<b>LM Comments</b>	LM endorses this recommendation

<b>RCM NA 6: Upload logs</b>	
<b>RCM NA 2016 Recommendation</b>	<p><i>The RCM NA strongly recommends that:</i></p> <ol style="list-style-type: none"> <li>1. <i>Upload Logs continue to form part of the data call for the RDB and require submission by all MS whether they are able to upload data or not.</i></li> <li>2. <i>An Intersessional Group is given sufficient time to review Upload Logs to qualify the data, report and distribute actions or advice to MS, RCMs and the RDB administrator to ensure the quality of data on the RDB is maintained and improved and end-users are aware of the limits to the data.</i></li> </ol>
<b>Justification</b>	<p>The development of the RDB is an ongoing 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 and limit the potential for data analysis and delays RDB use in the regional coordination process.</p> <p>The completion of an Upload log was included in the data calls for the RCM 2015 and 2016 and was 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 simple reference to what data is not on the system as well as what is.</p> <p>Intersessional work is required to review the issues listed in the upload logs, qualify them and identify actions and the responsibly body (RCM, RDB administrator and SC-RDB, or MS) that can deal with them.</p> <p>This intersessional work is pan regional.</p>
<b>Follow-up actions needed</b>	<ol style="list-style-type: none"> <li>1. RCM Chairs to appoint pan regional contributors for intersessional work.</li> <li>2. Intersessional group to report on 2016 upload logs <ol style="list-style-type: none"> <li>a. Identify a clear communications strategy</li> <li>b. Identify actions and responsible bodies</li> <li>c. Communicate these actions</li> <li>d. Collate responses</li> </ol> </li> <li>3. RCM chairs to include an updated upload log in data call 2017 and, when relevant ask MS to consider reload their data.</li> </ol>
<b>Responsible persons for follow-up actions</b>	RCM Chairs, Intersessional group, MS, RDB administrator
<b>Time frame (Deadline)</b>	RCMs 2017

<b>RCM NA 8: Data analysis subgroup</b>	
<b>RCM NA 2016 Recommendation</b>	<i>RCM NA recommends that a data analysis subgroup is established to facilitate intersessional work of the RCMs</i>
<b>Justification</b>	Increasingly the work of the RCM RCG can be and needs to be supported by work that utilises regional data. This can often be achieved very efficiently using open source software such as R, operating on common data formats as has been demonstrated in the COST project and the fishPi project.
<b>Follow-up actions needed</b>	RCG Chairs to identify a task leader. Task leader to establish mailing list of any and all interested individuals.  RCG chairs to consider role, operation, remit, time commitments, if necessary funding, of the work of such a group, and to begin a dialogue with interested parties.
<b>Responsible persons for follow-up actions</b>	RCG Chairs, Task leader
<b>Time frame (Deadline)</b>	Intersessionally 2016-2017

<b>LM 12. RCM NA 10: Foreign Landings</b>	
<b>RCM NA 2016 Recommendation</b>	<p><i>RCM NA recommends that:</i></p> <ol style="list-style-type: none"> <li><i>MS upload their samples of non-flag vessels (foreign landings) to the RDB.</i></li> <li><i>The WKCATCH investigate suitable methods for estimating non Flag landing fractions.</i></li> </ol>
<b>Justification</b>	<p>27% of landed tonnages are by foreign vessels landing into countries other than their own flag country.</p> <p>Follow up work from previous recommendations on foreign landings have demonstrated that the RDB has the facility to hold non flag vessel sampling data. MS should therefore upload any and all foreign landings they collect.</p>
<b>Follow-up actions needed</b>	<p>RCG Chairs to put out a data call.</p> <p>MS to upload their samples of non-flag vessels (foreign landings) to the RDB.</p> <p>WKCATCH investigate suitable methods for estimating non Flag landing fractions.</p>
<b>Responsible persons for follow-up actions</b>	RCG Chairs, MS and WGCATCH
<b>Time frame (Deadline)</b>	2017
<b>LM Comments</b>	LM endorses this recommendation and this needs to refer to ICES to be included in the ToRs

## 4. Communications and end users needs

<b>LM 13. Recommendation 2016-3 : Intensify contact between data collectors and end user in CECAF area</b>	
<b>RCM-LDF 2016 Recommendation</b>	Currently, no overview is available regarding the end user needs in CECAF area to facilitate scientific advice including data collected under the DCF programme. Therefore, the RCM LDF recommends to contact the CECAF secretariat to provide an inventory of the availability and use of the data collected by the EU and provided to the CECAF Working Groups. In case that some crucial data are missing, the Secretariat should indicate in detail the type of data and specific data needs expected from the EU in order to facilitate CECAF work.
<b>Follow-up actions needed</b>	Contact the CECAF secretariat through FAO
<b>Responsible persons for follow-up actions</b>	Chair and participants of RCM LDF. CECAF secretariat
<b>Time frame (Deadline)</b>	1 <sup>st</sup> January 2017
<b>LM Comments</b>	LM endorses this recommendation and RCM LDF should seek the support of the Commission to move this forward.

