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2019 Catch and Effort data submission

Relates to agenda item: 5.3

Working paper ☒ Info paper ☐

SIOFA Secretariat

Abstract

This paper summarizes the 2019 catch and effort data submitted by CCPs to the SIOFA Secretariat under the requirements of CMM 2019/02. Similar to the scientific observer data, Catch and Effort data were provided with a diverse quality range depending on the fisheries and the CCPs.

Recommendations *(proposals and working papers only)*

1. The Scientific Committee draws the attention of the MoP to the lack of Catch and Effort data submitted by Mauritius.
2. The Scientific Committee requests that the MoP consider mechanisms to ensure that all required Catch and Effort data are collected and submitted by CCPs, including for previous years where the data submitted was incomplete.
3. CCPs to comment on their respective submission and provide information about any difficulties encountered and ways toward improving the data submission.

Introduction

This report summarizes the catch and effort data submitted to the Secretariat by CCPs for their 2019 fishing year activities.

The report also provides an assessment of the quality and potential compliance of the data submitted against the requirements of CMM 2019/02. It is recalled that submission of the scientific is mandatory, and must be provided together with the catch and effort data, and follow the requirements of CMM 2019/02 paragraph 6 and the data specifications provided in Annex A.

Annual catch summaries and observer data submission are not part of this report.

In 2020, three CCPs notified the Secretariat of no fishing in 2019 (Korea, Seychelles, and China). The nine CCPs that performed fishing activities were Australia, Comoros, Cook Islands, European Union, France Territories, Japan, Mauritius, Chinese Taipei, and Thailand.

Method

The assessment of Catch and Effort data provided to the Secretariat under CMM 2018/02 used the colours and rating grid summarised in Table 1 below. The Secretariat liaised with each CCP for clarification and to give an opportunity to review and improve their submission.

Table 1: Compliance rating and colour coding of the submitted Catch and Effort data

Compliance rate colour codes	
Fully compliant with CMM 2019/02 (10)	Green
Compliant but accuracy can be improved (8-9)	Light Green
Not fully compliant, data still usable to do some SC works (6-7)	Yellow
Some information provided, but not enough to conduct proper SC work (1–5)	Orange
No information provided, non-compliant (0)	Red

All data fields required in CMM 2019/02 have not been listed to avoid an overly complex and cumbersome report. The SIOFA Data Manager chose to group the data requirements into several categories listed in Table 2 below, to summarise the Catch and Effort data submissions for each CCP. Annex A of CMM 2019/02 gives the full requirements of the Catch and Effort data submission.

Table 2: Categories and descriptions of submitted Catch and Effort data

Vessel id	information about the identity of the fishing vessels
Time resolution	fishing operations time accuracy, operations aggregation over a period
Spatial accuracy	spatial accuracy of the fishing operation, data aggregation on a geographic grid
Gear details	provision of fully detailed fishing gears specifications (ref. annex A)
Effort details	provision of effort (fishing hours, hooks number, etc.)
Depth	bottom depths and fishing depths at start and end of fishing
Species	Species details (species identification accuracy)
Retained catches	information on estimated retained catch
Discarded catches	information on estimated discarded catch
Benthos (VME) bycatch	information on bycatch of benthos (and VME taxa)
Birds/Mammals bycatch	information on bycatches of birds and mammals.

We note that (a) no cross verification of the data consistency between data sets, scientific observer data, or annual catch summaries has been done in this document, and (b) the on-board scientific observer data submissions are not summarized here but observer data can provide with information relevant to the catch and effort data submission.

Summary

AUSTRALIA

One vessel (mixed longline / drop line) operated for a short trip in 2019.

Table 3: Summary the Catch and Effort data submitted to the SIOFA secretariat by AUSTRALIA

Category	Data status	
Vessels id	provided	10
Time resolution	time of each operation	10
Spatial accuracy	rounded down to minute	8
Gear details	some specifications of the line are missing (hook specifications)	8
Effort details	hooks number provided and soak time computable	10
Depth	set end depth provided	7
Species	Some FAO codes provided. Some species are without FAO code (e.g., Latridopsis spp, Palinuridae – undifferentiated)	8
Retained catches	provided	10
Discarded catches	provided	10
VME bycatch	provided in observer data	
Bird & mammal bycatch	(None reported)	10

COMOROS

Comoros provided the Secretariat with a daily catch log file corresponding to a single trip in October-November 2019. No scientific observer data was submitted.

Comoros operates a mother vessel with several handline fishermen on small boats. No effort data for any fishing activity has been provided.

Table 4: Summary the Catch and Effort data submitted to the SIOFA secretariat by COMOROS

Category	Data status	
Vessels id	provided	10
Time resolution	day	7
Spatial accuracy	one position per day	7
Gear details	only main gear provided LHP, no specifications	4
Effort details	none	0
Depth	some	7
Species	FAO group code (EMP LHN RYG)	7
Retained catches	provided, Kg	10
Discarded catches	provided, none	10
Benthos bycatch	not provided	0
Bird & mammal bycatch	not provided	0

COOK IS

Cook provided two sets of data corresponding to the activities of two trawler vessels. The first trips have fishing operations aggregated over one day and the later trips are provided on a haul-by-haul basis.

The data had to be split into two parts: the aggregated data has been processed into the aggregated catch and effort database (AGG), and the later data into the haul-by-haul catch and effort database (HBH).

