



## **TECHNICAL ASSISTANCE TO IORA FOR THE IMPLEMENTATION AND COORDINATION OF IORA ACTION PLAN ON FISHERIES, AQUACULTURE AND MARINE ENVIRONMENT**

### **Webinar on Combatting illegal, unreported and unregulated fishing and especially through PSMA application in the IORA region**

**16 September 2021**

### **REPORT**

#### **A. INTRODUCTION**

Illegal unreported and unregulated (IUU) fishing, foreign and national, undermines the sustainable management and exploitation of the world's fisheries resources. The impacts of IUU fishing are first environmental driving the depletion of fish stocks, and secondly social and economic, affecting those working in the fisheries sector, and communities depending primarily on these resources.

The objective of Sustainable Development Goal (SDG) 14, is to '*conserve and sustainably use the oceans, seas and marine resources*'. A key target associated to SDG 14 – *to eliminate IUU fishing by 2020* – will not be achieved and combating IUU fishing remains a momentous challenge at the global level, including for Members of the Indian Ocean Rim Association (IORA).

IUU fishing constitutes a persistent and pressing problem estimated to account for up to USD23 billion annually in regions of the Eastern Indian Ocean alone (FAO/CSIRO/APFIC 2021). The effects of IUU fishing can be severe, particularly for small-island and coastal developing States heavily dependent on fisheries, and include adverse impacts on peoples' livelihoods, food security, national economies and the environment. Countries unable to fulfil international obligations for fisheries management and governance risk incurring trade sanctions on their fisheries exports, a growing issue as export markets tighten their controls. Furthermore, IUU fishing is increasingly associated with national and transnational organized criminal activities, although the evidence remains mixed.

The FAO Agreement on Port State Measures (PSM) is the first binding international agreement that specifically targets IUU fishing. It lays down a minimum set of standard measures for Parties to apply when foreign vessels seek entry into their ports or while they are in their ports. The objective of the agreement is to prevent, deter and eliminate IUU fishing through the implementation of effective port State measures, in order to ensure the long-term conservation and sustainable use of living marine resources and marine ecosystems. Among other things, the Agreement also includes specific requirements for developing countries and foresees the need to adopt cooperation mechanisms and

provide technical assistance to these countries in order to implement effective port State measures. Currently only 15 countries, among the 23 IORA Member States, have ratified the Agreement.

The Indian Ocean Tuna Commission (IOTC) to which 21 IORA Member States are party, adopted two main resolutions related to the Port State Measures (PSM): Conservation and Management Measures (CMM) 16/11 on port state measures; and CMM 05/03 on the establishment of an IOTC Programme of Inspection in Port. IOTC provides technical assistance to those of its contracting parties requiring further capacity in implementing these CMMs. Among other things, IOTC offers its Contracting Parties PSM legal assistance, provides national PSM training courses, support for the implementation of the E-PSM (as web-based information system to easily and effectively monitor the arrivals and departures of fishing vessels in a port), and fosters sharing experiences on PSM.

In IORA, the cross-cutting area of the Blue Economy was introduced in 2014, following which six focus areas were identified namely:

- Fisheries and Aquaculture;
- Renewable Ocean Energy;
- Seaports and Shipping;
- Seabed Exploration and Minerals;
- Marine Biotechnology, Research and Development; and
- Tourism.

Since 2014, focus has been geared towards the implementation projects and building capacity of the Member States in those areas. The establishment of the Working Group on the Blue Economy (WGBE) (which was a short-term initiative of the IORA Action Plan 2017-2021), with its five-year Work Plan, aims to promote socially, economically inclusive and environmentally sustainable development of the Blue Economy.

The WGBE Work Plan comprised of a list of projects/capacity building programmes under each of the Blue Economy focus areas that would be implemented over a short-term, medium-term and long-term period with the support of and commitments by Member States and Dialogue Partners.

Fisheries and aquaculture remains the priority for most of the Member States and one of the main focus is to combat illegal, unreported and unregulated (IUU) fishing for which France, through this dedicated Technical Assistance, and Australia, through the CSIRO, has committed to support activities related to this topic. These included sharing of information on surveillance of IUU fishing and ship tracking with other Member States, developing analytical tools for fisheries monitoring and surveillance data (VMS, AIS, community reporting, observer and logbook data, licensing data), and making available a number of low-cost remote sensing surveillance technologies. France also expressed interest in pursuing its support to activities regarding fisheries management including fight against IUU fishing in the IORA region, notably through the Agence Française de Développement (AFD).

Since then, several developments have taken place. Australia has proceeded to test several of the innovative tools that it has developed to quantify and monitor IUU fishing such as with the Asia Pacific Fisheries Commission (APFIC) in the Eastern Indian Ocean. In addition, IORA and France, through the French Development Agency (AFD) signed an MOU on 9th March 2020 for “Strengthening the Capacities of IORA in Promoting the Blue Economy and Fisheries Management” which would offer expertise, training, networking and material resources to decision makers, officials and experts working to promote regional cooperation in blue economy and fisheries management issues. In December 2020, France became the 23rd Member State of the IORA. In parallel and based on past AFD funded projects in the sector (such as INDESO project in Indonesia), France and AFD are discussing with various Member States on future projects financing on fisheries management in the region (Bangladesh, India, Indonesia, Tanzania, Madagascar notably) .

## B. PROPOSAL

Across the IORA region, including in the small-scale marine and inland fisheries, IUU fishing is backwashing the efforts made in fisheries management so far. There is a necessity to reinforce capacities in the legal and judiciary mechanisms so that natural and legal persons supporting or engaged in IUU fishing activities can be sanctioned. For these measures to be effective, it is important to ensure transparency on the sanctioning outcomes. The problem of IUU fishing is also severe in some regions of the Western Indian Ocean. Maritime security has largely been restored with an efficient and deterring control of the piracy. However, such a situation has become favourable to increased IUU fishing activities. In this context, the MCS systems in place to deter piracy and IUU fishing should complete each other and develop synergies.

In view of the high importance of issue, it was proposed to host a webinar that would provide information on developments that have been taking place in Member states and regionally, as well as the legal instruments and operational tools that are available to fight IUU fishing, in particular through PSM.

