

SUMMARY REPORT

Annual Meeting between ICES and the Advisory Councils (MIACO) Author: Alexandre Rodriguez, Executive Secretary LDAC Date: 27 January 2017

DISCLAIMER NOTE: This is a summary of the meeting from the LDAC Executive Secretary highlighting those issues which are deemed to be relevant for the LDAC. Therefore, it is not intended to cover all topics that were dealt with at MIACO as this will be covered by the ICES ACOM report (e.g. determination of MSY ranges; use of multiannual management plans as a basis for advice and alignment of its objectives with ICES methodology and Precautionary Approach).

Main topics discussed and relevant actions agreed

1. Overview

The meeting was well attended by over 20 delegates from 5 Advisory Councils out of the existing 8 (all except the South Western Waters, the Mediterranean Sea and the Market ACs), as well as ICES scientists and representatives from third non EU countries (i.e. the Norwegian Fishermen's Association). Due to justified last minute absence of the Chair and the First and Second Vice Chairs, the LDAC was solely represented by its Executive Secretary, who provided an overview of the work between the LDAC and ICES in 2016 and identified some potential advisory needs from the LDAC for 2017.

The agenda for MIACO and the list of attendees is appended to this report.

2. General considerations and main issues for collaboration ICES - ACs

- The Advisory Councils agreed to take ownership together with ICES in organising a bilateral preparatory meeting prior to MIACO, together with setting the agenda and co-chairing this meeting. The Baltic Sea Advisory Council (Chair + Secretariat) was appointed as first coordinator dealing with ICES for next year.
- Enhanced cooperation is required in the process for making effective regional premeetings between ICES and AC stakeholders prior to AC Working Group meetings. It would be advisable also to channel input and participation of ACs at ICES meetings that are open to observers (e.g. Advisory Drafting Groups).
- Increased communication is demanded particularly on the scoping and the organisation of Benchmark Workshops (BW). The benchmark workshops are set to review and improve assessment data and methodology.

The benchmarking process is an important one as it might result in changes in the perception of the state of stocks and eventually shape ICES policy advice. The main output produced on the benchmarking process is the stock annex, in which the data and methods are described, and these are peer reviewed. ICES and ACs exchanged views during MIACO on how to strike the right balance for scientists to remain independent while opening up for review a stock assessment with participation of all stakeholders. This would also apply to the known as Inter Benchmark Workshops, which are "fast track" procedures dealt with by designated experts to address specific issues by correspondence.



- ICES will work with Secretariats and AC members on improving knowledge and training to access to ICES improved features of its web and SharePoint sites.
- ICES will proactively inform of their meetings calendar and plan and will provide ToR and any relevant background information for future BW meetings.
- Despite the fact that presentations of advice by ICES to the ACs are generally well structured and seem to respond to the needs of the stakeholders, ICES staff was asked by the ACs to be available at critical dates after the release of advices (i.e. end of June for demersal mixed fisheries in EU waters and end of September for widely distributed and pelagic stocks). To this purpose, maximum utilization of the MoU to be signed between the European Commission and ICES allocates 15 days for ICES scientists to participate in all the existing ACs (8) for 2017.
- ACs improved communication with ICES and participated around the clock in several physical and web meetings in 2016. However, the level of ambition also increases in terms of input, questions and level of involvement of stakeholders along the years. It was perceived that a more formalised relationship might be articulated for dealing with both specific questions on stocks assessments and other more general critical observations made by stakeholders resulting from the advice (e.g. quality control issues, how to deal with uncertainty of data, etc.)
- It would be very valuable to find a forum besides MIACO to further strengthen dialogue between ICES and ACs in order to discuss the "meta level" issues, such as progress in methodology and work on data limited stocks, implementation of ecosystem approach to fisheries management, complexities of mixed fisheries, impact of LO on ICES advisory process and models used in the assessments, etc.
- The Pelagic AC asked that ICES gives due thought and consideration to the treatment made of stakeholders' information (both editing and additions) and its inclusion into the scientific advice given their recent lack of reporting on changes made in 2016.
- Regarding VMEs, the representative of the Norwegian Fishermen's Association asked if ICES could define objective indicators for different waters and sea beds. As an example, at the present time, habitats from the Barents Sea identified by ecosystem studies commissioned by Norway and Russia do not have good quality controls and are regarded as biased when they define "no go" fishing areas, providing uncertainty to fishermen on their fishing grounds. ICES noted that there is work already from UN guidelines which might be useful or not, about thresholds for vulnerable ecosystems.
- In terms of Communications with media, stakeholders and public in general, ICES has limited resources. In terms of what it would be useful for the ACs to see in the advice, there is still room for discussion on the way the MoU between the ICES and EU constraints and shape how the advice is presented. There was also a debate on how to read/interpret the advice sheets, maybe changes to the webpage might help and maybe a glossary of technical terms. Also, it was brought up that ICES PA and CFP PA are not identical, and this brings some consequences. All these are pertinent considerations for fisheries managers for making a better integration with the different policies under the CFP (MAMPs. TCMs, discards...).
- It would be interesting for the stakeholders' perspective that ICES might consider spending less resources on surveys and more on processing data and computing, thus increasing the quality of surveys with data we are feeding (e.g. blue whiting).