<b>LM 14. RCM Baltic 2016. Request towards ICES to comment on data needs from RCM/RCGs</b>	
<b>RCM Baltic 2016 Recommendation 3</b>	The RCM Baltic recommends that ICES as a data end user produces a request to the RCM/RCGs about the data and the analyses that ICES really needs, on a stockwise level.
<b>Justification</b>	The EU MAP annual work plan template requires that end users have defined variables that are to be collected. Presently, such a request from ICES as a major end user is still pending.
<b>Follow-up actions needed</b>	ICES to submit request to the member states.
<b>Responsible persons for follow-up actions</b>	The commission to approach ICES
<b>Time frame (Deadline)</b>	Prior to the first RCM in 2017.
<b>LM Comments</b>	LM endorses this recommendation and combines it with RCMNSEA recommendation about communicating with ICES (see below). This affects all RCGs. In the short term this is available in the ICES data calls and will be available from other RFMOs.

<b>Collaboration with ICES on data needs</b>	
<b>RCM NS&amp;EA 2016 Recommendation</b>	RCM recommends an initial meeting with ICES to establish the process of collaboration and the roles and responsibilities for addressing ICES data needs as an end user of data collected through regional data collection schemes within remit of the RCM/RCG.
<b>Justification</b>	The EU-MAP is intended to have greater end-user input on aspects of data collection. ICES is a major end user of data collected through regional data collection schemes within the remit of the RCMs. There is currently no clear process for ICES and other end users to communicate and justify proposals for new data collections or amendment of existing data to meet their needs. There is an urgent need for ICES to collaborate with RCGs to establish a well-defined annual process for: (i) identifying and documenting data deficiencies and new data needs, (ii) exploring how data collection can be best modified where feasible, and (iii) identifying the actions needed to design, evaluate, implement and monitor the new or modified data collection schemes. An initial meeting is needed to scope out options for this.
<b>Follow-up actions needed</b>	RCM NS&EA to contact ICES secretariat to arrange initial meeting by webex / skype.
<b>Responsible persons for follow-up actions</b>	RCM NS&EA and ICES secretariat
<b>Time frame (Deadline)</b>	October 2016 to establish initial webex between RCG subgroup and ICES
<b>LM Comments</b>	This recommendations was combined for endorsement with the recommendation No 3 of the RCM Baltic (See above).

## 5. Task sharing agreements

<b>LM 15. Recommendation 2016-4: Set-up of a multi-lateral agreement covering the sampling of pelagic fisheries in CECAF and SPRFMO area.</b>	
<b>RCM-LDF 2016 Recommendation</b>	The current multi-annual and multi-lateral agreements for biological sampling in CECAF (partners: GER, LAT, LIT, NED, POL) and SPRFMO area (partners: GER, LIT, NED, POL) terminate as of 31 <sup>st</sup> December 2016. Given that the current arrangements with a subcontractor can't continue, a new set-up for the multi-lateral agreements is required. Poland and The Netherlands agreed to investigate possibilities to arrange a joint sampling plan. RCM LDF recommends Poland and The Netherlands to liaise and draft an agreement for the respective areas and to propose this draft to the other MS involved
<b>Follow-up actions needed</b>	Poland and The Netherlands to liaise and draft agreement
<b>Responsible persons for follow-up actions</b>	Irek Wojcik (Poland) and Sieto Verver (The Netherlands)
<b>Time frame (Deadline)</b>	1 <sup>st</sup> January 2017
<b>LM Comments</b>	LM endorses this recommendation

<b>LM 16. RCM NA 4: Cost sharing</b>	
<b>RCM NA 2016 Recommendation</b>	<i>RCM NA recommends that any future costs and/or task sharing agreements across RCGs should be agreed by all MS and have a strong legal basis, so that there is no ambiguity for implicated member states on whether the agreements are to be implemented. The scope for exemptions beyond the thresholds and the opportunity for trade-offs needs to be considered in these agreements to help manage any increased burden on individual member states.</i>
<b>Justification</b>	Previous cost sharing agreements at RCM level have not been implemented by all member states involved as the legal basis was ambiguous. While there are clear legal obligations outlined in the DCF recast in relation to task and cost sharing, the agreed methods of how these are implemented, now also need to have a legal basis.
<b>Follow-up actions needed</b>	Commission to consider and provide support for this. Intersessional Group to investigate, promote and advise on this.
<b>Responsible persons for follow-up actions</b>	Intersessional group, Commission
<b>Time frame (Deadline)</b>	RCMs 2017
<b>LM Comments</b>	Recognizing the rationale behind this recommendation, the LM notes however, that expected outcome requires a firm legal basis and, as such, goes beyond the competence of the LM.  This issue was however, addressed to the Commission at the meeting (see sections 2.5 and 6.1 of the LM Report)

