

A Review of Longline Observer Coverage Reporting within the Inter-American Tropical Tuna Commission

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In 2011, the Inter-American Tropical Tuna Commission (IATTC) adopted [Resolution C-11-08](#) that requires members and cooperating non-members (CPCs) to ensure at least 5% of the fishing effort made by its large longline fishing vessels is observed by a scientific observer.¹ Since then, the Secretariat has only received a handful of complete longline observer reports. As indicated in the IATTC's staff [longline observer program report presented to the Scientific Advisory Committee in 2019 \(SAC-10-04\)](#), most CPCs have not provided complete observer data for any year* and only a handful submitted data for 2018.² This unfortunately has remained a steady trend every year since the Resolution was first implemented.

There is a growing recognition from managers, scientists, and other stakeholders that observer coverage needs to be increased on longline vessels to provide more complete information on catch, bycatch, and effort to support more effective scientific stock assessments and compliance processes. Additionally, the IATTC staff have noted that observer coverage levels are “the most important statistic [provided by members and CPCs,] since it not only shows the level of compliance with the 5% requirement, but is also critical for extrapolating observer data to the longline fisheries as a whole.”² Without proper oversight and data from these vessels, opportunities to avoid proper catch reporting and potentially launder illegal, unreported, and unregulated (IUU) fish into the supply chain will continue to exist.

This document provides an assessment of the current observer coverage requirements for longline vessels, highlights areas that hinder the Resolution’s effectiveness, and includes practical recommendations to establish a more comprehensive and concrete Resolution.

C-11-08 Requirements

One of the main responsibilities of the regional fishery management organizations (RFMOs) is to collect accurate data on fishing activities that can be used for scientific and compliance purposes. Many of the RFMOs, including IATTC, have mandated 100% coverage requirements for a limited list of gears, primarily for purse seine vessels. Recognizing the need to collect scientific data on non-target species and taking the recommended level of observer coverage on high-seas fishing operations introduced at the Kobe II workshop, C-11-08 mandates that each member and CPC will ensure “at least 5% of the fishing effort made by its longline fishing vessels greater than 20 metres length overall carry a scientific observer.”¹

The observer data collected is required to be submitted annually to the Secretariat by March 31 and includes the following mandatory data fields:

* While many of these CPCs do not have active longline vessels, they do have longliners on the IATTC Vessel Register, and therefore are obligated to submit an annual report.

- 1. Country (or fishing entity)*
- 2. Fishing year*
- 3. Total catches of the longline fleet, by weight*
- 4. Total fishing days in the year of the longline fleet (subsequently defined as “effective days fishing”)*
- 5. Percent coverage of fishing effort by observers (also to be expressed in “effective days fishing”)*
- 6. Total catch by vessels with observers on board*
- 7. Species composition of catches by vessels with observers on board*
- 8. Number of vessels with observers on board*
- 9. Number of sea turtles caught incidentally on trips with observers*
- 10. Whether caught sea turtles were released*
- 11. Numbers of sharks caught in trips with observers*
- 12. Numbers of rays captured in trips with observers*
- 13. Numbers of billfishes captured in trips with observers*
- 14. Numbers of fishing hooks used in trips with observers*
- 15. Type of hooks used*

Data Sources

These CPC summary reports not only demonstrate compliance with the minimum 5% coverage requirement, but also provide useful fleet and operational statistics used annually in IATTC’s Ecosystem Considerations and [Fishery Status](#) reports.³ However, many of these data fields are not being provided by CPCs, meaning that several key requirements of C-11-08 are not being met, including reporting on the percentage of observer coverage. All longline observer data reports submitted by IATTC CPCs are accessible online for each SAC meeting starting in 2013. However, many submissions prior to 2015 are either inaccessible or have not been updated with the full data compilation for that year. For the purposes of this review, the analysis was limited to reports submitted between 2015 to 2018.