- It was noted that there is not an overall and/or permanent group to look at quality of surveys. ACs encouraged ICES to take this challenge. ICES acknowledged that a huge amount of the overall costs are invested in data collection and processing, while only about a 10% of the overall budget is allocated for work in ICES by EWG. Perhaps more weight should be given to the work of scientists at Working Groups.
- To optimise efforts while ensuring adequate coverage on key stocks, it was suggested by ICES revisit of the frequency of the assessments for certain candidate stocks. This is a process that has already at its final staged and being looked at within ICES this year. It is expected that the stakeholders will be consulted soon with the view of start implementing a first tranche on 2018, and start the changes in provision of advice effectively in 2019.

3. LDAC considerations (discussed with and supported by ICES ACOM)

- The LDAC representative reminded that ACs under article 44.2. (c) of CFP reform are required to "contribute, in close cooperation with scientists, to the collection, supply and analysis of data necessary for the development of conservation measures". Linked to this, the LDAC wishes to have specific information on data gaps and data need requirements in advance for any Benchmark Workshops so the Secretariat can appoint-collect the necessary data from their members and identify/designate the relevant participants.
- It is very important to make clear linkages and effects of the implementation of the ecosystem based approach to fisheries management (i.e. systems and pressures for water column and seabed and interactions between species and habitats) and the impact of economic human activities other than fisheries on the environment and the fishing activities (e.g. oil and gas extractions or seabed mining) outside EU waters. ICES replied that a document specifically on this topic will be published soon and submitted to the LDAC Secretariat for further deliberations. It is mainly an informative document but has the aspiration of serving as basis for providing future advice on this subject matter.

MIACO Doc 6A titled "ICES and Ecosystem-based Management" is annexed to this report. ICES welcomes comments and views from stakeholders of this document, particularly on the use and application of these ecosystem overviews on fishing activities. This document is considered not as an advice on EBFM but a supporting document furnishing evidence to support to be updated every 4 years. ICES is working on this field in close collaboration with the European Environmental Agency (EEA) and HELCOM to avoid duplication of work.

- Regarding implementation of the LO outside EU waters, the LDAC announced that they will be working in improving knowledge on state of deep-water species (including deep-sea sharks) in NEAFC RA. The LDAC is currently waiting for the adoption of the EC Delegated Regulation setting *de minimis* rules for such species in NEAFC, given the inaction by MS and their lack of political will to date to set up a dedicated Regional MS Group to deal with implementation of LO outside EU waters.
- The LDAC will work on producing an advice and <u>might submit a formal request for</u> advice to ICES via the Commission to report on the existing scientific knowledge and review of stock assessments for the deep-water species as well as the availability and quality of the discard data.

