ISSF INTERNATIONAL SEAFOOD SUSTAINABILITY FOUNDATION

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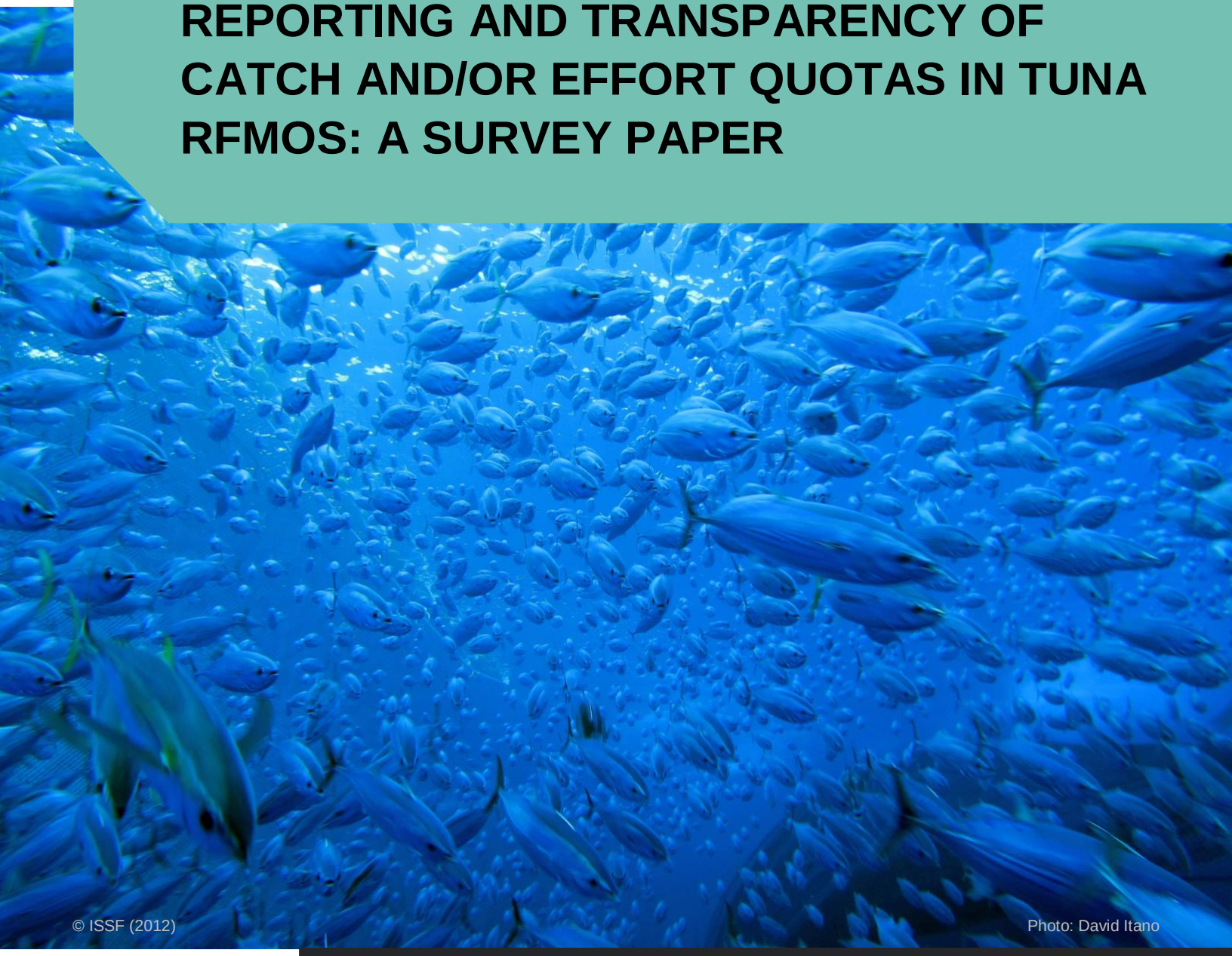
# REPORTING AND TRANSPARENCY OF CATCH AND/OR EFFORT QUOTAS IN TUNA RFMOS: A SURVEY PAPER





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**Topic Categories:** TAC, TAE, quotas, reporting, RFMOs, transparency

# Abstract

Regional fisheries management organizations (RFMOs) that are responsible for the management for highly migratory species, such as tuna, have adopted annual individual catch or effort limits for particular tuna stocks, or a total allowable catch or total allowable effort for specific tuna stocks. The adherence to these limits by RFMO Members and Cooperating Non-Members (CNMs) is typically monitored via annual, or sometimes, quarterly, reporting requirements.