Findings

Non-standardized Longline Effort Metric Used for Calculating % Observer Coverage

Other tuna RFMOs use the number of hooks to measure longline effort because its definition is less ambiguous and can be quantified or estimated with considerably more precision than other effort metrics for longline fisheries (e.g. number of trips). Additionally, this metric is also used for standardizing catch-per-unit effort for bigeye and yellowfin tuna stock assessments in all five tuna RFMOs, including the IATTC.⁴ However, a standard longline effort metric was not used by CPCs prior to 2019.[†] This problem was initially raised in 2012 when multiple CPCs expressed concern that data on the number of hooks was not always recorded—therefore in 2013, *effective day's fishing*[‡] was adopted as the metric for longline effort. However, it is rarely used as seen in the SAC's 2017 and 2018 summary reports. In 2017, nine of the ten CPCs included reported the total number of hooks observed, and the other reported the range of number of hooks per set.^{2,4} Likewise in 2018, only one of the six CPCs “explicitly

[†] At its 2019 meeting, the SAC approved the use of hooks as the standardized longline effort metric.

[‡] Effective day's fishing is defined as a day on which a longline set was made, excluding transit days.

uses the term *effective days fishing* to describe its effort, whereas all but one report the total number of hooks observed.”² This inconsistent method of calculating the observer coverage rate relative to the total effort of each longline fleet should be of concern to IATTC as it hampers comparisons between fleets and compliance with the Resolution’s requirements.

Individual CPC Reports

No CPCs were fully compliant in submitting their percent observer coverage every year for the entire 2013-2018 period. However, a few CPCs have consistently submitted full or partial reports for 2015-2018 as seen in Figure 2.

Figure 2: Percent Observer Coverage Data Review by CPC (2015-2018)

	USA	EU (GER)	EU (PRT)	EU (ESP)	KOR	JPN	TWN	CHN	CHL	MEX	BLZ	ECU	CRI	FRA	GTM	NIC	PAN	PER	PRT	SLV	VEN	VUT
2018	Yellow	Red			Red		Green	Yellow	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	
2017	Green				Red		Yellow	Yellow				Green	Red									
2016	Yellow	Red		Yellow		Green			Red			Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	
2015	Yellow	Red	Red	Green	Red	Green	Green	Red	Red	Yellow		Green	Red	Green								

Green – Data Submitted & Compliant with >5% Coverage

Yellow – Partially Submitted/Incomplete Data

Red – No Data Submitted and/or Not Compliant with <5% Coverage

Japan, Mexico, and Taiwan complied with the 5% observer coverage and exceeded the percentage in all reports submitted for 2015-2018. While they did not submit reports for 2018, Belize and Ecuador met and exceeded the 5% observer coverage requirement for 2015-2017. Chile, which hadn’t submitted reports until recently, met the requirement for 2017 and 2018. Korea, while compliant in submitting reports from 2015-2018, generally has not met the 5% observer coverage requirement, except for 2016. Similarly, the EU for both Spain and Portugal did not meet the 5% observer coverage requirement for 2016-2018, and no observer data was submitted for Germany.

Non-submission of Reports

The 5% observer requirement has been in force since 2013, therefore, all CPCs should be able to provide data for 2013-2018 to the Commission. This, however, is not the case. As seen in Figure 1, 17 CPCs have large-scale longline vessels[§] in the IATTC Convention Area and are required to submit the % observer coverage reported for their 2018 fleets.⁵

Figure 1: Number of Authorized Large Longline Vessels at IATTC (14 June 2019)⁶

China	Japan	Korea	Chinese Taipei	EU (Spain)	Vanuatu	Mexico	USA	Ecuador	Panama	France	Costa Rica	EU (Portugal)	Chile	Peru	EU (Germany)	Nicaragua
400	196	191	132	130	50	42	37	20	15	14	12	10	1	1	1	1

[§] Large longline vessels at IATTC are defined to be over 24 meters.

Of these 17 CPCs, only six reported their percentage of observer coverage for 2018. Of the six CPCs that did report--two (Japan and Mexico) met the 5% requirement, two (Portugal and Korea) did not meet the requirement, and the remaining two (Taiwan and Chile) submitted incomplete percent observer coverage data.² The vast majority of CPCs with large-scale longline vessels on the IATTC vessel register have not provided observer coverage data for the entire 2013-2018 reporting period.