<b>RCM NA 11: Maintenance of existing bilateral agreements</b>	
<b>RCM NA 2016 Recommendation</b>	<i>RCM NA recommends that, where required, formal bilateral agreements set up for the period from 2014-2016 are carried forward until regional sampling plans are agreed.</i>
<b>Justification</b>	The investigation and implementation of new regional sampling plans may change what is expected of MS in terms of delivery to a regional programme. Costs sharing, the exchange of expertise and the sampling of foreign landings will all feed into the success of these plans and multi-lateral agreements will be needed. Current agreements meet the requirements of current national sampling schemes. To reduce the administrative burden on member states of setting up new bilateral agreements for 2017+ it is recommended that current bilateral agreements are maintained until new regional sampling plans are finalised and agreed.
<b>Follow-up actions needed</b>	Commission to agree MS to maintain current contributions to these agreements
<b>Responsible persons for follow-up actions</b>	Commission MS
<b>Time frame (Deadline)</b>	2017 on

- <b>Agreement</b>	
- <b>Cost-sharing agreement for the conducting of the International Ecosystem Survey in the Nordic Seas (ASH) and the Blue Whiting Survey in 2016 and 2017</b>	
<b>RCM NS &amp; EA 2016 Agreement</b>	<p>RCM NS&amp;EA 2016 agreed on continuation of the cost sharing model for 2 surveys:</p> <ul style="list-style-type: none"> <li>i) the International Ecosystem Survey in the Nordic (Atlanto-Scandian herring),</li> <li>ii) the Blue Whiting Survey (blue whiting).</li> </ul> <p>This model applies to those MS having a EU-TAC share <math>\geq</math> 5% for the species subject to this surveys.</p> <p>This model will be used for the International Ecosystem Survey in the Nordic Seas (IESNS) carried out by the Danish R/V Dana and the Blue Whiting Survey carried out by the Irish R/V Celtic Explorer and the Dutch R/V Tridens for years 2016 and 2017.</p>
<b>Justification</b>	<p>There is an end-user need for fishery independent survey data for carrying out stock assessment of the Atlanto-Scandian herring stock and of the blue whiting stock. In addition, there is an agreement between EU and Norway that the EU Member States participate in surveying the Atlanto-Scandian herring stock.</p>
<b>Follow-up actions needed</b>	<p>Approval by National Correspondents from Denmark, Germany, the Netherlands, Sweden and the UK.</p> <p><i>Denmark, Germany, the Netherlands, Sweden and the UK agreed at the 2016 RCM NS&amp;EA.</i></p> <p>The NC's from Ireland, France and Spain should be consulted at the RCM NA 2016 regarding the Blue Whiting survey. Ireland should also be consulted regarding the International Ecosystem Survey in the Nordic.</p>
<b>Responsible persons for follow-up actions</b>	The RCM NS&EA and the RCM NA.
<b>Time frame (Deadline)</b>	Invoices should be sent to the MS concerned before November 1.
<b>Follow up in 2016</b>	The NC's concerned from the RCM NA to be consulted.

## 6. EU MAP revisions

<b>LM 17. RCM LP n: Minor changes to EU map ANNEX tables.</b>	
<b>RCM LP 2016 Recommendation</b>	<p><i>RCM LP recommends some minor changes to the EU Map annex to be considered during the EU Map revision.</i></p> <p>All these proposed changes are considered priorities for the end user (tuna RFMOs).</p> <p>The RCM LP recommends to include number of FADs data under effort variables included in table 4 (Fishing activity variables) from EU MAP annex.</p> <p>At the same time, RCM LP recommends moving <i>Isurus oxyrinchus</i> from table 1D to table 1C from EU MAP annex, as it is one of the main landed sharks by the EU fleet targeting large pelagics, and one of the high priority species among tuna RFMOs.</p>
<b>Justification</b>	<p>In tuna RFMOs there is a specific need for the monitoring of the Fishing Aggregating Devices (FADs). The new EU MAP does not include FAD monitoring under its requirements. Only footnote “c” in table 2 from the ANNEX mentioned FADs; however this table is related with métiers an aggregation levels, and nothing is mentioned about FADs in table 4 (Fishing activity variables). FAD monitoring has become a priority in all tuna RFMOs, as shows the current impulse given to FAD Working Groups. Taking into account that these FAD data are neither collected under control regulation, the RCM LP agrees that FAD data should be included in the table 4 (Fishing activity variables) from EU MAP annex.</p> <p>During the coordination of the biological sampling of the species caught by the EU fleet targeting large pelagic species, it was noticed that <i>Isurus oxyrinchus</i> was not included in any of the tuna RFMO species list for biological sampling (EU MAP annex, table 1C), while it is one of the main landed sharks and one priority species.</p>
<b>Follow-up actions needed</b>	RCM LP Chair and COM bilateral meeting.
<b>Responsible persons for follow-up actions</b>	Commission, RCM LP
<b>Time frame (Deadline)</b>	Before next EU MAP ANNEX revision.
<b>LM Comments</b>	LM endorses this recommendation