Through the IORA-AFD collaboration, one of the specific objectives of the Technical Assistance is to implement the Blue Economy Work Plan and address the issue related to “combat IUU (illegal, unreported and unregulated) fishing in IORA region”. In the context of this objective, the Technical Assistance had conducted a basic assessment of the capacity needs required (human and institutional) and the current level of implementation of Port State Measures in the IORA region and had undertaken an analysis of measures to combat IUU fishing in the IORA region. These technical reports had already been circulated to IORA Member States and this webinar is also the occasion for the authors to present the main findings of these reports.

## C. OBJECTIVES

The general objective of the webinar was to present recent developments, measures and tools to combat IUU fishing in the IORA region with particular emphasis on Port State Measures.

The specific objectives were the following:

- To present some of the innovative monitoring and assessment tools that the CSIRO has recently trialled and tested in some IORA countries with a view of their possible applicability and use in other IORA countries within the context of several collaborative projects, which are under discussion;
- To have an update on the status of FAO’s PSMA following its third meeting of Parties, and of the discussion, recommendations and proposed assistance that are relevant to IORA Member States;
- To present two technical reports prepared by the AFD Technical Assistance to IORA on: a) the assessment of the capacity needs required (human and institutional) and the current level of implementation of Port State Measures in the IORA region; b) the analysis of measures to combat IUU fishing in the IORA region;
- To promote the support and tools that the IOTC is providing to its Contracting Parties in support of its two CMMs aimed at improving the effectiveness of PSM and thus combatting IUU fishing;
- To interact with participants on the results of the reviews and presentations and their thoughts on combating IUU fishing in the IORA region, nationally and regionally.

The entire recording of the webinar can be accessed by clicking below:

<p><a href="#">Play recording</a> (2 hrs 59 mins) Recording password: IORAiuu2021</p>
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## **D. OPENING AND SPEAKERS**

**Opening:** **Dr Gatot H. Gunawan**, Acting Secretary-General/Director of IORA

**Moderator:** **Aubrey Harris**, Main Resident Expert for the AFD technical assistance to IORA implemented by COFREPECHE and SOFRECO

The flyer of the speakers for this webinar can be accessed from:

[https://www.dropbox.com/s/x1ajb4mj71rk31u/IORA\\_AFD%20combatting%20IUU%20webinar%20flyer.jpg?dl=0](https://www.dropbox.com/s/x1ajb4mj71rk31u/IORA_AFD%20combatting%20IUU%20webinar%20flyer.jpg?dl=0)

### **Speakers:**

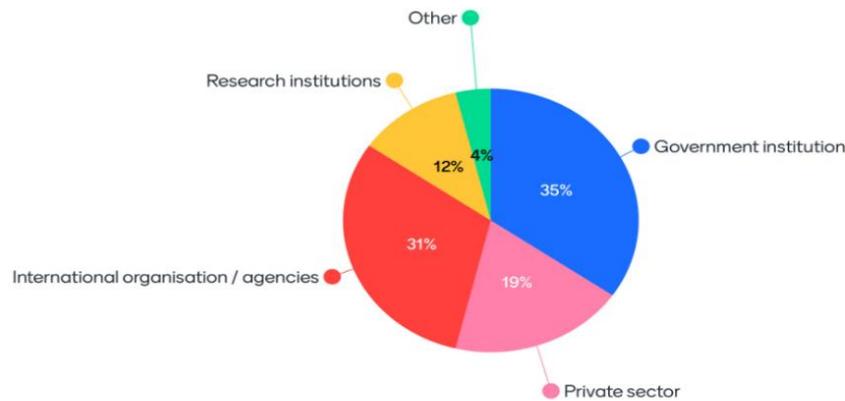
1. **Dr. Matthew Camilleri** (Team Leader of the Fisheries Global and Regional Processes Team at FAO)
2. **Dr. Chris Wilcox** (Senior Principal Research Scientist at CSIRO's Marine and Atmospheric Research centre in Hobart, Tasmania)
3. **Gilles Hosch** (International MCS Expert for the AFD technical assistance to IORA implemented by COFREPECHE and SOFRECO)
4. **Charline Gaudin-Goeser** (Director of international Development at COFREPECHE and MCS expert for the AFD technical assistance to IORA implemented by COFREPECHE and SOFRECO)
5. **Florian Giroux** (IOTC Compliance Coordinator)

The webinar agenda and the profiles of the Speakers are presented in Annexes I and II.

## **E. ATTENDEES**

A total of 151 persons pre-registered for the webinar. These were from: Australia 6; Bangladesh 12; Belgium 2; Botswana 1; Burundi 1; China 1; Djibouti 1; Egypt 4; France 12; Germany 5; India 5; Indonesia 16; Iran 1; Italy 3; Kenya 6; Luxembourg 1; Madagascar 5; Mauritius 9; Mozambique 1; Namibia 1; Oman 4; Pakistan 3; Portugal 1; Seychelles 2; Somalia 7; South Africa 4; Spain 3; Sri Lanka 2; Tanzania 17; Thailand 4; Tunisia 1; Turkey 4; United Kingdom 3; USA 3; Yemen 1.

There was a total of 98 participants who attended the webinar and 75 active connections were recorded one hour after the start of the webinar. On the response to the question "Where are you working", there were 26 answers. The response as seen above showed that: 35% were from Government Institutions; 31 % from International Organizations/Agencies; 19% were Private Sector; 12% were from Research Institutions; and 4% were from other sectors.



F.