Incomplete Information

There is a trend of some CPCs notifying the Secretariat that the data is not available and will be updated once the percentage is calculated. However, a majority of incomplete observer data reports are never updated. The USA has a history of submitting partial reports and then not providing a publicly available update to its deep-set percent observer coverage data. Similarly, since 2013, China has submitted partial reports indicating that “the observer coverage with fishing days will not be calculated until the fishery data compilation for the [year] is completed.”⁶ There is not public evidence that these reports have ever been updated. Since 2014, only 3 CPCs went back and updated their data, most notably Japan who has updated their reports annually between 2014 and 2017.

Recommendations

As recommended by the SAC, “5% coverage is too low for calculating accurate estimates of the catches of species caught infrequently in those fisheries, such as some sharks of conservation concern; 20% coverage is considered the minimum level required for such estimates.”⁷ While many CPCs already have difficulties meeting the 5% coverage, an overwhelming majority have not submitted any observer coverage data. The current regulatory landscape at IATTC has not progressed enough to ensure proper enforcement of Resolution C-11-08, which ultimately undermines the scientific analyses and decision making. The responsibility is on RFMOs, like IATTC, to improve reporting requirements and harmonize datasets between all members and CPCs. IATTC must strengthen and enforce the existing longline Resolution to ensure that complete reports on observer coverage data are submitted and can be used to support effective fisheries management and quality science.

Below are recommendations that the Commission should consider in order to improve compliance with the observer coverage data requirements:

- Add a formal review of compliance with reporting and observer coverage requirements to the agenda of IATTC’s annual Meeting of the Committee for the Review of Implementation of Measures Adopted by the Commission.
- Require CPCs to submit all operational longline observer data collected from January 1, 2013 to present and update any incomplete observer coverage reports.
- Amend Resolution C-11-08 to require CPCs to report the number of annual active longline vessels.

[Endnotes](#)

¹ IATTC, “Resolution on Scientific Observers for Longline Vessels” (2011),
https://www.iattc.org/PDFFiles/Resolutions/IATTC_English/C-11-08-Active_Observers%20on%20longline%20vessels.pdf

² IATTC, “Document Sac-10-04 Synopsis of Longline Observer Data Reported Pursuant to Resolution C-11-08” (Scientific Advisory Committee, 2019), https://www.iattc.org/Meetings/Meetings2019/SAC-10/Docs_English/SAC-10-04_Longline%20observer%20program%20reports.pdf

³ S.G.a.B. Wiley, “Standardization of Reporting Formats and Effort Reporting for Longline Fisheries (Resolution C-11-08)” (Scientific Advisory Committee, 2019),
https://www.iattc.org/Meetings/Meetings2019/SAC-10/INF_English/SAC-10-INF-H_Standardizing%20longline%20reports%20C-11-08.pdf

⁴ S. Hoyle and M. Maunder (IATTC), “Document SAR-7-07 Standardization of Yellowfin and Bigeye CPUE Data from Japanese Longliners, 1975-2004,” (Working Group to Review Stock Assessments),
[https://www.iattc.org/Meetings/Meetings2006/SAR-07/Docs_English/SAR-7-07_Longline%20catch%20per%20unit%20of%20effort%20\(CPUE\)%20standardization.pdf](https://www.iattc.org/Meetings/Meetings2006/SAR-07/Docs_English/SAR-7-07_Longline%20catch%20per%20unit%20of%20effort%20(CPUE)%20standardization.pdf)

⁵ IATTC, “IATTC Vessel Database – Authorized Large Longline Vessels”, (2019),
<https://www.iattc.org/VesselRegister/VesselList.aspx?List=Longline&Lang=ENG>

⁶ IATTC, “SAC-07 INF-A(f) China: Annual Report”, (2015),
[https://www.iattc.org/Meetings/Meetings2016/SAC-07/PDFs_INF_English/SAC-07-INF-A\(f\)_China-Annual-report-2015.pdf](https://www.iattc.org/Meetings/Meetings2016/SAC-07/PDFs_INF_English/SAC-07-INF-A(f)_China-Annual-report-2015.pdf)

⁷ IATTC, “Document SAC-10-19 STAFF RECOMMENDATIONS FOR MANAGEMENT AND DATA COLLECTION 2019” (2019), https://www.iattc.org/Meetings/Meetings2019/SAC-10/Docs_English/SAC-10-19_Staff%20recommendations%20to%20the%20Commission.pdf