



# Improve Monitoring Control and Surveillance scheme

# Monitoring Control and Surveillance study

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#### PURPOSE

To present to participants at the Working Party on the Implementation of Conservation and Management Measures (WPICMM) the report of the Monitoring Control and Surveillance (MCS) study for their review to provide comments on the report and make recommendations to the Compliance Committee on the way forward.

# RATIONALE

The First and Second Performance Review panels recommended that the IOTC develop an integrated MCS system, including strengthening existing MCS tools.

The second review of the performance of IOTC made several recommendations related to MCS that were later adopted by the Commission. In particular:

# Monitoring, Control and Surveillance (MCS)

Paragraph 149 of the PRIOTCO2 RECOMMENDED that:

- The IOTC should continue to develop a comprehensive MCS system through the implementation of the measures already in force, and through the adoption of new measures and tools such as a possible catch documentation scheme, noting the process currently being undertaken within the FAO.
- As a matter of priority review the IOTC MCS measures, systems and processes, with the objective of providing
  advice and guidance on improving the integration of the different tools, identification of gaps and
  recommendations on how to move forward, taking into consideration the experiences of other RFMOs, and that
  the review should be used as a basis for strengthening MCS for the purpose of improving the ability of the
  Commission to deter non-compliance and IUU fishing.

# **O**BJECTIVE

The objective of the MCS study is to provide to the Commission advice and guidance on improving the integration of the different tools, identification of gaps and recommendations on how to move forward, taking into consideration the experiences of other RFMOs, and that the review should be used as a basis for strengthening MCS for the purpose of improving the ability of the Commission to deter non-compliance and IUU fishing.

#### TASKS AND RESPONSIBILITIES OF THE MCS CONSULTANT

To provide expert technical advice on Monitoring, control and surveillance:

- Taking into consideration the experiences of other RFMOs and utilizing best practices in fisheries MCS, review the current IOTC monitoring, control and surveillance (MCS) measures, systems, tools and processes, with the objective of providing advice and guidance, on improving the integration of the different tools, identification of gaps and make recommendations on how to move forward by including new MCS measures,
- Proposing amendments to the existing MCS Measures adopted by the Commission and propose new MCS measures to strengthen the IOTC MCS scheme to compile in an IOTC MCS legislative framework.

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# BACKGROUND

Component 2, sub-component 2.1, of the Work Plan of the WPICMM comprise of the following activities:

2	Examine Monitoring, Control and Surveillance (MCS) technical matters in order to provide the Compliance Committee with options for strengthening MCS
2.1	Improve IOTC MCS scheme
2.1.1	Review CPCs national MCS scheme and current MCS practices
2.1.2	Review existing IOTC MCS tools
2.1.3	Review upcoming MCS reports comprising of reports on VMS and CDS
2.1.4	Recommendation that the VMS and CDS study reports are submitted to the WPICMM
2.1.4	Make recommendations on these reports for the Compliance Committee

#### DISCUSSION

The MCS study report is available at Chapter II of the consultant's report, reference IOTC-2019-WPICMM02-MCS CDS Study.

An extract of the main outcomes of the MCS study are reproduced below (Paragraphs 2.6 to 2.8 of the consultant's report):

# 2.6 Integrating and streamlining existing MCS CMMs

The result from the foregoing sections, providing assessment, recommendations and consolidation proposals of existing resolutions, provides the following picture with regards to streamlining and integration of CMMs:

#### **Coastal State MCS measures**

Resolution 14/05 Record of licensed foreign vessels & access agreement info

#### Flag State MCS measures

Resolution 18/06 Programme for transhipment by large-scale fishing vessels

Resolution 15/04 IOTC record of authorised vessels

Resolution 15/03 Vessel monitoring system (VMS) programme

Resolution 15/01 Recording of catch and effort data by fishing vessels

Resolution 10/08 Record of active vessels having fished for tunas and swordfish

# Port State MCS measures

#### Resolution 16/11 Port State measures to combat IUU fishing

Resolution 05/03 Establishment of a programme of inspection in port

#### Market State MCS measures

Resolution 03/03 Amendment of the forms of statistical documents

Resolution 01/06 Bigeye tuna statistical document programme

#### Penalty mechanisms targeting non-compliant States, vessels and nationals

Resolution 18/07 Non-fulfilment of reporting obligations in the IOTC

#### Resolution 18/03 List of vessels presumed to have carried out IUU fishing

Resolution 16/05 Vessels without nationality

Resolution 10/10 Market related measures

Resolution 07/01 Compliance by nationals of CPs and CNCPs

Resolution 01/03 Scheme to promote compliance by NCP vessels

Resolution 99/02 Actions against fishing activities by FOC LSTLVs

Of the current 17 MCS-related resolutions, it is suggested that only eight are maintained, while eliminating and integrating the remaining nine into the existing texts; or in the case of the market state measures Resolutions 03/03 & 01/06, to replace them with a resolution on an IOTC eCDS. This entails that more than 50% of the existing MCS resolutions may be eliminated, while maintaining, strengthening or expanding their original provisions. The texts of the revised resolutions are appended in the Annexes to this report.

The foregoing sections make it clear that IOTC's current regulatory substance on MCS is unwieldy, by virtue of the fact that it is subdivided into separate and stand-alone resolutions that have been generated over a period spanning two decades, which do overlap and contradict each other to various degrees, provide gaps in other cases, and which are difficult to maintain coherent over time. In time, IOTC is advised to explore the option of moving to the regulatory substance to a format different from the one it is currently encapsulated in.

A much more robust, and coherent approach to RFMO rule-making is the development of a single text covering the entire regulatory substance, and that may be revised by the Commission on a needs-be basis. NAFO yields one of the very good RFMOs examples of such a regulatory framework.<sup>2</sup>

# 2.6.1 Key integration, streamlining and revision efforts undertaken

This section briefly summarises the key elements that have been streamlined, integrated and/or expanded through the above exercise. All changes are integrated and reflected in the revised resolutions appended in annexes III to X. In providing this summary, the key elements are not tagged to their individual resolutions, but presented as MCS-related subjects, indicating what is being proposed.

#### Records and data reporting

Transparency is improved across the board. Copies of key documents, and data are forwarded to the Secretariat. In general terms, all submissions of data and documents is moved to electronic submissions, cutting out submission of paper copies. Mandatory CPC reporting routines are consolidated under a reduced number of resolutions. The logbook regime is strengthened and the keeping of records is improved.

#### Landing and transhipment declarations

Absence of landing declarations represents one of the biggest gaps in the IOTC MCS framework, and is now addressed – providing also for all related data to be copied to the IOTC Secretariat. Transhipment declarations are expanded to in-port transhipments, and a system of event-specific in-port transhipment authorizations is proposed. Reporting provisions for at-sea transhipment are tightened.

#### **Record of Authorised Vessels**

Transparency and access to information concerning the RAV is increased by removing certain information barriers for non-CPCs, and more critical information is to be included (foreign EEZ access; transhipment authorizations; etc.).

<sup>&</sup>lt;sup>2</sup> See: <u>https://www.nafo.int/Fisheries/Regulations</u>

# IUU listing

This has been expanded substantially, to move being simple vessel listings. So-called "Entities" are added, covering physical and legal persons. The definition of IUU fishing is expanded, to include notions such as slavery.

# Foreign entities and NCPs

The current focus put on NCPs, FOCs and no-nationality vessels is shifted to "foreign", particularly to respond to the tenets of the PSM framework. Non-discrimination is addressed and improved under several resolutions, notably the resolution on trade restrictive measures.

# Trade restrictive measures

A shift in language is proposed, in order to provide clarity as to what the object of this resolution is. The identification procedure is strengthened, and discriminatory clauses are eliminated.

# Vessel Monitoring Vystem

No specific proposals are made in this report, beyond the fact that a Commission VMS is considered as a *conditio sine qua non* to move MCS in IOTC to the next level, and to support in a critical manner the adoption of new instruments, such as an e-CDS.

# BET SDP

This program is to be discontinued and wholly replaced by an e-CDS, in line with PRIOTC01 proposals and Kobe 2007 findings.