## PRESENTATION BY SPEAKERS

1. Presentation by Dr. Matthew Camilleri, Team Leader of the Fisheries Global and Regional Processes Team at FAO: **Implementation of the PSMA in the IORA region; Preparing for global information exchange.**

The presentation opened with an introduction to international instruments and tools to combat IUU fishing and report on IORA countries' adherence to the PSMA and other key instruments, followed by an overview of the global mechanisms in place to implement the PSMA. The Conservation and Management Measures of relevance to combatting IUU fishing adopted by Regional Fisheries Management Organizations, of which IORA countries are Contracting Parties, was also presented. A brief analysis of the implementation of the PSMA by IORA countries, with a focus on port entry and port use denials, on the basis of a self-assessment questionnaire, was discussed. The second half of the presentation focused on the importance of global information exchange to bolster the implementation of the PSMA and other instruments; the status (including a focus on the IORA region) of the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (GR) and the functioning of the PSMA Global Information Exchange System (GIES), currently under development, was presented. The presentation concluded with a summary of the technical assistance support provided to IORA countries through FAO's Global Capacity Development Programme, along with potential future opportunities. A copy of the presentation can be accessed at: [https://www.dropbox.com/s/2x137s5yfs8ra58/IORA\\_PSMA\\_PPT\\_FAO%20Camilleri.pdf?dl=0](https://www.dropbox.com/s/2x137s5yfs8ra58/IORA_PSMA_PPT_FAO%20Camilleri.pdf?dl=0)

2. Presentation by Dr. Chris Wilcox, Senior Principal Research Scientist at CSIRO's Marine and Atmospheric Research centre in Hobart, Tasmania: **Analytical approaches and low-cost technologies for fisheries monitoring and surveillance to reduce IUU fishing.**

CSIRO's Marine Monitoring and Surveillance team works on a variety of fisheries monitoring projects, in particular focusing on Illegal Unreported and Unregulated (IUU) fishing. The team works in three key areas: 1) development of analytical tools for fisheries data, 2) development of novel technologies to provide low-cost fisheries surveillance data, and 3) capacity building for fisheries officers and marine reserve managers. Chris Wilcox, the lead for the CSIRO team presented the group's work supporting regional bodies and national governments in their fight against IUU fishing. The presentation covered capabilities in light of the recent Blue Economy Work Group plan, including remote sensing, PSMA support, and other relevant priorities. The presentation highlighted some opportunities for assistance to IORA members in addressing IUU fishing as outlined in the plan. A copy of the presentation can be accessed at: <https://www.dropbox.com/s/w5wv9h9m4nky7jh/IORA%20CSIRO%20Intro%20and%20BEWG%20relevance%20Wilcox.pdf?dl=0>

3. Presentation by Gilles Hosch, International MCS Expert for the AFD technical assistance to IORA implemented by COFREPECHE and SOFRECO: **Analysis of measures to combat IUU fishing in the IORA region**

The presentation covered the key findings of the assessment made in the recent report entitled “Analysis of measures to combat IUU fishing in the IORA region” prepared with the support of the AFD through the Technical Assistance to the IORA. The presentation first provided an overview of where IORA Member countries fall on the global IUU Fishing Index, allowing for a summary assessment of how the entire region compares to the global average, and then how individual countries and IORA-subregions may resemble, or differ from each other. The presentation then provided an overview of where IORA Members stand as coastal, flag and port States with regards to specific IUU and MCS indicators, and how these affect the overall MCS performance of IORA Members. The presentation wrapped up by presenting a number of key insights gained from the assessment, highlighting the most pressing issues that ought to be considered in initiatives aiming to improve MCS and the more effective combatting of IUU fishing across the IORA region. A copy of the presentation can be accessed at: <https://www.dropbox.com/s/opn2u96z0uipo8w/IUUMCS%20IORA%20Webinar%20%20Hosch.pdf?dl=0>

4. Presentation by Charline Gaudin-Goeser, Director of international Development at COFREPECHE and MCS expert for the AFD technical assistance to IORA implemented by COFREPECHE and SOFRECO: **Assessment of the capacity needs required and the current level of implementation of port State measures in the IORA region**

The presentation covered the key findings of the assessment made in the recent report entitled “Assessment of the capacity needs (human and institutional) required and the current level of implementation of port State measures (PSM) in the IORA region” prepared with the support of the AFD through the Technical Assistance to the IORA. The report mainly assessed two aspects of the PSM:

1. The current status of implementation of, on one side, the PSMA and, on the other side, of the RFMO relevant resolutions on PSM in the IORA Member States (MS);
2. The basic capacity needs assessment of IORA MS based on the results of a questionnaire circulated to the IORA MS.

As the FAO and the IOTC were presenting, during this webinar, the current status of implementation of the PSMA and PSM Resolutions in IORA MS, this presentation focused mainly on the results of the questionnaire analysis and list of recommendations which emerged from the report. A copy of the presentation can be accessed at:

[https://www.dropbox.com/s/wallt51u3nbjn06/IORA\\_AFD%20Webinar%20GaudinGoeser%20presentation.pdf?dl=0](https://www.dropbox.com/s/wallt51u3nbjn06/IORA_AFD%20Webinar%20GaudinGoeser%20presentation.pdf?dl=0)

5. Presentation by Florian Giroux, IOTC Compliance Coordinator: **Implementation of port State Measures in the IOTC context**

Worldwide efforts to manage fisheries extending across national and international boundaries onto the high seas continue to be undermined by Illegal, Unreported and Unregulated Fishing (IUU). Port State measures have been recognised by IOTC as one of the most cost-effective means for enhancing compliance in fisheries management. Following the approval of the 2009 FAO Agreement on Port State Measures (PSM) and pending the Agreement coming into force, in 2010 the Indian Ocean Tuna Commission (IOTC) moved forward and adopted Resolution 10/11 on PSM to Prevent, Deter and Eliminate IUU Fishing, which entered into force on 01 March 2011 (Superseded by Resolution 16/11). This presentation gave an overview of the IOTC comprehensive set of capacity building activities related to Port State Measures: national PSM training, regional PSM training on national interagency collaboration and regional cooperation, and PSM manuals, guides and the e-PSM application. It also

provided an overview on the compliance status of the PSM resolutions in the IORA MS members of the IOTC. A copy of the presentation can be accessed at:

<https://www.dropbox.com/s/7y7za4rqooa7vgz/IOTC%20PSM%20IORA%20Webinar%20Giroux.pdf?dl=0>

## **G. QUESTION AND ANSWERS**

**Helene Gobert, Task Team Leader – Ocean, Fisheries & Aquaculture, AFD**

*What is the difference or complementarity between the IUU Fishing Index and the CSIRO MCS tools?*

Chris Wilcox: two things were presented. One was a risk assessment for a PSMA and that focused on individual vessels and uses real time AIS across all of the Indian Ocean to produce risk analysis reports. Ideally, behind that is a fisheries official that can log into that website and include the MMSI, the unique vessel id and get a risk report on a vessel arriving in real time based on its last 3 months of activity. So, it is fairly different from the IUU Fishing Index which focusses around indicators of IUU at national scale and is relatively static. The other thing I presented was a methodology for estimating the value and volume of illegal fishing based on landings, which is a project we are trying to get rolling in the IORA region with IORA Members. That differs in that it is not trying to estimate IUU risk, it is trying to estimate the volume landed and the value of that volume, again an estimation tool.