<b>LM 18. RCM NA 12: EUMAP Table 10 survey list revisions</b>	
<b>RCM NA 2016 Recommendation</b>	<i>RCM NA recommends that the list of mandatory surveys on table 10 of EUMAP Decision 2016/1251 are reviewed at a dedicated STECF EWG based on updated and predefined criteria. This should also include a review of the target stock/species listed in table 10.</i>
<b>Justification</b>	The list of mandatory survey included in Table 10 of Implementing Decision 2016/1251 is based on the old DCF regulation. A review needs to take place prior to the application of cost sharing models to ensure that the list of mandatory surveys is current and includes the appropriate target stocks/species.
<b>Follow-up actions needed</b>	Commission to setup a dedicated EWG to respond before the resubmission of National Work Programmes for 2018
<b>Responsible persons for follow-up actions</b>	Commission, STECF
<b>Time frame (Deadline)</b>	September 2017
<b>LM Comments</b>	LM endorses this recommendation

## 7. National Work Plan Template

<b>RCM NA 1: Annual work plans</b>	
<b>RCM NA 2016 Recommendation</b>	<p><i>The RCM NA strongly recommends that:</i></p> <ol style="list-style-type: none"> <li><i>1. The commission and STECF, in their evaluation of MS Annual Work Plans submitted in 2016, take into account the concerns, the proposed solutions, and suggested evaluation criteria detailed in the first draft of RCMNA 2016 report ANNEX XXX</i></li> <li><i>2. MS should complete these tables fully as best they can and where they perceive there is ambiguity in what is required explain their choice in the comments or text box for that section.</i></li> </ol>
<b>Justification</b>	<p>It was clear during a detailed review and discussions at RCMNA 2016 that the completion of the WP template in some instances is open to interpretation and further guidance is required. Where there was consensus between MS there should be some consistency in their completion but where there was not, it may make the job of evaluating the returns difficult. For example, completing section 4 will differ depending on the sampling schemes which could range from adhoc random quota based sampling to pure statistically sound sampling schemes. Any evaluation of compliance and science this year should take this into account.</p> <p>This year's evaluation process is an opportunity to catalogue best practice and improve on the guidance for next year's submission of the 2018 Work Programme and the evaluation in 2017.</p>
<b>Follow-up actions needed</b>	<p>MS to complete templates before the deadline.</p> <p>STECF to consider the RCM issues in their evaluation.</p> <p>STECF and the commission to provide clearer guidance and better examples for 2018 Work Programme and Technical reports</p>
<b>Responsible persons for follow-up actions</b>	NC, Commission
<b>Time frame (Deadline)</b>	November 2016, WP evaluation

<b>RCM MED&amp;BS – LP 2016 WP Recommendation N</b>	<p><u>Table 1A: List of required stocks</u></p> <p>RMC Med&amp;BS 2016 recommends that MS collect the length of large pelagic elasmobranchs (a list of which is found in Annex) from commercial catches, without any threshold being applied to these species.</p>
<b>Justification</b>	<p>The exclusion of the application of thresholds on large pelagic species (Commission Implementing Decision (EU) 2016/1251, Chapter 5, 2) was also extended to pelagic sharks. This is because data about these is missing since these are generally relatively scarce in catches and in previous years MS did not collect this data as exemptions were applied.</p>
<b>Follow-up actions needed</b>	<p>MS to include the collection of length of large pelagic elasmobranchs from commercial catches in their WPs.</p>
<b>Responsible persons for follow-up actions</b>	MS
<b>Time frame (Deadline)</b>	End of October 2016