The list of relevant deep-water species mentioned is annexed to this report.



- Work of the LDAC on management measures for Atlantic Tropical Tuna was also mentioned, highlighting the issue of improving knowledge and management of FADs. The Inter-RFMO meeting on FADs scheduled for April-May 2017 was flagged up as an opportunity to make progress on this topic. ICES Vice-Chair replied that ICES has not a specific mandate to deal with Atlantic Tropical Tuna although ICCAT scientists are or were in several occasions ICES scientists. However, they are not sure what ICES role would be here other than assessing implementation of LO for pelagic stocks. The ICES Working Group on survivability of species was mentioned. ICES is now advising on catches rather than landings and they include on the forecast as much information as possible.
- The LDAC announced that, in partnership with the Pelagic AC, they will be holding a Second International Conference on the North Atlantic Fisheries, with a panel dedicated to scientific issues including stock migrations and patterns due to climate change; and ecosystem considerations. This event is likely to be held in Norway in summer 2017 and an ICES representative will be invited as speaker or panelist under the LDAC funding. ICES delegates (Mark Tasker and Mark Dickey-Collas) thanked LDAC for this invitation and showed their interest in attending. It was also identified NAFO WG on Integrated Ecosystems as a reference together with work initiated in the Western Pacific.

4. ICES Summary on Fisheries overviews

This work started with the North Sea and is under phase of completion for all fisheries now: they hope to have five ecoregions completed by the end of May 2017 and the rest before the end of the year. ICES Fisheries overviews are reports giving summaries on who is fishing, landings by nation, graphs of catches by gear, stock status by group stock status for benthic fisheries, spatial distribution by gear (done on annual base).

ICES welcomes suggestions from policy makers, MS and stakeholders on management measures and regulations to be included here for getting a clearer picture of what is going on. The idea is to explore the trade-offs with different managements measures or policies, e.g. Cod as food for other species or for fisheries activities, predator-prey relations, etc.

The alternative would be to give only biological advice, but there is an economic dimension which is relevant, apart from biological indicators, and economic performance of fisheries is important here. For mixed fisheries, in MoU can be analysed how to optimize in the Baltic. EU system on ranges for F, how can you optimize the yield (as in tonnage does not reflect the economic yield...). However, some NGOs represented at the meeting did not support this idea as in their view is not for ICES to propose a MSE, as trade off analysis often influence policy.

The aim for ICES is that these fisheries overviews serve as backgrounds for developing regional MAMPs that are easily adaptable and contain clear references to data sources so it can be traced back and reviewed every 2-3 years.

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ANNEX I. Catch limits for Deep-sea Stocks

International Waters, ICES VIb, XII, XIVb

Summary description:

- Most of the TACs for this species in EU waters were set on a biannual basis (2017-2018), as a result of the agreement reached by the Council in November 2016, and as such they have been accordingly reflected in the Council Regulation on TAC and Quota 2017.
- Annex IB NEAFC FO includes 49 species: 12 are subjected to TACs by the EU; 17 are deep-water sharks (coinciding with the EU Deep-sea Regulation); and the remaining 20 not subjected to catch limits (quotas).
- NEAFC Rec. 7/13 forbids direct fishery and retention on board of deep-water sharks.
- Unknown Stocks of wide distribution, without reference points.
- Limited data: only exploitation and stock trends (Increasing/Stable/ Decreasing)
- Recommendation made on catches, by-catches and discards.
- Little quota or quota cero in several cases ("Choke Species")
- Catch and discard data insufficient, although improving in the last years.