Aubrey Harris: clearly quite different. Any possibility that some of this could inform the IUU Index?

Gilles Hosch: So, I think it was clear that they are doing work that is actually applying analytics to some very specific tools such as AIS, VMS and trying to project and predict IUU risk in specific areas. The IUU Index is global in scope. We are not looking at specific fisheries, areas. The IUU index takes 40 indicators across these different segments of responsibility and what we are doing is basically the first time we put numbers to IUU fishing, and the Index. So, it was published in January 2019 and before the end of this year the 2021 version will be published. So as Chris says, it is quite static but currently the thought is having it done every 2 years and then it will allow to actually see in what areas progress is being made, or regression is occurring. Both are possible. But it is more of a metric that allows us to gauge international, regional and country level effort rather than specific fisheries.

**Jean Pierre Cauzac, Strategic Project Manager, Collecte Localisation Satellites (CLS)**

*Do IORA Member States share information about potential IUU suspicious activities with IGOs such as Interpol so that carrier vessels may be checked at ports?*

Aubrey Harris: Rather be addressed by IOTC. Not aware that IORA because of the nature of the Organization does this in particular. Recall that it is receiving technical assistance in fisheries, aquaculture and environment, but this does not deal with this matter directly. But since 21 of IORA's MS are members of IOTC, the Commission will be able to provide some response.

Florian Giroux: I'll provide some concrete response to this – they share information and currently the EPSM application has two functionalities to be able to share vessel files. [The EPSM results were projected]. In this case, this is the famous IUU vessel STS-50, a CCAMLR vessel that had been calling in the ports of Madagascar, after in Maputo, Mozambique, and been caught by the Indonesian Navy. So, this is the vessel file, and there is a functionality called Vessel File Sharing where in this case the vessel called into a port in Madagascar, and Madagascar decided to share this file with a number of entities, as you can see, with the Australian Fisheries Management Authority, with the Secretariat of CCAMLR, EU, the French Monitoring Centre, ICCT, Interpol. This functionality allows the members to share IUU vessel information with several entities even with South Africa and Togo, which was the Flag State of the vessel

*Do IORA MS cooperate with IOTC on high seas boarding inspections?*

Florian Giroux: Currently there isn't a high seas boarding and inspection scheme in IOTC like there is in ICCAT or WCPFC. There is no cooperation at this level, only some cooperation that can be done on the UN Fish Stocks Agreement. Currently there isn't one in IOTC. The members are still discussing a possible Resolution and ad hoc measures in this sense.

Aubrey Harris: Mr. Mauree will be following me as the Main Resident Expert of this project. So Welcome Mr. Mauree. Please take it on and do a good job.

**Daroomalingum Mauree, SWIOFish1 Regional Coordinator, IOC**

Thank you, Aubrey, Hope I can follow your track as you have been a marvellous moderator. I've already posed two questions directly that have been answered by the panellists in the Chat box. For me, it appears that it is much more easy for countries to share IUU fishing vessel information with NGOs compared to IGOs. I base this on a relevant database at SID, even at Greenpeace, where it happens that these organizations are very well advanced in receiving information. Why is it so and how can IGOs reverse this tendency? May be am wrong but this is what I can see, I can gather from relevant articles or papers that I see especially from SIF.

Matthew Camilleri: Thank you for a very interesting question. Indeed, there is a lot of intelligence out there, NGOs have their ears on the ground in getting information. Some may be reliable, other information may not be reliable but at the end of the day, it is not about sharing information with an NGO or IGO, what is important is that the information is shared among States because it is only States that can take action, operational, enforcement and eventual prosecution. Also, I'd like to say that it is not enough to detect IUU fishing, it is important to take action after IUU fishing has been detected and there is sufficient evidence of that IUU fishing. If no action is taken, these information of the IUU fishing that took place is useless. And this is why States must not only have their operations strengthened and their enforcement systems strengthened, and have a very good MCS system, they need to be able to have the power and that is enshrined in their legislation and the capacity to take action, not only as a single State but also in cooperation with others. So, this is why information exchange is so key, and we have seen this demonstrated, for example, through the EPSM. Now exchange of information at the regional level is taking place. What the Global information exchange system aims to do is to amplify that at the global scale. The more information available to all States, the easier for everybody to take action. It is eventually down to the State to be able to take action on information that is available. More information shared, the better.

**Nicolas Vuillaume, Fisheries Expert, Collecte Localisation Satellites (CLS)**

*Would it be possible to connect national Fisheries Monitoring Centres (FMCs) to the EPSM database to automatically collect vessel inspection information?*

Florian Giroux: It is possible to connect the EPSM to any national system. It depends upon the State. Currently we have two IOTC Members that have a national EPSM system, those Members are asking to be connected. So, we are going to work with them for this to happen so that they have one system, national, that is connected to the IOTC EPSM, that makes their uses and operations more friendly. This is the same in the context of the FAO Global System. Connecting the RFMO systems to the FAO Global System is to another level but is something that will be achieved soon as Matthew has pointed out.

**Helene Gobert, Task Team Leader – Ocean, Fisheries & Aquaculture, AFD**

*Raised larger question on the role of an organisation such as IORA combatting IUU fishing which doesn't have the same role as IOTC or regional fisheries organisations.?*

Gatot Gunawan: Thank you for the question. Up to now, IORA still doesn't have the concrete cooperation towards IUU fishing. That is why we have also had a discussion with France who will host the workshop on IUU fishing in Reunion, in December 2021. This is why I am encouraging France to lead the process; we need something concrete as cooperation within IORA in combatting IUU fishing. So, I wish that at the workshop in Reunion in December, we can think of the process of concrete cooperation in IORA.

Aubrey Harris: Actually, you mention the workshop or meeting that is being planned later this year. Perhaps you or Helene might cover a little more about it. My take is that IORA has only over the last few years worked on a programme in this area, and it is still work in progress. It is actually fine tuning its various subsidiary bodies to approach such issues. Of course, its overall goals are much broader much more related to trade, etc. It is work in progress in my view. Any further information on the workshop?