<b>RCM MED&amp;BS – LP 2016 WP Recommendation N</b>	<p><u>Table 1B: Planning of sampling for biological variables</u></p> <p>Stratification of stocks for data collection should follow the structure followed in the previous years (Group 1, 2 and 3 species as in the adopted GFCM-DCRF, 2016). Annual biological parameters (sex, age, maturity, weight) shall be reported yearly for Group 1 species (as identified in the GFCM-DCRF Annex A.1); biological parameters (sex, age, maturity, weight) should be reported every three years for Group 2 species (as identified in the GFCM-DCRF Annex A.2) and <i>Anguilla 63nguilla</i> (eel). Biological information (sex, weight and maturity) for all Group 3 sharks, other should be reported through the research surveys at sea. This is also in line with the approach, and the spatial stratification, as identified in the adopted GFCM-DCRF.</p> <p>Furthermore, if a species it is presents in Groups 1, 2 and 3 of the GFCM-DCRF (Annex A) but it is absent from Tables 1A, 1B and 1C of the DC-MAP this species should be included in the sampling plan.</p> <p>Concerning large pelagic species from Table 1C of the Annex to the Commission implementing decision adopting a multiannual Union program for the collection, management and use of data in the fisheries and aquaculture sectors for the period 2017-2019), length data should be reported yearly.</p> <p>Sex, maturity and weight should be reported in accordance with the end-user needs and coordination at marine region level.</p>
<b>Justification</b>	<p>In order to be in line with the approach indicated in the adopted GFCM DCRF as well as to maintain the data serious available at MS' ends.</p>
<b>Follow-up actions needed</b>	<p>MS to adopt this approach when compiling their WPs</p>
<b>Responsible persons for follow-up actions</b>	<p>MS</p>
<b>Time frame (Deadline)</b>	<p>End of October 2016</p>

<b>RCM MED&amp;BS – LP 2016 WP Recommendation N</b>	<p><u>Table 1C: Sampling intensity for biological variables</u></p> <p>MS are encouraged to calculate the number of individuals to be sampled for biological data collection for demersal species and small pelagics by using the tool developed by the MARE/2014/19 project in this regard.</p> <p>Since at this point in time the knowledge on how to use and run this tool amongst MS is scarce, the number of individuals to be sampled in the year 2017 is to be decided by the MS based on previous sampling knowledge.</p> <p>With regard to the number of individuals to be sampled for large pelagics, the RCM LP is currently working on devising an appropriate tool to calculate the optimum number of individuals to be sampled. As this tool is not available yet, the same number of individuals of large pelagic species as regionally agreed to be collected by each country for the previous triennial period (PGMed 2014) is to be retained, in the case the collection of the same biological parameters still applies. An updated version of this table is presented in Annex.</p>
<b>Justification</b>	<p>Setting thresholds as following the old DCF regulation has been deemed not appropriate for quality evaluation on which to base the number of samples. This was very difficult to reach, even if data was collected from a very large number of samples.</p> <p>Thus the MARE/2014/19 project devised an alternative tool to calculate the optimum number of individuals required for sampling, which work on past data sets. While this tool is complete, at this point in time, the majority of the MS are unable to operate it and require training about it. It is with this scope that a workshop in this regard is being recommended by this group.</p>
<b>Follow-up actions needed</b>	<p>MS are to decide the number of individuals required for sampling based on previous knowledge for the year 2017.</p> <p>A training workshop on the use of the tool devised by the MARE/2014/19 project is to be organised. The chairs for this workshop have been indicated to be Ms. Maria Teresa Facchini and Mr. Norbert Billet (to be confirmed).</p> <p>After the training, MS are to use this tool in order to check and plan the number of individuals</p>
<b>Responsible persons for follow-up actions</b>	<p>MS, RCM Med&amp;BS</p>
<b>Time frame (Deadline)</b>	<p>End of September 2017</p>

<b>RCM MED&amp;BS – LP 2016 WP Recommendation N</b>	<u>Table 2A: Fishing activity variables data collection strategy</u> The RCM Med&BS 2016 recommends MS to collect data about the ‘length of the nets’ for passive gears, ‘number of hooks’ and ‘number of pots/traps’ for all vessel lengths including those smaller than 10m.
<b>Justification</b>	This data is deemed as important and is also required in view of the GFCM DCRF.
<b>Follow-up actions needed</b>	MS to include the collection of these variables in the WPs.
<b>Responsible persons for follow-up actions</b>	MS
<b>Time frame (Deadline)</b>	End of October 2016

