MINUTES

North Western Waters Advisory Council

FOCUS GROUP ON HAKE, ANGLERFISH AND MEGRIM

Bilbao Exhibition Centre (BEC)

Thursday 18 April 2013

15:00 – 18:00 h

President: Víctor Badiola
Rapporteur: Alexandre Rodríguez

1. Welcome

1.1. Opening

The President and moderator of the Focus Group, Victor Badiola, opened the meeting and welcomed the participants. The full list of participants is included in Annex 1.

There were apologies received from the Group members Jesús Lourido, Eduardo Míguez, Barrie Deas, Paul Trebilcock, John Crudden and Johnny Woodlock; and from Michael Keatinge, Conor Nolan and Joanna McGrath, from the NWWRAC Secretariat.

1.2. Adoption of the meeting agenda

Sean O´Donoghue asked to switch the order of points 2 and 3 and remove point 4, which would be included in the previous one so that all members have sufficient time to express their opinions. The Agenda was adopted with the changes as mentioned so that point 3 became point 2 (and vice versa) and point 4 was removed.

1.3. Summary of the work and advice provided by the NWWRAC

It was pointed that two reference documents (the NWWRAC work plan for Northern Hake and the letter on improving assessment of Anglerfish stocks in Area VII) had been made available to members and any interested parties on the specific NWWRAC meeting site[1].

[1] http://www.nwwrac.org/Meetings/Meetings_ENG/Navigation.php?id=661&language=Espanyol

2. Initiatives of Industry-Science Collaborative Work on Data Deficiencies

The two presentations mentioned below were given under this point. Both presentations are available on the NWWRAC website for consultation:

1. Assessment, advice, data issue and other actions to improve knowledge on Anglerfish stocks (*L. piscatorius and L. budegassa*) in Subarea VII and Divisions VIIIa,b,d,e[2] - Iñaki Quincoces (AZTI/ICES)

2. WKFLAT 2012 and WGHMM 2012 outcome: data issue, influence on the advice on Megrim (*L. whiffiagonis*) in Subarea VII and Divisions VIIIa,b,d,e[3] - Marina Santurtún (AZTI/ICES)

ANGLERFISH IIIa, IV y VI

Scientific Presentation – Carmen Fernández (Vice-chair of the ICES Advisory Committee ["ACOM"])

A benchmark workshop took place on data compilation of the Northern Anglerfish stock in 2012 and 2013 (follow-up) in ICES Subdivisions IIIa-IV-VI.

The goal is to seek to obtain a full analytical assessment and catch options tables. Unfortunately, the "benchmark" workshop did not attain it due to existing problems with age estimation of Anglerfish and the lack of information on the stock spawning component. Therefore, in May of this year the ICES Working Group will carry out an assessment based on stock trends with a view to release the ICES official advice in late June.

Comments from the floor

Sean O´Donoghue referred to the change of dates to conduct scientific surveys. In the last two years the survey was brought forward from autumn to spring. After discussions with scientists, it was concluded that it would be put back again to the original date that is in autumn of this year. Mr. O'Donoghue asked if this will have any impact on the perception of the stock and data consistency and robustness for time series.

Carmen Fernández replied that she would consult with the relevant scientists about the exact reason for moving surveys ahead to spring in the past and asked for more information on the Scottish science-industry partnership surveys to obtain biological data.

[2] www.nwwrac.org/admin/publication/upload/AnglerfishVII_AZTI_NWWRAC_Bilbao_April2013_IQ.pdf
[3] www.nwwrac.org/admin/publication/upload/MegrimVII_AZTI_NWWRAC_Bilbao_18April2013_MS.pdf

Mike Park mentioned that Professor Paul Fernandes explained that the assessment model has improved but they still are to solve out the problem related to age estimation. The fact of advancing the survey date to spring was mainly due to the climate and sea conditions. As regards the science-industry partnership, the Scottish industry in conjunction with the Marine Scotland has started a self-sampling pilot program for a number of species including Anglerfish stock. There is a need to obtain further information on specimens of greater age.

ACTION: Mike Park to periodically feedback the NWWRAC on the progress done in the Scottish partnership project towards the improvement of knowledge on this stock.

ANGLERFISH VII - VIIIabd

Scientific Presentation – Iñaki Quincoces (AZTI/ICES)

There are deficiencies in scientific assessments of this stock. For the moment it is not possible to obtain an analytical assessment of this species due to the problems outlined below:

1. Tuning Data

There are no tuning data available for standard commercial species. It would be very important to gain access to logbook data, which should be made available in accordance with the Data Collection Framework Regulation.