This Survey Paper reviews what types of quotas have been adopted in the five tuna RFMOs, how those quotas are reported against by Members and CNMs, what reporting requirements are in place, and if any near-real time in-season reporting systems for the consumption of quotas are in place. The advantages and potential disadvantages of in-season quota consumption reporting are also examined, and findings provided.


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# Executive Summary

International regional fisheries management organizations (RFMOs) that are responsible for the management for highly migratory species, such as tuna, have adopted annual individual catch or effort limits for particular tuna stocks, or a total allowable catch or total allowable effort for specific tuna stocks. The adherence to these limits by RFMO Members and Cooperating Non-Members (CNMs) is typically monitored via annual, or sometimes, quarterly, reporting requirements.

A lack of monitoring within a season of how RFMO Members and Cooperating Non-Members (CNMs) are approaching, or possibly exceeding, these limits has been identified as possibly preventing rapid and precautionary conservation, management and purchasing decisions within a given year.

This Survey Paper reviews what types of quotas have been adopted in the five tuna RFMOs (the Western and Central Pacific Fisheries Commission, the International Commission for the Conservation of Atlantic Tunas, the Inter-American Tropical Tuna Commission, the Indian Ocean Tuna Commission and the Convention for the Conservation of Southern Bluefin Tuna), what reporting requirements are in place, how those quotas are reported against by Members and CNMs, and if any near-real time in-season reporting systems for the consumption of quotas are in place.

The advantages and potential disadvantages of in-season quota consumption reporting are also examined, and findings provided.

## Key Findings:

1. **In-season catch/effort monitoring may be desirable for specific scientific and compliance purposes, but can be difficult to accomplish.**
2. **The advantages include having accurate monitoring of quota, including provision of guidance to processors or the market about sourcing tuna.**
3. **The disadvantages are that it could lead to misreporting and/or worsening of statistics because verification without adequate quality assurance mechanisms is difficult.**
4. **Broader use by fleets of electronic reporting, with appropriate quality assurance, could lessen the risk of misreporting while allowing for more cost-effective in-season monitoring.**

# Research Questions

These research questions are for readers to begin to examine how aspects of our findings for RFMO in-season quota reporting and transparency may help them in their work. The questions are not intended to be comprehensive or represent every finding in the Report, but are designed to assist users in identifying how to use them. We have organized these questions around the key themes covered in the Report.

- **Do the tuna RFMOs have any catch or effort quotas? Are they total allowable catch or effort quotas (TAC/TAE) or allocated to members?**
- **What are the reporting requirements for these quotas? Are they annual and retroactive or in-season?**
- **Is there any transparency regarding Members' performance in meeting/staying within its quotas or the TAC? E.g., are data available re. the Compliance or Science Committees?**
- **Do any RFMOs have in-season public reporting of members' implementation (meeting or breaching) allocated quotas or a global TAC/TAE?**
- **Is transparency of in-season quotas a good thing; are there drawbacks?**
- **How many RFMOs have Member reporting requirements for achievement of in-season quotas, that then result in a closure when reached? If there is reporting only on annual cycle, then what is done if there is a breach of an allocated quota or fishing after a global TAC reached?**

# Introduction

A lack of monitoring within a season of how tuna RFMO Members and Cooperating Non-Members (CNMs) are approaching, or possibly exceeding, annual individual catch or effort limits for particular tuna stocks, or a total allowable catch or total allowable effort for a specific tuna stocks, arguably prevents rapid and precautionary conservation, management and purchasing decisions within a given year.

This Survey Paper reviews what types of quotas have been adopted in the five tuna RFMOs, what reporting requirements are in place, how those quotas are reported against by Members and CNMs, and if any near-real time in-season reporting systems for the consumption of quotas are in place. The advantages and potential disadvantages of in-season quota consumption reporting are also examined, and findings provided.

## WCPFC

**Quotas**: WCPFC has catch or effort limits for bigeye, yellowfin, skipjack, South Pacific albacore tunas, and swordfish, through its conservation and management measures (CMMs). For example, CMM 2017-01 (and its antecedents) contains catch limits for bigeye tuna for longline vessels, and these limits are allocated among specific WCPFC members. Other CMMs, such as for albacore and swordfish, contain effort limits (i.e., a limit on the number of fishing vessels actively fishing for that species), which are not allocated. Still others include provisions that the catch of certain tuna species is not to exceed a particular tonnage from a reference year or range of years. These are also not typically allocated.