<b>RCM MED&amp;BS – LP 2016 WP Recommendation N</b>	<u>Table 3A: Population segments for collection of economic and social data for fisheries</u> The RCM Med&BS 2016 considered fleet segments which are not recreational but do not fish for profit. The meeting recommends that the recommendations emanating from PGEcon in this regard are to be taken onboard in the future.  Social variables will be collected as from 2018, thus PGEcon can provide guidance on these variables in 2017.
<b>Justification</b>	In some MS there are fleet segments which are not recreational but do not fish for profit. Those segments defer from commercial and from recreational segments and as that should be considered separately.
<b>Follow-up actions needed</b>	Concerned MS are to adopt the recommendations that will be provided with regard to fleet segments which are not recreational but do not fish for profit as well as with regard to social variables to be collected as from January 2018.
<b>Responsible persons for follow-up actions</b>	PGEcon, MS
<b>Time frame (Deadline)</b>	End of October 2018

<b>RCM MED&amp;BS – LP 2016 WP Recommendation N</b>	<p><u>Table 3B: Population segments for collection of economic and social data for aquaculture</u></p> <p>RCM Med&amp;BS 2016 recommends collecting data of inactive vessels by length class.</p>
<b>Justification</b>	This will allow MS to perform the analysis required when compiling the report on the balance between the fishing capacity of their fleets and their fishing opportunities by vessel length.
<b>Follow-up actions needed</b>	MS to collect data of inactive vessels by length class
<b>Responsible persons for follow-up actions</b>	MS
<b>Time frame (Deadline)</b>	End of October 2016

<b>RCM MED&amp;BS – LP 2016 WP Recommendation N</b>	<p><u>Table 4B: Sampling frame description for biological data</u></p> <p>With regard to the sampling of discards, MS are invited to follow the discard sampling program as recommended by RCM Med&amp;BS 2010, which is being reproduced in Annex.</p> <p>MS are to report data by métiers as recommended by RCM Med&amp;BS 2009. This list of métiers is being reproduced in this report as Annex.</p>
<b>Justification</b>	<p>It is important to sample those métiers for discards, if indicated in the relevant table if they are not chosen for sampling through the ranking system as indicated in the GFCM DCRF. This will also help maintain the available data series.</p> <p>The RCM Med&amp;BS 2016 reviewed the list of métiers as recommended by RCM Med&amp;BS 2009, but no changes were deemed as necessary. Keeping the same list of métiers also ensures congruency along the data series.</p>
<b>Follow-up actions needed</b>	<p>The group reviewed the table as adopted in 2010 and agreed to continue following it. Table is presented in Annex of the RCM MED&amp;BS-LP 12016 report.</p> <p>MS are to report data by métiers as indicated in the table in the Annex.</p>
<b>Responsible persons for follow-up actions</b>	MS
<b>Time frame (Deadline)</b>	End of October 2016

<b>LM 19. RCM MED&amp;BS – LP 2016 WP Recommendation N</b>	<p><u>Table 1E: Anadromous and catadromous species data collection in fresh water</u></p> <p>RCM Med&amp;BS 2016 agrees with the decision reached during the GFCM meeting held during the Joint ICES\EIFAAC\GFCM Working Group on Eels (WGEEEL); to have a pilot study including at least one or two representative EMUs with river basins.</p> <p>Furthermore, RCM Med&amp;BS 2016 recognizes the difficulty of covering all Management Units. In this case sub-sampling of Management Units is recommended.</p>
<b>Justification</b>	<p>The main scope of this pilot project would be to study the recruitment of glass and yellow eel and devise the methodology to be adopted for data collection about these species. Consecutively, data collection will be extended to the rest of the EMUs.</p>
<b>Follow-up actions needed</b>	<p>MS are to perform a pilot study taking at least one or two EMUs into consideration during the first year of data collection (2017). Sampling is then to be extended to the rest of the EMUs, with the possibility of sub-sampling if required.</p>
<b>Responsible persons for follow-up actions</b>	<p>MS, LM</p>
<b>Time frame (Deadline)</b>	<p>End of December 2017</p>
<b>LM Comments</b>	<p>LM is concerned that this is not in line with EUMAP. Therefore, before setting a pilot study as recommended above, MS concerned shall clarify the legal aspect of this issue with the Commission.</p>

<b>RCM MED&amp;BS - LP 2016 WP Recommendation N</b>	<p><u>Table 1F: Incidental by-catch of birds, mammals, reptiles and fish</u></p> <p>For 2017, MS may use the observers onboard required for the collection of biological data to collect this information (i.e. number or weigh). When onboard, MS are to collect data about these catches taking place since January of the same year.</p>
<b>Justification</b>	<p>During RCM Med&amp;BS 2017 a list of métiers important for incidental catches will be prepared and agreed. Based on this list and end user needs, starting from 2018, MS will carry out pilot studies on a yearly basis. The RCM will select the métiers which will be sampled through the pilot studies in the following year. MS shall then perform onboard observations for those métiers which do not fall within the biological onboard observations but which are deemed important for incidental by-catch of PETs. Member States are encouraged to follow the methodology provided by Mare 19 project, Deliverable.3.2 - handbook with guidelines for monitoring incidental by catch and processing the collected data.</p>
<b>Follow-up actions needed</b>	<ul style="list-style-type: none"> <li>• MS may use the observers onboard required for the collection of biological data to collect this information during 2017.</li> <li>• MS will then perform pilot studies and follow data collection as to be recommended by RCM Med&amp;BS 2017.</li> </ul>
<b>Responsible persons for follow-up actions</b>	MS, RCM Med&BS 2017
<b>Time frame (Deadline)</b>	End of December 2019