# Port State Measures

Landings and transhipments are now confined to designated CPC ports, in which PSM measures (including reporting obligations) - as adopted by the Commission - may be implemented. Landing and transhipping in non-CPC ports is no longer authorized.

# 2.7 IUU profile and identification of semantic gaps in MCS setup

MCS schemes are best modelled on the basis of the IUU profile of a fishery. In the case of IOTC, the MCS scheme has been constructed, and updated in large parts over the last two decades, and has been revised continuously. The work undertaken above in streamlining and integrating measures reflects the latest effort in this domain.

The IUU profile of tuna fisheries in the Indian Ocean is quite diverse, and establishing such a profile is partly based on assumptions and guesswork. One of the more important elements missing in the IOTC MCS setup, which generally contributes a lot of information to raising an IUU profile for a fishery in general is a boarding and inspections scheme. Once a consistent program – complete with consistent and transparent reporting – is in place, "guess-timating" the IUU profile of any particular fishery becomes a lot easier, as it may be based on consistent data sets yielding numbers of inspections, and numbers and types of infractions detected.

It is believed, that today, owing to dynamics in tuna fisheries globally, the impact of stateless or otherwise non-authorised vessels in the IOTC area of competence – the latter vessels often falling under the "FOC-vessel" denomination – is a concern that has diminished substantially since the midnineties. This was largely corroborated through the Indian Ocean Commission (IOC) air patrols and sea patrols that were undertaken in the earlier years of this decade under the auspices of the Smartfish ERS project. The large majority of infractions are believed to be perpetrated by otherwise duly registered and authorized vessels, flouting rules pertaining to license conditions and the general framework of IOTC Resolutions. Illegal practices cover a wide range of infraction types, such as operating illegally in EEZs of other states where no licenses are held – or operating in otherwise closed areas, tampering with VMS transponders, transhipping illegally, misreporting catches (by volume, species and/or area), flouting quota allocations, etc.

Some of these infractions can only be detected through advanced forms of monitoring presence on the fishing grounds (VMS; boarding and inspection; aerial patrols), while the implementation of advanced reporting obligations, coupled with advanced data analysis capabilities can also support the detection of inconsistencies and infractions. In the latter domain, the consistency of the routines, transparency considerations and data accessibility for analysis, and the implementation of dedicated verification routines is of importance. In this domain, important gaps do also exist.

What can be said, after completing the above exercise on revising MCS-related resolutions, is that centralised reporting overall is weak, starting with the all-important absence of a Commission VMS, and corroborated by the fact that a lot of additional trip specific operational fishing information only goes back to the flag state, and is then (partially) reported in generally consolidated form to the IOTC Secretariat – often for scientific purposes, and not for MCS purposes.

The e-PSM framework marks an exception to this general state of affairs, which is in the process of slowly changing at this particular level. However, with the e-PSM managing to centralise more operational data, the second part of the equation – another gap – needs to be addressed. And this relates to the data analysis routines that ought to be run by the IOTC's compliance section, reporting to the Compliance Committee, aimed at detecting and reporting suspected/established infractions, by CPCs and/or individual vessels and/or operators alike. These routines remain very poorly defined throughout IOTC's regulatory substance, and the mandate of the Secretariat to run these routines – in general – is not established.

An example of such a gap in monitoring and data analysis routines at the present time is the fact that transhipments at-sea are individually authorized, recorded and centrally reported, but are not discounted against individual landings. Especially for carrier vessels, typically landing in several different ports, such monitoring routines should be undertaken centrally at the level of the Secretariat, in a an agreed and results-oriented manner, and would go a long way in detecting the laundry of undeclared, misreported and/or illegally transhipped catches into the supply chain.

With regards to the latter set of gaps (centralised reporting and dedicated data analysis), the development of an effective CDS provides the foundation for addressing such gaps to a very large extent. As for the e-PSM, a modern e-CDS will centralise all data relative to individual fishing trips, all harvests and off-loadings (transhipments and landings) are accounted for, and can discounted against each other – as may be the case – in order to ensure that the supply chain is sealed and the entry of non-originating product is denied. The important element – as for the e-PSM data – will be to ensure that the MCS-oriented monitoring routines are put into place, with a clear mandate for the Secretariat to carry them out.

