

Strengthening the collaboration between scientists and fishing industry in view of improving scientific advice.

Working document addressing the issues to be tackled in the WKDDRAC3 meeting.

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The Third Data Deficiency Coordination Workshop with the RACs (WKDDRAC3), was planned to be chaired by Joël Vigneau (France) and Barrie Deas (UK), at ICES in Copenhagen, Denmark, on 16 January 2013 to:

- a) Evaluate the progress done after WKDDRAC2
- b) Identify the main data issue of the northwest and southwest water stocks and agree on actions to improve data deficiencies;
- c) Data preparation for ICES stock benchmark meetings;

The one-day workshop had to be cancelled after too few scientists could attend the meeting. By correspondence, the authors of the working document, potential participants to WKDDRAC3, wanted to reiterate their willingness to continue working together with the industry and improve the collaborative work undertaken so far. This document is a summary of the mailing exchange which took place in relation to WKDDRAC3 terms of reference.

The cancelation of WKDDRAC meeting is an alarming signal demonstrating the unsustainability of the current model and the gap between the increasing demands on the fisheries science community and the declining of national budgets and human resources. Prioritisation must be put high on ICES and European Commission agenda, and this should start with reducing the frequency of assessments and advice for many species, whilst allocating freed-up resources towards improving data quality and analytical methods supporting management advice.

From the two first WKDDRAC reports, it is clear that two levers may be pulled to address data deficiencies, namely (i) putting together a task force for addressing the main data deficiencies and (ii) work on models less data hungry and frequency of assessments and advice allowing focusing more on the quality of the analysis. WKDDRAC 1 & 2 elaborated on the first point, expectations are on the forthcoming DC-MAP¹ to progress on the second. For this to happen, structural communication with legitimate stakeholders on setting priorities in data collection must be put in place within the DC-MAP, the details of which must be discussed no later than the next STECF/EWG on data collection.

Industry cooperation within the existing requirements of the Data Collection Framework Regulation was highlighted by WKDDRAC2. Facilitating the access to the fishing vessels by

¹ DC-MAP : Data Collection – Multi-annual Programmes is the planned framework to replace the EU Data Collection Framework (DCF) for the period 2014-2020.

on-board observers and allowing access to VMS data for scientific purpose were specifically mentioned.

Since WKDDRAC2, scientists acknowledge significant progress in terms of willingness of the industry to provide sampling platforms for various projects and working towards solving some of the data issues. Despite the good intentions and improved communication, the impact it had on improving stock assessment and advice remains limited and inefficient. Very few stocks benchmarked in 2012 mentioned the input of collaborative work. Progress from task forces is confidential and can hardly be found in any assessment report.

Collaborative actions have been initiated in different European countries, with more or less success and benefits to assessment quality. The following examples can be highlighted:

- DEEPFISHMAN² with the use of fishermen's log, cognitive maps and questionnaires for improving deep-water species assessments;
- Self sampling programmes are currently used in stock assessment such as cod Celtic sea, blue whiting in France,
- In Ireland information on the volume of frozen graded *Nephrops* is provided by industry to reconstruct the size and sex distributions of the landings from the Porcupine Bank.
- There are also industry funded surveys for *Nephrops* and boarfish in Ireland³.
- Fisheries Science Partnership (FSP) programme⁴ in UK has already issued concrete results. For example data from the FSP roundfish surveys were included during the benchmark of cod VIIa in 2012 (ICES WKROUND 2012).
- Sentinelle fisheries, reference fleet or fully documented fisheries are ongoing with the objective of providing a better quantification and spatialization of effort and catches. Examples like RECOPECA⁵ in France have the potential to provide the required information if more widely deployed.
- SWWRAC and Spanish scientist with a proposed action plan to improve data from anglerfish and megrim by means of industry knowledge incorporation in relation to tuning fleets to be used in the assessment. On board collection of anglerfish gonads for maturity data improvement. Proposal of project for improving data used in the assessment of anglerfish and megrim in Subarea VII and Div. VIIIabd presented at RCM (Sept. 2012) for funding above actions plus other already identified actions to improve assessment and consequently management.

A FP7 research project is currently being prepared on the use of fishing vessels as monitoring platforms (project SENSOfleet). If accepted and financed, this will provide a lot of focus and scientists time from next year on, to progress on these aspects. Eventually, a compilation of all the actions undertaken with a return of experience and benefits for the quality of stock assessment would be extremely relevant for promoting the good ideas around.

2 <http://deepfishman.hafro.is/doku.php>

3 <http://hdl.handle.net/10793/822> and <http://hdl.handle.net/10793/712>

4 <http://www.cefas.defra.gov.uk/publications-and-data/scientific-series/fisheries-science-partnership-reports.aspx>

5 <http://www.ices.dk/products/CMdocs/CM-2008/R/R1608.pdf>

A very sensitive point for the fisheries scientists was that a number of ICES advices in 2012 were penalized by the non-inclusion of Spanish data in the assessment. Any help from the RAC and the industry to resolve this situation would be highly appreciated. More generally, the scientists reiterate the conclusion of the WKDDRAC2 stating that accurate recording of landings provides the backbone for most stock assessments.

WKDDRAC2 identified that dialogue between scientists and industry on changing fishing patterns will improve understanding of fishing effort, targeting and other fishing behaviours and strategies. This was said to be a prerequisite to integrating or reintegrating commercial LPUE data into assessments. Any progress on this issue would be welcome.

Data compilation workshops were introduced in 2012, in order to be a dedicated forum on addressing data deficiencies in preparation to subsequent benchmarks. Data issues are identified by EWGs, intersession work programs are prepared but they are generally not prioritized and there is no assurance that the work will be done to address them. Commitment of national resources to evaluating and addressing the key data issues in a structured way, involving stakeholders is required. The 2013 data compilation workshops to be held in October 2013 could serve as test cases for improving the procedure. From the list given after ICES/ACOM December 2012 meeting, demersal stocks concerned for the NWW, SWW and NSRAC are :

- Four-spot megrim (*Lepidorhombus boscii*) in Divisions VIIIc and IXa
- Megrim (*Lepidorhombus whiffiagonis*) in Divisions VIIIc and IXa
- Hake in Division IIIa, Subareas IV, VI, and VII, and Divisions VIIIa,b,d
- Hake in Divisions VIIIc and IXa.
- Plaice in Skagerrak
- Plaice in Kattegat, Belts and Sound
- Haddock in Subarea IV (North Sea) and Division IIIa West (Skagerrak)
- Haddock in Division VIa (West of Scotland)
- Sole in Divisions VIIf, g (Celtic Sea)
- Whiting in Division VIIe-k
- *Nephrops* in the FU 20 (Labadie, Baltimore and Galley), FU 21 (Jones and Cockburn)
- *Nephrops* off the southeastern and southwestern coasts of Ireland (FU 19)

As a supplement, three stocks which could not be assessed in 2012 due to data quality problems:

- Megrim (*Lepidorhombus whiffiagonis*) in Subarea VII and Div. VIIIabd
- Black Anglerfish in Subarea VII and Div. VIIIabd
- White Anglerfish in Subarea VII and Div. VIIIabd.

Most of these stocks require investigations on misreporting, LPUE and commercial tuning series, discards estimates, spatial changes in effort, biological variables and parameters, etc... all points where fishermen knowledge and information may be extremely relevant.

New challenges are coming their way under the reformed CFP, potentially changing both fishing practice and our ability to sample and monitor catches. It is therefore more than ever necessary to strengthen the collaboration with the industry to address these challenges and implement smarter and sustainable sampling data collection programmes.