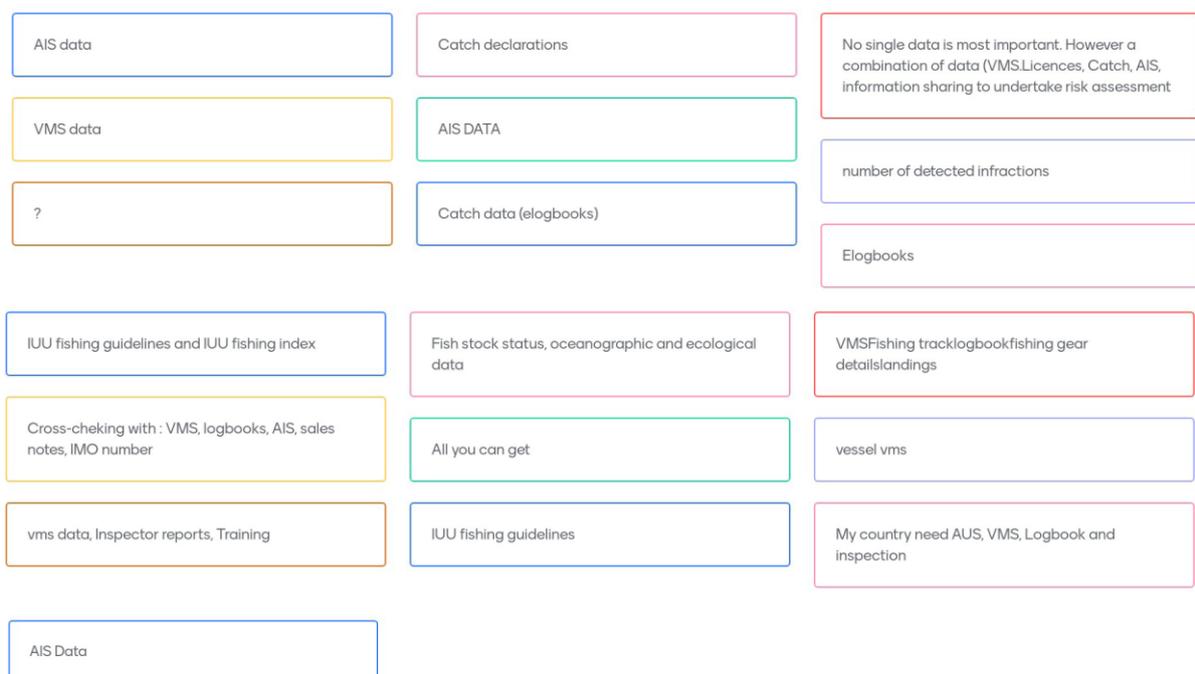
Helene Gobert: Unfortunately, no. We are working with our Ambassador for the region to find a good entry point, not to repeat what has been said today or similar meetings on the topic. France will come back to IORA to give more information on the workshop which will be held partly as a webinar and partly in Reunion before the end of this year.

Aubrey Harris: invited other questions to be sent to him or to the presenters with copy to IORA so as to be kept in the loop.

## H. GROUP EXERCISE AND RESULTS

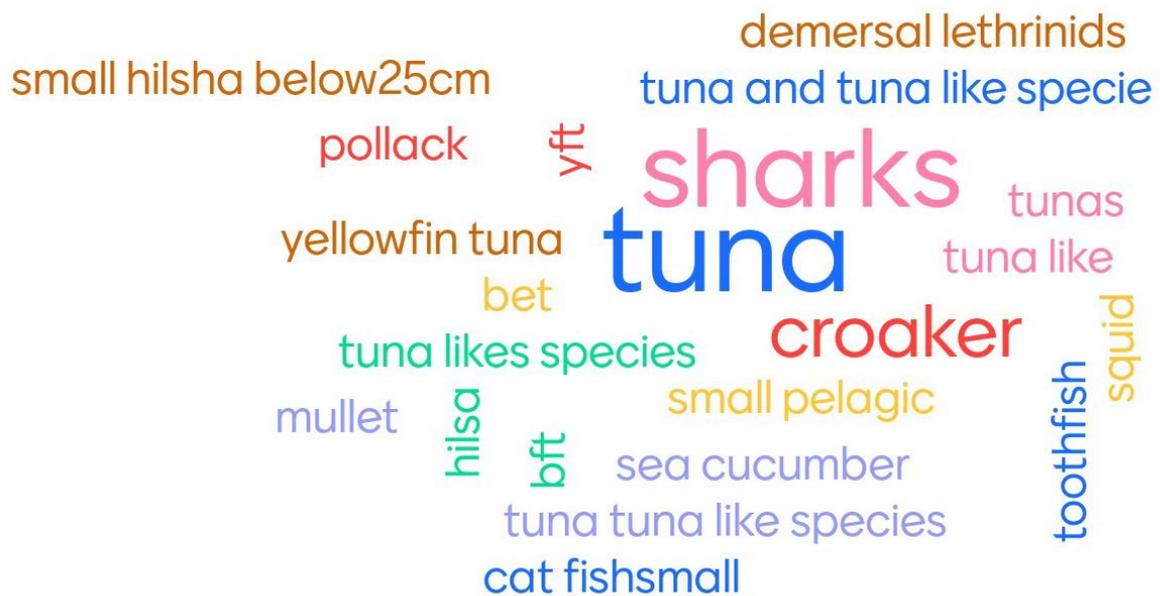
Some polling exercises undertaken with Mentimeter ([www.mentimeter.com](http://www.mentimeter.com)) sought feedback from the participants on some of the issues that had been raised during the presentation.

### What is the most important data or analysis need for your country to address MCS issues?



The response of 19 participants reflected is the Mentimeter illustration above included: AIS data; VMS data; catch data (E-logbooks); no of detected infractions; licensing; information sharing for risk assessments; IUU fishing guidelines; IUU Fishing Index; fish stock status; oceanographic and ecological

data; fishing tracks; fishing gear details; inspection data; landings; cross-checking with VMS; logbooks; sales notes; IMO number; inspection reports; training; and all you can get.