## 8. Landing obligation

<b>RCM NA 5: Implication of the Landing obligation</b>	
<b>RCM NA 2016 Recommendation</b>	<i>RCM NA recommends that MS continue to account for the additional catch fractions brought about as a consequence of the landing obligation. They need to account for them in their recording of transversal variables and biological data and adapt to the annual updates of the regional discard plans. MS states should continue to review, monitor and advise on the impact of the implementation of the landing obligation on sampling catches for biological data, catch data and catch estimates.</i>
<b>Justification</b>	<p>The landing obligation has introduced a new category of catch (Below Minimum Size, BMS) and this fraction of the catch will be reported, sampled and required in any catch estimation. This necessitates that national institutions and ICES through all stages of the recording, storage and estimation processes are able to accommodate this fraction.</p> <p>Apart from in the Baltic there is little data, to date, to be able to analyse the impact of the obligation on the quality of catch estimates and the scale of the issue in other regions can only be perceived. Annual updates of discard plans may change the nature of the fisheries currently being sampled and the data collectors and end-users will need to be live to these changes.</p> <p>As the landing obligation beds in, catch data and other metrics will become more available to assess the impact of the discard plans on catch estimates.</p>
<b>Follow-up actions needed</b>	<ol style="list-style-type: none"> <li>1. All MS to complete draft monitoring template ANNEX XXX</li> <li>2. RCM Chairs to appoint pan regional contributors for intersessional work</li> <li>3. RCM Chairs to submit an early data call in 2017 to allow intersessional analysis of RDB data.</li> <li>4. Pan regional intersessional group to: <ol style="list-style-type: none"> <li>a. review 2016 BMS CS and CL data on the RDB and source and review other available metrics (e.g. refusal rates)</li> <li>b. contribute to and review ToRs &amp; outcomes of WGCATCH 2016</li> </ol> </li> </ol>
<b>Responsible persons for follow-up actions</b>	RCM Chairs, MS, Intersessional Group
<b>Time frame (Deadline)</b>	RCMs 2017

## 9. Workshops and pilot studies

<b>LM 20. RCM NA 2: Assigning trips to métier</b>	
<b>RCM NA 2016 Recommendation</b>	<p><i>The RCM NA strongly recommends a data compilation workshop to:</i></p> <ol style="list-style-type: none"> <li><i>1. Standardise the processes that use trip based transversal data to determine the métier.</i></li> <li><i>2. Consider criteria for aggregating data for different end-users (JRC, ICES and other RFMOs).</i></li> <li><i>3. Investigate a framework for managing métier and fleet descriptions when needed.</i></li> </ol>
<b>Justification</b>	<p>All catch, effort and sample data is uploaded to the RDB by métier and limited to a reference list of RCM agreed métiers defined by ICES area.</p> <p>MS submit their data to ICES on Intercatch disaggregated by métier and the JRC for FDI datacalls and other RFMOs also request the data by métier without reference to the RCM agreed list of métiers. MS have independently developed their own code and processes for calculating species assemblage and rules for merging métiers. This is initially based on the transversal data for a trip which may or may not cover more than one métier. These methods are not necessarily consistent between countries and even between agencies within countries and could be based on, for example, a foreshortened list of species assemblages; rules for particular gears; catch by weight and or value and relative ratios. The impact of the different methods is not known but as data is being compared more readily at a regional or international level, so as to improve on confidence in current assumptions simple rules and standards need to apply.</p> <p>Since 2009 RCMNA has regularly recommended MS provide, maintain and update fleet descriptions for all sampled métiers to better define and compare similar fleets and the sampling of them between nations. This has been only moderately successful with no clear repository for them. ICES Expert Working Groups are now also requesting fishery and métier descriptions as part of their data calls. A repository and better strategy is required for collating and maintaining MS descriptions.</p>
<b>Follow-up actions needed</b>	<p>JRC or ICES to setup a transversal data workshop:</p> <ol style="list-style-type: none"> <li>1. to review current algorithms and processes for allocating a trip to a métier based on catch data.</li> <li>2. to provide standard guidelines for determining or allocating a trip to a métier or multiple métiers and how to aggregate the data.</li> <li>3. to define a strategy for storing and maintaining national fishery descriptions relative to the defined métiers.</li> </ol>
<b>Responsible persons for follow-up actions</b>	<p>ICES or JRC to set up workshop</p> <p>NC and MS to provide contributors and to implement guidelines</p>
<b>Time frame (Deadline)</b>	3 years
<b>LM Comments</b>	Liason endorses this recommendation but the RCGs should consider how this is best progressed. RCGs should provide ToRs and a formal proposal for a joint JRC ICES series of workshops.