Table of deep-water species subject to catch limits in EU waters and NEAFC

- * Regulation (CE) 2016/2285 of 12.12.2016
- ** EU Regulation 2017/127, published on 28.1.2017

			2017		2018		
Nombre especie / Species Name	Cod./ Code	Areas CIEM / Cpaco	EU	ES P	EU	ES P	TAC
Sable negro / Black Scabbardfish	BSF	I-IV y AAII	9	0	9	0	Cautelar
	BSF	V-VII and XII y AAII	2.9 54	16 8	2.6 00	14 8	Analítico
	BSF	VIII, IX y X y AAII	3.3 30	10	2.9 97	9	Analítico
	BSF	34.1.2 y AAII	2.4 88	0	2.1 89	0	Cautelar
Argentina / Greater Silver Smelt	ARU	I, II y AAII	90	0			
	ARU	III, IV y AAII	1.0 28	0			
	ARU	V-VII y AAII	3.8 84	0			
Alfonsino	ALF	III-X, XII, XIV y AAII	28 0	63	28 0	63	Analítico
Brosmio / Tusk	USK	I-II, XIV y AAII	21	0			Cautelar
	USK	V-VII y AAII	3.8 60	46			Cautelar



			20	2017		18	
Nombre especie / Species Name	Cod./ Code	Areas CIEM / Cpaco	EU	ES P	EU	ES P	TAC
Species Name	RNG/	I, II, IV y	EU	L	EU	L	
Grenadiers	RHG/	AAII	10	0	10	0	
	RNG/		27		22		
	RHG	III y AAII	8	0	3	0	
	RNG/		3.0		3.1		
	RHG	Vb - VII	52	49	20	50	
	RNG/	VIII-X, XII,	2.6	1.8	2.0	1.5	
	RHG	XIV y AAII	23	83	99	08	
Reloj Anaranjado / Orange Roughy	ORY	VII	0	0	0	0	
		I-V and					
	ORY	VIII-XIV	0	0	0	0	
Maruca Azul / Blue Ling			11.				
	DU		31	36			
	BLI	Vb -VI - VII	4	5			No De Cart I
	DII	AAII XII	35 7	34 1			No Definido
	BLI						Precautorio
Maruca / Ling	LIN	I,II y AAII	36	0			
	LIN	V y AAII	33	0			
			13. 69	3.7			
	LIN	VI-XIV	6	3.7 44			Cautelar
Besugo / Red Seabream		VI-VIII y	14	11	13	10	Gauteiai
	SBR	AAII	4	6	0	4	
			17	13	16	13	
	SBR	IX, y AAII	4	7	5	0	
			51		51		
	SBR	X y AAII	7	5	7	5	Analítico
Brótola de fango / Greater Forkbeard			24	70	24	70	
	GFB	I-IV y AAII	34	6	34	6	Analítico
		V-VII, y	24	70	24	70	
	GFB	AAII	34	6	34	6	Analítico
	CED	VIII-IX y	28	25	25	23	A
	GFB	AAII	5	8	4	0	Analítico
	GFB	X-XII y AAII	58	0	52	0	Analítico
Tiburones profundas / Deepwater Sharks	15	V-IX y AAII	10		10		Cautelar
	Specie	X y AAII	10		10		Cautelar
	s	34.1.1	10		10		Contribut
	2	aguas UE	10		10		Cautelar
Doonias (Bird Dool	2 Specie						
Deanias (Bird Beak Dogfish)	Specie	XII AAII	0	0	0	0	Cautelar
Uugiisiij	S	AII AAII	U	U	U	U	Cauteidi



ANNEX II. MIACO Doc 6A

ICES and Ecosystem-Based Management

ICES sees Ecosystem-based Management (EBM) as the primary way of managing human activities affecting marine ecosystems. Ecosystem-based Fisheries Management (EBFM) addresses the fishing sector. These approaches to management of marine activities have been described by a number of organizations (FAO, CBD, Arctic Council, NOAA,) and applied in relevant legislation (e.g. CFP, MSFD). Certain key phrases illustrate the central tenet of the ecosystem approach: management of human activities, consideration of collective pressures, achievement of good environmental status, sustainable use, optimization of benefits among diverse societal goals, regionalization, trade-offs, and stewardship for future generations.