**Reporting**: The WCPFC requires estimated total catch and catch and effort data to be reported annually, aggregated by gear, flag, time-period and geographic level and at the operational level[1]. WCPFC members are also to annually report on their implementation of CMMs via its Part 2 report. In the case of bigeye catch limits, those CCMs with allocations are required to report monthly to the Secretariat. The Secretariat notifies all CCMs when 90% of the catch limits for a CCM is exceeded.

**Transparency**: Except with respect to allocated bigeye catch limits for longline fleets of specific members in CMM 2017-01, during a given year, there is no transparent mechanism for member reporting when the total and/or allocated catch or effort limits are being approached and if members are within the prescribed limits.

## IATTC

**Quotas**: The IATTC has catch limits for bigeye tuna for longline vessels, and these limits are allocated among specific IATTC members (C-17-02 and its antecedents). In 2017 the IATTC adopted a total allowable catch limit for yellowfin and bigeye (combined) for the purse seine fishery on floating objects in C-17-01. This measure was replaced by C-17-02.

**Reporting**: The IATTC requires estimated total catch and catch and effort data to be reported annually, aggregated by gear, flag, time period and geographic level and at the operational level, where possible (C-03-05). IATTC has requirements for monthly catch reporting, by CPC, of bigeye by longline vessels (C-13-01) and of cumulative catches by species by other gears, principally purse seine and pole and line (to implement catch limits in IATTC multi-year tuna conservation resolutions). These data are available publically on the IATTC website[2]. Semi-annual reports of North Pacific albacore catches are also required by C-13-03 and are also publically available on the IATTC web site[2]. Now

[1] https://www.wcpfc.int/status-data-provision

[2] https://www.iattc.org/CatchReportsDataENG.htm

superseded Resolution C-17-01 included a mechanism for the purse seine fishery whereby in season consumption of annual catch limits were reported by members to the Secretariat, and the Secretariat informed the members when the TAC was being approached, and then when it was reached.

**Transparency**: The in–season reporting mechanism in C-17-01 used the monthly catch reporting requirement to track when the TAC was being approached and when 100% of the TAC was reached.

## IOTC

**Quotas**: IOTC has adopted catch limits for yellowfin tuna via Resolutions 16/01 and 17/01 and skipjack tuna via the Harvest Control Resolution 16/02.

**Reporting**: The IOTC requires estimated total catch and catch and effort data to be reported annually, aggregated by gear, flag, species, time period and geographic level (Resolution 15/02).

**Transparency**: There is no transparent mechanism for CPC reporting when the total and/or allocated catch limits are being approached and if CPCs are within the prescribed limits. For instance, under current Resolutions, it is not possible to gauge compliance with catch limits until at least 2 years after the limits are put into effect.

## ICCAT

**Quotas**: ICCAT has adopted a total allowable catch (TAC), and in some cases, catch limits for CPCs for bigeye, yellowfin, albacore and bluefin tunas.

**Reporting**: ICCAT requires estimated total catch (Task I) reported annually, aggregated by gear, flag, region, species and by EEZ and high seas, where possible. Catch and effort data (Task II) is to be reported by area, gear, flag species and by month. ICCAT also requires monthly reporting of catches for Eastern Atlantic Bluefin tuna[3].

**Transparency**: During a given year, there is no mechanism for CPC reporting when the total and/or allocated catch limits are being approached and if CPCs are harvesting within their prescribed annual catch limits.

## CCSBT

**Quotas**: The CCSBT has a Management Procedure (MP) that is used to guide the setting of the Southern Bluefin (SBT) global total allowable catch (TAC). Under the MP, the TAC is set in three year periods. In addition, some flexibility is provided for limited carry-forward of unfished allocations between quota years[4].