<b>LM 21. RCM LP n: Workshop on Longline data collection coordination</b>	
<b>RCM LP 2016 Recommendation</b>	<p>EU countries participating in tropical tuna purse seine fisheries started coordinating port sampling and onboard sampling one decade ago. An annual coordination meeting that take place since 2005, which since few years ago is organized under the Data Collection Framework.</p> <p><i>Regarding the rest of the LP fleets, this regional coordination does not exist. The RCM LP considers that a workshop to coordinate longline fisheries in which matters such as data acquisition, sampling methodology, and sampling coordination issues are discussed would be beneficial for the data collection on LP species.</i></p>
<b>Justification</b>	<p>France and Spain coordinate their tropical tuna purse seine fisheries in an annual coordination meeting that take place since 2005 alternatively in Spain and France with participation of scientists from both countries. During this meeting, sampling methodological issues are discussed; tools and sampling protocols are shared, discussed and eventually revised. Regional sampling coordination and possible bilateral agreements are also discussed. Scientists from non EU landing countries like Seychelles, Madagascar, Côte d'Ivoire, Sénégal and Ghana who participate in the data collection are also invited. Specific or common scientific contributions, as well as data calls, to tuna RFMOs (ICCAT/IOTC/WCPFC/IATTC) are jointly elaborated.</p> <p>The existing trend in coordination for the tropical tuna purse seine fisheries can be understood as an example towards the regional sampling scheme. Regarding the rest of the LP fleets, this regional coordination does not exist, thus the group considers that organizing this workshop will be really beneficial for the LP regional sampling coordination.</p>
<b>Follow-up actions needed</b>	Coordination between research institutes involved in LL fisheries
<b>Responsible persons for follow-up actions</b>	MS with LL_LP fisheries, COM, RCM LP
<b>Time frame (Deadline)</b>	
<b>LM Comments</b>	LM endorses this recommendation

<p><b>LM 22. RCM LP 2016 Recommendation</b></p>	<p>Based on end user feedback (IOTC/WCPFC) <i>“For Longline it is needed to increase observer coverage in some fleets. Thus, there is a lack of bycatch information”.</i></p> <p>Under EU MAP, Chapter III/ 3 (a) states that :<i>“Where data collected during observer trips are not considered to provide sufficient data on incidental by-catch for end-user needs, other methodologies, shall be implemented by Member States. The selection of these. Methodologies shall be coordinated at marine region level and be based on end-user needs.”</i></p> <p>Electronic Monitoring System (EMS) has been tested through different pilot studies in purse seine, and its capabilities have been proven. On the basis of experience gained during these trials, minimum standards for EMS on Purse seine are already developed. These results have been presented to ICCAT/IOTC Scientific Committees with the aim of implementing EMS as a valid tool comparable to observers.</p> <p>The RCM LP recommends a feasibility study on Electronic Monitoring System for Long Line, in order to follow the same steps that have been carried out on purse seine fleet.</p>
<p><b>Justification</b></p>	<p>Based on tuna RFMO feedback, main data deficiencies seem to be derived from the low observer coverage of some fleets, where the minimum requirement of 5% coverage is not achieved.</p> <p>Electronic Monitoring Systems (EMS) on fishing vessels have been developing rapidly during the last decade. EMS trials and pilot studies have been conducted in different fisheries in order to test their effectiveness as an alternative or complement to traditional human observers. EMS has been tested through different pilot studies in purse seine, and its capabilities have been proven. Furthermore, on the basis of experience gained during these trials, minimum standards for EMS on Purse seine are already developed.</p> <p>This pilot study could be considered as the first step to follow the same process that has been carried out on purse seine fleet.</p>
<p><b>Follow-up actions needed</b></p>	<p>Coordination between MS involved in LL fisheries with troubles in reaching desirable observer coverage. Selection of fleet for the pilot study</p>
<p><b>Responsible persons for follow-up actions</b></p>	<p>MS with LL_LP fisheries, COM, RCM LP</p>
<p><b>Time frame (Deadline)</b></p>	
<p><b>LM Comments</b></p>	<p>LM endorses this recommendation</p>