2. Marketing

The legislation related to Anglerfish marketing is different from the rest of fisheries legislation: for example, marketing Anglerfish below 0.5 Kg is not allowed (which correspond to a size of 35 cm approximately) however catch is permitted. Accordingly they are not considered as discards from a technical viewpoint.

ACTION: The NWWRAC to draft a letter asking the Commission to withdraw the legislation in force insofar as commercial provisions for Anglerfish is referred.

3. Tagging

A tagging program is also needed at Pan-European level with a view to have an aged-based assessment model which takes into account the different stock ages and structure. Such program is expensive to conduct. The NWWRAC may ask the Commission to assist for the provision of funding.

4. Differentiation of species (*Lophius pescatorius* and *Lophius budegassa*)

It is necessary to improve information on the biology identification of this species. There are two subspecies of anglers which are subject to the same TAC in terms of management. Catches are difficult to quantify since fleets operate in fishing grounds with different patterns, different mesh sizes, different fishing areas, etc.

5. Quantification of Mature Female

It is too difficult to catch big size females during trawling. Big females disappear from fisheries during the spawning season, thus no representative samples are available and its status becomes difficult to know.

Comments from the floor

Eibhlín O'Sullivan asked whether trends in fishing rates were based on scientific surveys or information provided by Member States. And what are the existing gaps in terms of information.

Iñaki Quincoces replied that both effort measuring indicators from fisheries institutes and landings information based on the "*logbooks*" were used. The problem is not the information itself, but the problems of adaptation to the national databases (for example, France).

Furthermore, although scientific surveys are standardized, there are few fishing index data (for example, technical change or "*technological creep*", improvements in fishing capacity or "*Catchability*"), which somewhat distort perceptions on abundance.

Carmen Fernández pointed out that indicators for abundance trends are used and that same are based on research surveys. There is an ongoing debate about the use of commercial CPUE as abundance index in assessments, therefore technical changes affecting the fishing capacity of the fleet should be considered.

Eibhlín O'Sullivan expressed the Irish fleet availability to collaborate and try to assist to clarify the lack of data.

Iñaki Quincoces said that the fishing industry could assist in improving knowledge about this species by reporting on catches of large spawning females. By gutting it on board we can know if the individual caught is male or female, and whether the female is mature or not. However, the current sampling level is very low given the current way in which the Data Collection Framework is set up.

Julien Lamothe added that, in her capacity as data coordinator of the South RAC and working with Caroline Gamblin (her counterpart in the NWWRAC), are overseeing a project in France in collaboration with Ifremer to develop a self-sampling protocol to identify the two species of Anglerfish and quantify discards of small animals.

Marina Santurtún explained that at a meeting of the South RAC held in Lisbon in July 2012 a summary and work plan to improve knowledge on Megrim and Anglerfish stocks was proposed. Industry cooperation would be limited to working in the self-sampling program and enabling observers to embark on board fishing vessels to quantify discards.

ACTION:

The NWWRAC will support AZTI request for funding for the development of a project to improve biological assessment of Anglerfish and Megrim stocks in areas VII and VIII where the industry involvement can be accounted for. The aim is to contribute to a substantial improvement in data being incorporated into the assessment, in which the fisheries sector would play an essential role. The European Maritime Fisheries Fund (EMFF) could be the ideal instrument for funding, or otherwise the Commission's DG MARE could launch lots for tender on studies led by interested institutes with the co-operation of fishing industry.

The Secretariat will circulate to members the project proposal submitted by AZTI to the South RAC in 2012

3. ICES Advice: Assessment and Methodology

Scientific Presentation – Carmen Fernández (Vice-chair of the ICES Advisory Committee [ACOM])

3.1. Overview of Advisory Process and Decision Making

The Vice-Chair of ICES ACOM, Professor Carmen Fernandez, explained the ICES advisory process and the phases of the process, the methodology and categorization of stocks and the assessment models used, with particular reference to the MSY approach and data-limited stocks.

She also briefly looked at the biology of Northern Hake, Anglerfish and Megrim stocks in Subareas IV, VI and VII. Finally, Prof. Fernandez summarized the ICES strategy and developments so that a multi-species and mixed fisheries approach is incorporated in its advices.

The full presentation in question is available for consultation on the NWW RAC website[4].

3.2. Data limited stocks

There are more than 100 stocks lacking a complete analytical assessment.
In 2012, ICES first offered a quantitative assessment of data deficient stocks. A classification of stocks into six categories based on the information available (high to low) was set up.