The development of a high seas boarding and inspection regime, and the development of an e-CDS thus come to the fore as the two most obvious gaps that ought to be addressed through the development of new and hitherto non-existing regulatory frameworks (resolutions).

Regarding dedicated monitoring, analysis and infraction-detection routines, it should be sufficient to endow the Secretariat with the mandate to develop and implement such routines in close consultation with the WPICMM – based on all data collected, regardless of their confidentiality status – and to submit the results of all such work on a recurrent basis to the CoC for its pertinent action. The CoC and the Secretariat should thus liaise directly to establish which routines are of interest, without any need to specify (and limit) such work through individual listing of routines in dedicated resolutions and provisions. The only element that must be guaranteed and monitored, is that the implementation of these routines is non-discriminatory, and applies equally all parties – regardless of their membership

status. An overall blanket mandate for the Secretariat to act in this domain is then sufficient to guarantee vast improvements in this domain.

# 2.8 Proposed new processes, new systems and new Resolutions

From the foregoing discussion, there are three key elements that ought to be considered for addition to the IOTC MCS framework. These are as follows:

# Commission VMS

The VMS situation at the IOTC is currently the object of a dedicated and stand-alone exercise. The adoption of an e-CDS in the absence of a Commission VMS is an unsound starting condition. And the launching of a high-seas boarding and inspection regime in the absence of centralised and accessible VMS signals would also be unsound and largely substandard as an approach.

For these two reasons alone, a Commission VMS should be considered as a top MCS priority, and should be developed and implemented as soon as practically feasible. The continued absence of a Commission VMS denies most avenues for central real time monitoring of the fisheries, and is instrumental in assisting IUU operators and lenient flag states to not having their infringements detected, and duly sanctioned.

The proposal for a *VMS resolution* is made separately from this report, in a dedicated stand-alone report and proposal.

# Electronic Catch Documentation Scheme (e-CDS)

CDS have been around in the RFMO arena for close to three decades now, and all arguments for considering their adoption have been made. These arguments are re-visited in the following chapter of this report – which is dedicated to the development of an e-CDS. Included in the arguments in favour of an IOTC e-CDS is the fact that the IOTC performance review has suggested the adoption of a CDS in 2009 – exactly a decade ago – at a time when both ICCAT and CCSBT were in the process of rolling out the CDS covering bluefin tuna, and almost ten years after CCAMLR had started implementing its CDS covering two species of toothfish.

The proposal for an e-CDS resolution is appended to this report in Annex XII.

# High seas boarding and inspection regime

The need for this active sea patrolling regime, targeting high seas operations in the IOTC AoC has been actively discussed since 2013, a study and a Resolution proposal have been developed, but so far, no text has been adopted by the Commission. A high seas boarding and inspection regime is critical in order to provide an avenue capable of enforcing key IOTC management provisions that can only be enforced while vessels are at sea, and in doing so, addressing some of the critical high profile IUU issues that IOTC fisheries in general are understood to suffer from. These include, but are not limited to tampering with VMS transponders, failing to honour logbook up-keeping provisions and providing complete catch reporting, infringing management rules such as the installation and operation of bird scaring devices or honouring shark finning provisions, misreporting in general, and illegally transhipping at sea.

The proposal that has been prepared – with the latest amendments added in 2016 – stands and is reappended in Annex XI. The assessment that was made of the proposal under the assignment contained in this report finds that it is a solid proposal, that it should be reconsidered by the Commission, and that any reasons for not adopting it should be clearly argued, minuted and reported, so that an amended resolution mindful of any such justified reservations may be prepared, and adopted in the future. Finally, if the resolution fails to pass – given its overall importance to complete the IOTC MCS framework – a motion ought to be submitted in order to adopt the resolution by majority vote, instead of consensus.

# RECOMMENDATION

That the WPICMM02:

- 1) **NOTE** paper IOTC–2019–WPICMM02–05b and the consultant's report IOTC-2019-WPICMM02-MCS CDS Study,
- 2) Make **RECOMMENDATIONS** on the MCS study report and propose to the Compliance Committee a way forward to improve existing MCS measures and to adopt new MCS measures.