ICES role is to provide the evidence for ecosystem-based decision making for the management of fisheries and other sectors in the ICES area. The evidence is required to explore the consequences of likely trade-offs (central to EBM) in the management of and between sectors and their impacts and services from the biodiversity of species and habitats. This is to support sustainable development aimed at both human and ecosystem well-being and stewardship of marine ecosystems. EBFM should result in fisheries management that maintains resilient and productive ecosystems. ICES provides the knowledge base to achieve this end, as encapsulated in its mission of providing the "information, knowledge, and advice on the sustainable management of human activities affecting, and affected by, marine ecosystems."

EBM is a process towards this goal, and the organization is incrementally using its network, data centre, and advisory role to provide the scientific basis for operational management. As the process is incremental, it allows ICES to respond appropriately to the changing demands of a developing policy landscape and dynamic ecosystem.

Evidence base and bools

Since 1992, the ICES Working Group on Ecosystem Effects of Fishing Activities (WGECO) has considered the framework and application of both EBM and EBFM. Through its outputs, WGECO has provided leadership in the development of major concepts, such as those underlying the European Marine Strategy Framework Directive (MSFD). These concepts have propagated throughout the ICES network, driving further development of the evidence required to provide relevant and timely operational advice.

Through the ICES data centre and with strategic partners, it provides operational information products to underpin the exploration of what can be called the safe-operational space for trade-offs. The data centre is leading European initiatives to improve collaboration between resource use scientists and conservation practioners by building common vocabularies and data sharing between organizations such as FAO, EUROSTAT, and OBIS (Ocean Biogeographic Information System). It is also working with the ICES working groups on marine spatial planning, habitat mapping, and fisheries spatial data to make the provision of spatial data consistent across various data sources, to enable clear and traceable provenance of information for decision making.

A series of integrated ecosystem assessment groups are in place to cover a number of regional parts of the ICES area (ecoregions). These groups are developing methods and tools to make the ecosystem approach operational. Their ecosystem assessments include ecosystem trend analyses, the building of Bayesian networks, and methods to qualify, quantify, and prioritize regional anthropogenic pressures. The impact of climate change on marine ecosystems is a key issue that ICES builds into its work.



Application of evidence base to EBFM

ICES provides three main outputs to support EBM: advice on fishing opportunities, fisheries overviews, and ecosystem overviews. These products are continually developing to address new information as well as changes in the ecosystem, legislation, and the drivers of fisheries. Spatial management and regional priorities are addressed as all of the advice is given by ecoregion. The ecoregions reflect both the biogeography of the ICES area and the management of the area by national and regional authorities.

Advice on fishing opportunities has evolved from the traditional focus on single species catch options. It now includes an assessment of the stock status, the exploitation rate in relation to maximum sustainable yield (MSY), and projections of the consequences of fisheries actions for each stock impacted by fisheries in the European ICES area. The assessments are a mixture of analytical and knowledge-limited (proxy) approaches which encompass target species, bycatch species, and deep sea and elasmobranch fisheries.

Where evidence exists of productivity changes in the ecosystem or fish stocks, researchers are encouraged to consider the evidence and implications for management of these changes. Advice on fishing opportunities uses rules, with associated reference points, that reflect policy objectives. The ecosystem approach is integrated into the reference points, which are based on the current state of the ecosystem and updated to reflect any effects of the ecosystem on stock dynamics. Where appropriate, such as with forage fish or cannibalistic fish, estimates of the temporal variation of natural mortality are built into the stock assessments to consider the implications for fish for top predators or density effects on stock dynamics.