**Reporting:** Members and Cooperating Non-Members (CNMs) are expected to provide annually information on the total catch of southern bluefin tuna (SBT) per fleet, aggregated SBT catch and effort information, SBT catch at size and SBT catch at age data. However, the precise information to be provided by each Member and CNM varies. The information to be provided by each Member/CNM and the dates by which it must be provided is specified each year by the Extended Scientific Committee (e.g., in the Scientific Data Exchange requirements.)[5] Also, each month, Members and CNMS are required to report their total southern bluefin tuna (SBT) catch (whole weight, in kilograms) for the previous month, and

[3] http://www.iccat.int/Documents/Recs/compendiopdf-e/2014-04-e.pdf

[4] https://www.ccsbt.org/sites/ccsbt.org/files/userfiles/file/docs_english/operational_resolutions/Resolution_Limited_Carry_forward.pdf

[5] https://www.ccsbt.org/sites/ccsbt.org/files/userfiles/file/docs_english/general/data_exchange_requirements.pdf

the total cumulative SBT catch (whole weight, in kilograms) for the year to date, to the Secretariat. The report is required to be provided no later than the last day of the month following fishing. With respect to quotas,

Members and CNMs are required to provide the following information to the CCSBT Secretariat:

- Members and CNMs that manage their southern bluefin tuna fishery with an individual quota management system are to report:
    - the yearly SBT quota and catch allocation arrangements for this fishery either by company, quota holder or vessel; and
    - the final SBT catch against quota by company, quota holder or vessel at the completion of a vessel's fishing period or fishing year.
- Members and CNMs that manage through an "Olympic" system are to report the final SBT catch by company or vessel at the completion of a vessel's fishing period or fishing year.

The timeframe established for providing this information is as follows:

- Information on the initial quota allocation is due within two months of the start of the Member's/CNM's fishing season; and
- Final catch information is due within 6 months of the end of the Member's/CNM's fishing season.

Members and CNMs must also provide an annual report to the CCSBT Compliance Committee and the Extended Commission 4 weeks before the meetings. This annual report includes as section for reporting the annual catch against a national SBT allocation.

**Transparency:** The catch limits for Members and Cooperating Non-Members of the CCSBT are publicly available. However, there is no transparent mechanism for Member/CNM reporting when allocated catch limits are being approached or exceeded. The Annual Reports provided by Members/CNMs that would identify over-catches are reviewed

# The Advantages and Disadvantages of In-Season Quota Consumption Reporting

This Survey Paper shows that most tuna RFMOs do not require near real-time reporting that would be needed to provide in-season quota monitoring. The case of the IATTC, where monthly or semi-annual reports from several gears for several species are available to members of the Commission or to the public, demonstrates that in-season quota monitoring is possible.

Potential advantages of in-season monitoring of catch and effort include[6]:

1. Supporting the implementation of harvest strategies through catch or effort controls;
2. Developing scientifically designed projections for predicting when an overall limit could be achieved using historical patterns informed by in-season data; and
3. In-season management of catch quotas.

Compliance with tuna RFMO conservation measures and data requirements is fundamentally the responsibility of the Member or CNM for those vessels flying its flag (or under charter). Some RFMO members have instituted methods to monitor the consumption of national quotas allocated to their flagged vessels through near real-time reporting and/or projection methods. However, for example, it is difficult to monitor tropical tuna purse seine catches by species in near real-time due to the necessary correction required to estimate the species composition of the catch. The problem is that until catch is sampled (at port or at-sea) and analyzed, there is no accurate accounting of the catch of each species, especially in fleets that make sets on both free-swimming schools and floating objects. Thus, a potential disadvantage of in season reporting is that it could add to uncertainty in projections of time to quota consumption[7].

Also, RFMOs that have established monthly reporting requirements appear to have done so for fisheries targeting only one species, such as bluefin, or a specific gear for a particular fishery, like longline for swordfish or albacore. It may be that in-season reporting is easier to accomplish for fisheries targeting a specific stock and/or using a certain gear type.

[6] Input from the March 2018 ISSF Scientific Advisory Committee

[7] *Ibid.*

In summary, in-season catch/effort monitoring may be desirable for specific scientific and compliance purposes, but can be difficult to accomplish. The advantages include having accurate in-season monitoring of quota, including provision of guidance to processors or the market about sourcing tuna.

However, in-season monitoring could also lead to misreporting and/or worsening of those statistics that are reported. This is because verification of in-season reports without adequate quality assurance mechanisms is difficult.[8]

Broader use by fleets of electronic reporting, with appropriate quality assurance, such as used in the WCPFC and by certain tuna RFMO members, could lessen the risk of misreporting while allowing for more cost-effective in-season monitoring.

## Recommendation

- If RFMOs begin to require Members and CNMs to report to the RFMO its in-season status with respect to their individual annual catch limits and/or an annual TAC for specific tuna stocks and/or gears, then RFMOs should also develop, through their scientific committees or staff, quality assurance mechanisms for verification of in-season reports, including through the use of electronic reporting technologies, to minimize the risk of misreporting.

[8] *ibid.*

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