Progress will be continued as to the evaluations methodology at the WKLIFE3 workshop - "*Workshop on the Development of Assessments based on Life history traits, exploitation characteristics and other key parameters for data limited stocks*". This workshop will be held in the October 2013

Anglerfish and Megrim stocks (except Megrim in IVa and VIa) are classified under category 3. *"Stocks for which survey-based assessments Indicate trends*", i.e. stocks with reliable abundance indices (from CPUEs of scientific or commercial surveys), which indicate trends. The advice is based on recent catches, modified according to the index trend over the past 5 years (an average of two years is calculated in relation to the previous 3 years for abundance index, and the result is multiplied by the recent catch).

[4] "ICES advisory process: assessment and methodology" - Carmen Fernández
www.nwwrac.org/admin/publication/upload/ICES_Advisory_Process_Methodology_NWWRAC_Bilbao_18April2013_CF.pdf

Once this method is calculated, there would still be two steps

1. Limiting the results obtained by the method in relation to recent catches to a 20% maximum change,

2. Applying a precautionary margin of 20% reduction (which is applied to the results obtained in point 1) if the stock status in relation to reference points is unknown

There are some exceptions to the rule of applying a margin reduction. It is recommended to reduce exploitation unless there is strong evidence that the stock is increasing or exploitation (F or effort) has decreased substantially, and rather than being applied every year, it is put off to see the stock evolution following the initial application. In principle, few changes are likely to arise in advice on data limited stocks, which might remain constant for a number of years.

MEGRIM IVa - VIa

Scientific Presentation – Carmen Fernández

A "benchmark" workshop took place in 2011 and another in 2012. Age information remains imprecise with no significant sampling regarding geographic distribution. The growth of this species depends on the depth at which it is located.

The assessment model currently used for this stock is based on biomass dynamics, for which the use of age or length data is not required to evaluate the stock status. The advice for this stock is based on the maximum sustainable yield (MSY).

MEGRIM VIIbk, VIIIabd DLS

Scientific Presentation – Marina Santurtún (AZTI/ICES)

A "benchmark" workshop was organized in March 2012, where a review of data availability and quality (2010) was conducted with a view to their integration into the FG of May. We identified the faults or shortfalls the assessments are suffering from and tried to understand how it affects the management advice. It is worth mentioning that there was an improvement of data following the workshop.

The presenter showed a table with landings and discards data by countries and CPUEs of tuning fleets representing three Member State:

- Spain → Vigo trawling fleet with data divided into two temporal series, one between 1984-1998 and another between 1999-2010, due to the technologic change by metiers enabling assessments improvement.
- France → Series obtained by fleet rather than by metier.
- Ireland → Innovative CPUE index accepted by the model

In the current evaluation model the total catch (landings + discards) is considered. Consideration is being given to the fact of incorporating a novel statistical assessment model with details of catches by age, which allows for "holes" or absence of data for certain years in the information provided by national fleets. The idea is that the new assessment model can absorb inconsistencies and heterogeneity of base data regarding effort, catches by age, discards, etc.

Comments and Questions from the Floor

Hugo González said that Megrim minimum landing size has decreased from 25 to 20 cm. This would have a direct relationship with the catch of smaller individuals that can now be traded in the market.

Marina Santurtún considered that this could partially explain the differences in catch by age, but yet it is happening in other sizes and ages. Therefore the main problem is that the underlying data are not good and accurate estimates cannot be obtained, only trends. Hence, the stock is classified under Category 3, working with trends. Discards are estimated to be 25% by weight of the stock. Despite the increase in biomass, the tendency of which is estimated at 25%, the window of uncertainty and precautionary margin is applied due to the lack of knowledge of exploitation data and the fact that there is no discard data array.

NORTHERN HAKE IIIa, IV, VI, VII, VIIIabd

Scientific Presentation - Carmen Fernández

A transitional framework towards maximum sustainable yield (MSY) is established since the ICES have an analytical assessment and catch options table. The assessment is not based on age but on sizes. We performed a comprehensive evaluation in 2011 (could not be updated in 2012 because of Spanish data problems) and each year a report is issued in accordance with the transition framework to MSY in order to achieve Fmsy in the 2015

ACTION: The ICES approach on mixed fisheries will progress to include and consider technical interactions. It will strengthen partnerships with stakeholders (RACs) and deepen on those synergies and collaborations already formed - for example, ICES-RAC initiatives to mitigate data deficiencies and GEPETO project

Comments and Questions from the Floor

Hugo Gonzalez recalled that the Northern Hake biomass exceeded 140,000 t for two consecutive years, and now is estimated to be above 150,000 tons

Furthermore, Hugo raised three reflections and issues:

1. Is the ICES still aiming at reaching MSY value in 2015 taking into account that the Council decision reports about extending the time limit?
2. In view of how the stock is, can we assume that the purpose of the Recovery Plan was attained?
3. How is the information on the fisheries status conveyed to the ICES?