The fisheries overviews are summaries of the activities and impacts of the fleets fishing in the ICES area. They describe the fleets operating in each ecoregion, the composition of their catches, and their interactions with the ecosystem, thus documenting the goods and services derived from fishing. Mixed fisheries considerations, which describes the consequences and options for management of mixed fisheries, are part of these overviews. Mixed fisheries advice highlights the impossibility of the objective of maximum sustainable yield for all stocks and provides trade-off options between different management strategies. Methods have been developed to include information on the impact of fisheries on the sea bed and the impact of bycatch of endangered, protected, or threatened species within the fisheries overviews.

Building the evidence base for EBM

The ecosystem overviews use qualitative methods to identify and focus on the top five priority human activities and resulting pressures that can be locally managed within each ecoregion. They thus put fishing activities into the context of the trends and status of the marine ecosystem as a whole. Quantitative methods to further assess these pressures are currently being developed. In many ecoregions, ICES considers that fishing contributes major anthropogenic pressures on the ecosystem. The approach of assessing activities, pressures, and state of the ecosystem provides the flexibility to monitor for cumulative effects of the pressures on the ecosystem and to accommodate impacts of climate change as they become apparent. Work is being done with the regional sea commissions – OSPAR, HELCOM, and ICES Member Countries – to keep these overviews relevant to the knowledge needs of management.

In addition to these three main areas of advice, ICES is regularly asked to provide bespoke advice on issues relating to EBFM and EBM. For example in recent years, methods have been devised to assess the status of information poor stocks, monitor recreational fishing, and explore maximum sustainable yield as a range of catch rather than as a point estimate. Advice has also been issued on the impact of aquaculture.





ICES data centre also hosts and maintains the OSPAR and HELCOM impulsive noise register, marine litter datasets (collected in conjunction with ICES coordinated surveys), a biodiversity portal (aimed at seal and bird populations) and the North Atlantic vulnerable marine ecosystem (VME) portal, which all provide a valuable resource to our partner environmental and fisheries organizations. They also facilitate the production of advice that is integrated into the overall framework for EBM in a strategic and responsive manner.

Engagement with society

People are central to EBM. Any process that engages with society needs to be transparent, adaptive, and inclusive. Assurances should be given of proper quality control so that personal bias in science and advice is minimized and good professional standards are upheld. Transparency is at the core of science and means that ICES science processes, documentation, and products must be open to observation and scrutiny for the users of the science and advice. The evidence base and methodologies used to provide knowledge products are openly accessible in the highest resolution that the underlying data sources allow. Inclusiveness is at the core of an ecosystem approach.

ICES engages with the users of its science and advice to define the issues of concern, understand interests, bring in other sources of knowledge, and ensure that advice relates to societal choices. Inclusiveness is implemented through scoping processes, where scientists engage with users and stakeholders to ensure that their questions and issues are addressed. ICES works hard to ensure the legitimacy and credibility of its advice. The "benchmark" is now widely used throughout the organization to enable stakeholder input into method development and knowledge acquisition. Industry-science partnerships feed information through to ICES products. Working groups look at the provision of goods and services, and its strategic initiative on the human dimension challenges. ICES and its partners work to incorporate trans-disciplinary approaches to the provision of knowledge for society, whilst also liaising with international bodies and research projects to maintain relevance. Ensuring that the provision of knowledge remains independent and yet also open and challengeable is key.

Summary

In its Strategic Plan 2014-2018, ICES is committed to building a foundation of science around one key challenge: integrated ecosystem understanding. Part of this integrated approach is the implementation of EBM as a continuous and iterative process. The principles of EBFM and EBM are clear and are being incorporated into every facet across the data, science, and advisory programmes. EBM requires the consideration of broader issues, where the impacts of marine sectors intersect and society needs information on trade-offs between such activities and with marine ecosystems. Regular reviews of progress are made to ensure the momentum of incorporating EBFM and developing methods for EBM are being maintained.

Prepared by Council Steering Group on MSFD & Ecosystem Approach, ACOM leadership, ACOM and SCICOM and ICES secretariat.