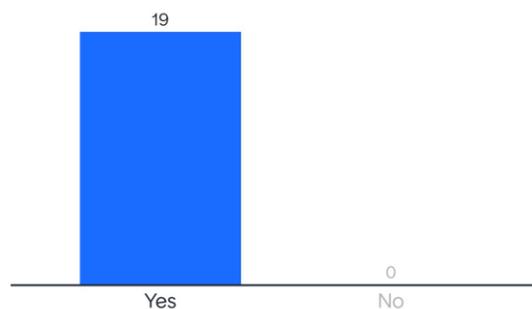


Overall numerous sources were mentioned and the response was broad. However, AIS, VMS, E-logbook data and cross-verification between data sources appeared to prevail.

**What are the most important species in your country in terms of IUU fishing?**

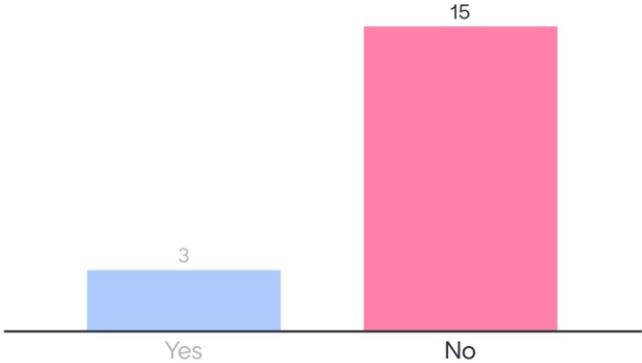
Again, the response was broad and reflected the breadth of species of the different parts of the Indian Ocean, and those from some of the participants from outside of the Indian Ocean (pollack). Overall, it was dominated by tunas (and tuna like species) but importantly also featured sharks and croakers.

**Based on the IUU Index 2019 results, are IORA Members facing higher IUU risks than the global average?**



The answer to this question was a categorical 'YES' indicating that the participants at this webinar were either initially well aware of the situation of IUU fishing in the Indian Ocean or had closely followed and endorsed the results and messages of the third presentation on "Analysis of measures to combat IUU fishing in the IORA region".

**In general terms and across the IORA region, are sanctions and penalties applicable to IUU fishing of sufficient deterrence?**



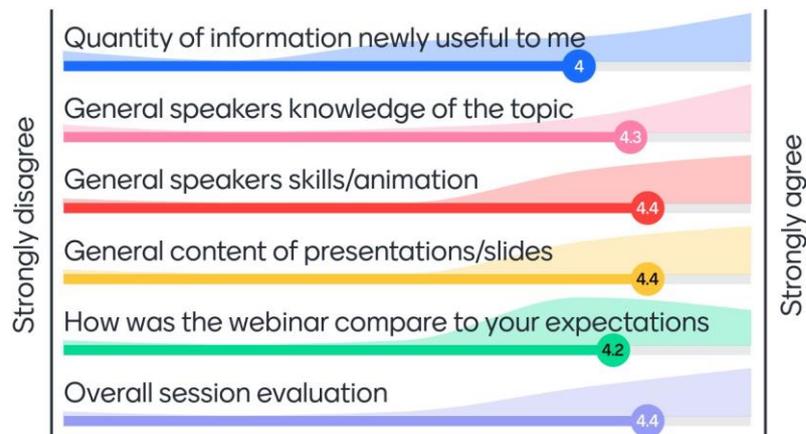
The response provided (15) was strongly in favour that sanctions and penalties applicable across the IORA region for IUU fishing were insufficient deterrence. A smaller number (3) considered they were of sufficient deterrence. This smaller group probably also considered the likelihood of apprehension in this equation. If measures are not being sufficiently enforced, and the probability of getting away with infractions is large, increasing the level of penalties do not always have the level of deterrence that would appear to be indicated. In such cases, rather than increasing sanctions and penalties, ensuring that they are enforced can have a significant deterrent effect.

**Name one of the most important actions your country could undertake to strengthen MCS – using a maximum of two words.**



The response to the question is shown above in a word cloud. It is noteworthy that by far the most important actions the country of the participants at the webinar could take were “Capacity Building” and “Training”. This result also highlights the importance of the work undertaken by the AFD technical assistance in the review reports produced, and of their recommendations made to IORA in this regard.

## I. EVALUATION OF THE WEBINAR



Twenty-one (21) participants evaluated the webinar. Scores all averaged above 4 and above out of a possible score of 6. The highest score of 4.4 was obtained for: General speakers' skills/ animation; General content of presentations/slides; and the overall session evaluation. A score of 4.2 was obtained for the general speakers' knowledge of the topic, and a score of 4.0 was obtained for the quantity of information newly useful to the participant.

## J. CONCLUSION

This was the fourth webinar that had been held as part of the AFD technical assistance to IORA in fisheries, aquaculture and environment. It was a cooperative endeavour of the IORA Secretariat and AFD also including the CSIRO, and featured high profile and important inputs from FAO and IOTC. It was the occasion to highlight the results of two reports produced earlier in the year by COFREPECHE Technical Team Experts on an "Analysis of measures to combat IUU fishing in the IORA region" and an "Assessment of the capacity needs (human and institutional) required and the current level of implementation of port State measures (PSM) in the IORA region". The questions posed to the presenters and their responses were engaging and stimulating. Unfortunately, there was insufficient time to take all of the questions, and participants were invited to forward these and any other related ones to the presenters, and the Main Resident Expert, keeping IORA in copy. Responses to the questions and the polling provide interesting insights that can stimulate further actions for the consideration of the IORA Secretariat, WGBE and the CGFM.

It is to be noted that not only was there was the most numerous participation (98 participants) in the AFD technical assistance to IORA to date, but also of its high level with an ambassador, several international legislators, senior government officials involved in combating IUU fishing, and well-known international consultants and researchers. Participants came from 35 countries, 18 IORA member States, and 17 other non-IORA States. Following the webinar, expressions of appreciation to the organisers and presenters of the webinar was received from numerous participants.