Carmen Fernández replied:

1. The ICES has not contemplated any change in the time frame for the MSY application. Political debates are out of her control.
2. The Northern Hake stock assessment could not be updated last year due to data problems. Therefore, it is a mere "roll over" of last year assessment. The stock seems to be doing well in terms of tendency and the ICES Working Group will assess this stock and reanalyze the reference points in this year, even though it is uncertain that Frms values will be reconsidered.
3. Member States send the information to the ICES in accordance with the Data Collection Framework Regulation (DCF).

Mike Park mentioned that Scotland is having problems with the stock migration towards the North Sea and the consequent increase in abundance. This may probably be a "choke species" case giving rise to future closures of other fisheries as indicated in recent scientific studies[5].

Carmen Fernández clarified that a possibility is considered in that the Northern Hake would be included in the North Sea mixed fisheries analyses this year.

Juan Carlos Corrás showed concern that the impact of a predator species like Hake may jeopardize other species due to its current abundance and alter stock balance.

Carmen replied that considerations of this type are being analysed for the first time in relation to different species and regions as part of the development of a multi-specific approach.

Juan Carlos Corrás asked if the possibility that landings will decrease due to effort restrictions rather than stock abundance reduction is taken into account in the assessment model.

Carmen replied that fishing effort restrictions are not included in the assessment model. Landings may decrease. If it is the case, the stock is well and its good status should be reflected in the surveys abundance index or CPUE… Consequently, there are different variables in the model which facilitates to achieve a reliable assessment.

FLBEIA – Tool of Bioeconomic Simulation for Mixed Fisheries
Presentation by Marina Santurtun (AZTI Tecnalia)

FLBEIA is not a tool for assessment model but a management support toolbox,

FLBEIA is essentially a bio- economic simulation toolbox:

- Oriented to conduct impact assessments of multiannual management plans
- Useful to evaluate different Management options.
- Multi-stock, multi-fleet, and multi-metier.
- Modular, built on sub models basis
- Incorporates biological and economic models in a flexible way to enable the selection of different economic, social and environmental variables, as well as segmentations to be done as regards fleet, effort dynamics, etc.
- Fcube is incorporated in FLBEIA, together with profit maximization models, thus including both effort dynamics and capital.
- Contributes with value added to managers and stakeholders

[5] "*From a recovery stock to a choke species: the example of North Sea hake*" – ECOFISHMAN
Authors: A. Baudron, D. Speirs, M. Heath, C. McCaig, P. Fernandes
www.nwwrac.org/admin/publication/upload/Northern_Hake_EAPO_Members_Mtg_12March2013_EOS_JS.pdf

- A practical example can be found in DEEPFISHMAN Project for a case study on French Deepwater mixed fisheries, including deep-sea species like Blue ling, Black scabbarfish, Saithe, Sikis or Roundnose grenadier
- Allow for different management scenarios to be compared based on biomass, including and incorporating uncertainty to facilitate decision making.
- It means a step forward in mixed fisheries management and ecosystem approach.

Conclusion

The Chairman thanked all members and observers for their attendance at the meeting, the scientific speakers for their presentations and quality thereof, the Secretariat for the organization and preparation of the meeting and the interpreters for their excellent work.

The meeting was adjourned at 18 h.

ANNEX I. LIST OF PARTICIPANTS

Members of the Focus Group

Víctor Badiola (Chairman)

Bertie Armstrong
Alan Coghill
Juan Carlos Corrás
Thomas Díaz
José Manuel Fernández Beltrán
Hugo González
Julien Lamothe
John Lynch
Jennifer Mouat
Jacques Pichon
André Gueguen
Sean O´Donoghue
Eibhlín O´Sullivan
José Luis Otero
Michael Park
Mercedes Rodríguez Moreda
Jane Sandell
Caitlín Uí Aodha

Scientific Experts

Carmen Fernández (ICES)
Iñaki Quincoces (AZTI/ICES)
Marina Santurtun (AZTI / ICES)
José Castro (IEO/ICES)
Hilde VanHaecke (ILVO)

European Commission – DG MARE
Roy Griffin and Laurent Markovic

National Authorities / Member States

Ramón de la Figuera (MAGRAMA – Spain)
Rémi Méjecaze (DPMEM - France)

NWWRAC Secretariat
Alexandre Rodríguez (Rapporteur)