## Annex I: Webinar agenda



# TECHNICAL ASSISTANCE TO IORA FOR THE IMPLEMENTATION AND COORDINATION OF IORA ACTION PLAN ON FISHERIES, AQUACULTURE AND MARINE ENVIRONMENT

**Webinar on Combatting illegal, unreported and unregulated fishing and especially through the application of the Port State Measures Agreement in the IORA region**

**16 September 2021**

**0700 hrs (GMT)**

## AGENDA

6:45 to 7:00

- Arrival and connection to the webinar

7:00 to 7:10

- **Dr. Gatot H. Gunawan** (Acting Secretary-General/Director of IORA)
  - ⇒ Opening remarks

7:10 to 7:20

- **Aubrey Harris** (Main resident Expert for the AFD technical assistance to IORA implemented by COFREPECHE and SOFRECO)
  - Introduction and presentation

7:20 to 7:40

- **Dr. Matthew Camilleri** (Team Leader of the Fisheries Global and Regional Processes Team at FAO)
  - ⇒ First presentation: **“Implementation of the PSMA in the IORA region; Preparing for global information exchange”**

The presentation will open with an introduction to international instruments and tools to combat IUU fishing and report on IORA countries' adherence to the PSMA and other key instruments, followed by an overview of the global mechanisms in place to implement the PSMA. The Conservation and Management Measures of relevance to combatting IUU fishing adopted by Regional Fisheries Management Organizations, of which IORA countries are Contracting Parties, will also be presented. A

brief analysis of the implementation of the PSMA by IORA countries, with a focus on port entry and port use denials, on the basis of a self-assessment questionnaire, will be discussed. The second half of the presentation will focus on the importance of global information exchange to bolster the implementation of the PSMA and other instruments; the status (including a focus on the IORA region) of the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (GR) and the functioning of the PSMA Global Information Exchange System (GIES), currently under development, will be presented. The presentation will conclude with a summary of the technical assistance support provided to IORA countries through FAO's Global Capacity Development Programme, along with potential future opportunities.

7:40 to 8:00

- **Dr. Chris Wilcox** (Senior Principal Research Scientist at CSIRO's Marine and Atmospheric Research center in Hobart, Tasmania)<sup>1</sup>
  - ⇒ Second presentation: **"Analytical approaches and low-cost technologies for fisheries monitoring and surveillance to reduce IUU fishing"**

CSIRO's Marine Monitoring and Surveillance team works on a variety of fisheries monitoring projects, in particular focusing on Illegal Unreported and Unregulated (IUU) fishing. The team works in three key areas: 1) development of analytical tools for fisheries data, 2) development of novel technologies to provide low-cost fisheries surveillance data, and 3) capacity building for fisheries officers and marine reserve managers. Chris Wilcox, the lead for the CSIRO team will present the group's work supporting regional bodies and national governments in their fight against IUU fishing. The presentation will cover capabilities in light of the recent Blue Economy Work Group plan, including remote sensing, PSMA support, and other relevant priorities. The presentation will highlight some opportunities for assistance to IORA members in addressing IUU fishing as outlined in the plan.

8:00 to 8:20

- **Gilles Hosch** (International MCS Expert for the AFD technical assistance to IORA implemented by COFREPECHE and SOFRECO)
  - ⇒ Third presentation: **Analysis of measures to combat IUU fishing in the IORA region**

The presentation will cover the key findings of the assessment covered in the recent report entitled "Analysis of measures to combat IUU fishing in the IORA region" prepared with the support of the AFD through the Technical Assistance to the IORA. The presentation will first provide an overview of where IORA Member countries fall on the global IUU Fishing Index, allowing for a summary assessment of how the entire region compares to the global average, and then how individual countries and IORA-subregions may resemble, or differ from each other. The presentation then provides an overview of where IORA Members stand as coastal, flag and port States with regards to specific IUU and MCS indicators, and how these affect the overall MCS performance of IORA Members. The presentation wraps up by presenting a number of key insights gained from the assessment, highlighting the most pressing issues that ought to be considered in initiatives aiming to improve MCS and the more effective combatting of IUU fishing across the IORA region.

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<sup>1</sup> For more information on the team and their current work please visit <https://research.csiro.au/iuu/>.

8:20 to 8:40

- **Charline Gaudin-Goeser** (Director of international Development at COFREPECHE and MCS expert for the AFD technical assistance to IORA implemented by COFREPECHE and SOFRECO)
  - ⇒ Fourth presentation: **Assessment of the capacity needs required and the current level of implementation of port State measures in the IORA region**

The presentation will cover the key findings of the assessment made in the recent report entitled “Assessment of the capacity needs (human and institutional) required and the current level of implementation of port State measures (PSM) in the IORA region” prepared with the support of the AFD through the Technical Assistance to the IORA. The report mainly assesses two aspects of the PSM:

1. The current status of implementation of, on one side, the PSMA and, on the other side, of the RFMO relevant resolutions on PSM in the IORA Member States (MS);
2. The basic capacity needs assessment of IORA MS based on the results of a questionnaire circulated to the IORA MS.

As the FAO and the IOTC will present during this webinar the current status of implementation of the PSMA and PSM Resolutions in IORA MS, this presentation focuses mainly on the results of the questionnaire analysis and list of recommendations which emerged from the report.

8:40 to 9:00

- **Florian Giroux** (IOTC Compliance Coordinator)
  - ⇒ Fifth presentation: **Implementation of port State Measures in the IOTC context**

Worldwide efforts to manage fisheries extending across national and international boundaries onto the high seas continue to be undermined by Illegal, Unreported and Unregulated Fishing (IUU). Port State measures have been recognised by IOTC as one of the most cost-effective means for enhancing compliance in fisheries management. Following the approval of the 2009 FAO Agreement on Port State Measures (PSM) and pending the Agreement coming into force, in 2010 the Indian Ocean Tuna Commission (IOTC) moved forward and adopted Resolution 10/11 on PSM to Prevent, Deter and Eliminate IUU Fishing, which entered into force on 01 March 2011 (Superseded by Resolution 16/11). This presentation will give an overview of the IOTC comprehensive set of capacity building activities related to Port State Measures: national PSM training, regional PSM training on national interagency collaboration and regional cooperation, and PSM manuals, guides and the e-PSM application. It will also provide an overview on the compliance status of the PSM resolutions in the IORA MS members of the IOTC.

9:00 to 9:15

- Question and answers

9:15

- Group exercise on specific aspects of IUU fishing
- Evaluation and open up questionnaire
- Webinar Closure

## Annex II: Profiles of the Speakers

### Dr. Matthew Camilleri



Dr Matthew Camilleri, graduated in fisheries science and ocean science from the University of Plymouth (UK) where he went on to obtain a Ph.D. in fisheries management.

Dr Camilleri served as consultant to the Maltese government on fisheries management and as Head of the Malta Centre for Fisheries Sciences between 1998 and 2007. During that period, he played a key role in developing the Maltese fisheries sector and in building Malta's capacity to monitor and manage its fisheries in line with the European Union's Common Fisheries Policy. He also acted as national focal point for regional scientific projects of the Food and Agriculture Organization of the United Nations (FAO) and for scientific programmes of the European Union.

Dr Camilleri joined FAO in 2007 and is currently the Team Leader of the Fisheries Global and Regional Processes Team within the Organization. His responsibilities include the promotion and monitoring of the implementation of the FAO Code of Conduct for Responsible Fisheries and other international fisheries instruments, especially those aiming to combat illegal, unreported and unregulated fishing. Dr Camilleri served as Technical Secretary for the FAO Technical Consultations which adopted the international Voluntary Guidelines for Flag State Performance and Voluntary Guidelines for the Marking of Fishing Gear. He also serves as Technical Secretary to the meetings of the Parties to the 2009 FAO Agreement on Port State Measures and leads FAO's capacity-development programme on the implementation of the Agreement and complementary instruments.

### Dr. Chris Wilcox



Chris Wilcox is a research scientist with CSIRO Marine and Atmospheric Research, stationed in Hobart, Tasmania. His research covers a wide range of topics in population management including control of invasive species, conservation of threatened biodiversity, and management of commercial and recreational harvesting. His work integrates field data, statistical analysis and predictive models to synthesize information to support decision-making. He has worked with NGOs, government and private enterprise over a 25-year career as a professional biologist to develop cost effective solutions to natural resource management problems. Originally from the USA, he has a Masters degree and a Ph.D. in ecology and conservation biology. Chris has been in Australia for 15 years, first working in the Great Artesian Basin on effects of groundwater withdrawal for mining on wetland ecosystems. Since coming to CSIRO in 2005, his research has included biodiversity offsets, population estimation, analysis of satellite tracking data, optimization of invasive species eradication, management of fisheries, reserve design and management, and most recently understanding the impacts of marine debris. His research is currently focused in two primary areas: a) evaluation of sources, impacts and solutions for plastic pollution in the ocean; and b) development of improved analytical tools for addressing illegal, unregulated and unreported (IUU) fishing.

### Mr. Gilles Hosch



Gilles Hosch, the author of this Report, is a marine biologist by training. He has a vast international track record in fisheries management, with a focus on MCS work. He started his career in fisheries in 1998 as an officer of the United Nation's Food and Agriculture Organization (FAO), with postings to Samoa (Polynesia) and Ghana (Africa). In 2001, Gilles became an independent adviser, and started a first posting as an MCS adviser to the Ministry of Fisheries in Angola in 2002 under a wider EU-funded SADC MCS program. As of mid-2003, Gilles focused on implementation of short-term assignments with Government agencies in developing countries through bilateral donor programs or under the auspices of the United Nations, assisting their various efforts in developing their capacity in the domain of MCS as an adviser. Gilles has implemented MCS work in over 70 countries worldwide.

His work includes the formulation of national plans of action to combat, deter and eliminate illegal, unregulated and unreported fishing (NPOA-IUUs) – including the 2007 NPOA-IUUs for Mozambique and the Seychelles, the 2008 and 2010 NPOA-IUUs for Madagascar and Djibouti, and the 2015 NPOA-IUU for Myanmar. Gilles has also been active in fisheries project monitoring and evaluation work, evaluating several large fisheries projects worldwide, and implemented the final evaluation of the *MCS of highly migratory large pelagics of the Indian Ocean* – which finished in 2008, and the *Indian Ocean Regional Tuna Tagging Project* of the IOTC – which finished in 2011.

Finally, Gilles has a long-standing cooperation with the Indian Ocean Tuna Commission (IOTC), for which he has executed several contracts, including the development of a training package entitled "*Implementation of IOTC Conservation and Management Measures*" (2012), advising the Commission on streamlining and strengthening MCS measures and developing a Catch Documentation Scheme (2018), and most recently assessing the performance of individual IOTC Members in implementing their flag state monitoring and enforcement duties (since 2019 - ongoing).

### Charline Gaudin-Goeser



Graduated in international law and international organizations, Mrs Charline GAUDIN-GOESER has more than 13 years of experience in the field of fisheries, project management and international cooperation.

Prior joining COFREPECHE in September 2017, she worked for international organizations like the European Union (DG MARE), the FAO and RFMOs but also for consulting companies and NGOs (e.g. IUCN). Expert long and short term on various EU and German funded projects (GIZ), she specialized over her career in fisheries legislation, policies and institutional aspects.

She was for 2 years (2011-2012) key expert on a EU project aiming at assisting developing countries in fighting illegal fishing activities and complying with EU requirements to export fisheries products to the EU. Recently she coordinated and contributed as expert to the Preparation of the Seychelles' fisheries sector policy and strategy provided particular support on IUU and MCS aspects. Since 2020, she acts as project director for the AFD Technical Assistance to the Indian Ocean Rim Association (IORA) for the implementation and coordination of IORA work plan on fisheries, aquaculture and marine environment. In this context, she contributed as expert to the activities of TA objective "To combat IUU (illegal, unreported and unregulated) fishing in IORA region" in particular to the activity 1.1 "Conduct an assessment of the capacity needs (human and institutional) and the current level of implementation of Port State Measures" in the IORA Member States.

## **Florian Giroux**



Florian Giroux joined the IOTC Secretariat in April 2012 and is currently acting as Compliance Coordinator. Florian earned his Master in Exploitation of Coastal Living Resources and Aquaculture in France. Before joining the IOTC Secretariat, Florian started his overseas experience in 1998 in Southern Africa and the Indian Ocean where he serves the Fisheries Administration of several countries in the field of fisheries management and monitoring, control and surveillance (MCS) of fishing activities. Within the Compliance section, he is tasked with working closely with the Members and Co-operating non-Contracting Parties of the Commission, to ensure the highest possible level of compliance with conservation and management measures adopted by the Commission.