Table 5: Summary the Catch and Effort data submitted to the SIOFA secretariat by the COOK ISLANDS

Category	Data status	
Vessels id	provided	10
Time resolution	day and tow date/time (mixed)	7
Spatial accuracy	degree minute	8
Gear details	(in observer report)	
Effort details	number of trawl shots + tow times (mixed)	7
Depth	irrelevant when fishing operation are aggregated + provided on a tow-by-tow basis (mixed)	5
Species	FAO code provided + a few unidentified	9
Retained catches	Kg provided, below Kg 100 no weight accuracy	9
Discarded catches	Kg provided, below Kg 100 no weight accuracy	9
Benthos bycatch	provided in observer data	
Bird & mammal bycatch	provided in observer data	

EUROPEAN UNION

The European Union provided data from one Spanish flagged longliner.

Table 6: Summary the Catch and Effort data submitted to the SIOFA secretariat by the EUROPEAN UNION

Category	Data status	
Vessels id	provided	10
Time resolution	day	8
Spatial accuracy	minute + 1 decimal	9
Gear details	only main gear provided, no technical specifications	4
Effort details	hooks number	10
Depth	provided	10
Species	provided, some high-level taxa used	9
Retained catches	provided	10
Discarded catches	provided	10
Benthos bycatch	provided	10
Bird & mammal bycatch	in observer report	

FRANCE OVERSEAS TERRITORIES

France Overseas Territories had two fishing trips from one vessel.

Table 7: Summary of the Catch and Effort data submitted to the SIOFA secretariat by FRANCE OVERSEAS TERRITORIES

Category	Data status	
Vessels id	provided	10
Time resolution	haul date-time	10
Spatial accuracy	decimal degree	10
Gear details	provided	10
Effort details	hooks number + soak time	10
Depth	provided	10
Species	provided, a few at genus level	9
Retained catches	provided	10
Discarded catches	provided	10
Benthos bycatch	provided in observer report	
Bird & mammal bycatch	provided in observer report	

JAPAN

Only trawl operations reported in 2019. Tow-by-tow data provided.

Table 8: Summary of the Catch and Effort data submitted to the SIOFA secretariat by JAPAN

Category	Data status	
Vessels id	provided	10
Time resolution	tow start/end time	10
Spatial accuracy	tow coordinate rounded to 1 minute	8
Gear details	trawl specs provided in observer report	
Effort details	tow duration	10
Depth	tow start and end depth provided	10
Species	FAO code provided but usage of other	7
Retained catches	Kg provided	10
Discarded catches	Kg provided	10
Benthos bycatch	reported in observer data (NIL)	
Bird & mammal bycatch	reported in observer data (NIL)	

MAURITIUS

No information from Mauritius was provided.

Table 9: Summary of the Catch and Effort data submitted to the SIOFA secretariat by MAURITIUS

Category	Data status	
Vessels id	no info provided	0
Time resolution	no info provided	0
Spatial accuracy	no info provided	0
Gear details	no info provided	0
Effort details	no info provided	0
Depth	no info provided	0
Species	no info provided	0
Retained catches	no info provided	0
Discarded catches	no info provided	0
Benthos bycatch	no info provided	0
Bird & mammal bycatch	no info provided	0

CHINESE TAIPEI

All fishing activities were from pelagic longliners targeting oil fish.

Table 10: Summary of the Catch and Effort data submitted to the SIOFA secretariat by CHINESE TAIPEI

Category	Data status	
Vessels id	provided	10
Time resolution	date/time (no set end Date/Time)	8
Spatial accuracy	coordinate (no set end positions)	8
Gear details	many gear technical specs missing	4
Effort details	hooks number	10
Depth	not provided (irrelevant?)	
Species	FAO code provided, IOTC species mixed, OIL/LEC mixed	7
Retained catches	Kg provided	10
Discarded catches	Kg provided	10
Benthos bycatch	no information (irrelevant?)	
Bird & mammal bycatch	no information	0

THAILAND

Trawl and hand line fishing operations.

Table 11: Summary of the Catch and Effort data submitted to the SIOFA secretariat by THAILAND

Category	Data status	
Vessels id	provided	10
Time resolution	HL: day, TW: tows time	7
Spatial accuracy	HL: daily position, TW: tow start and end positions	7
Gear details	HL: not provided, TW: some specs provided	4
Effort details	HL: hooks (no line lifts no), TW: tow duration	7
Depth	provided	10
Species	FAO + usage of "trash fish"	8
Retained catches	Kg	10
Discarded catches	Kg	10
Benthos bycatch	in observer report	
Bird & mammal bycatch	no information	0

All CCPs

Table 12: Summary of all CCPS Catch and Effort data submissions

Data categories	AUS	COM	COK	EU	Fr-OT	JPN	MUS	CT	THA
Vessels id	10	10	10	10	10	10	0	10	10
Time resolution	10	7	7	8	10	10	0	8	7
Spatial accuracy	8	7	8	9	10	8	0	8	7
Gear details	8	4		4	10		0	4	4
Effort details	10	0	7	10	10	10	0	10	7
Depth	7	7	5	10	10	10	0		10
Species	8	7	9	9	9	7	0	7	8
Retained catches	10	10	9	10	10	10	0	10	10
Discarded catches	10	10	9	10	10	10	0	10	10
Benthos bycatch	0	0		10			0		
Birds/Mammals	10	0					0	0	0

Summary

Mauritius: Mauritius did not provide any information in regards of its fishing activities in the SIOFA area in 2019. The Scientific Committee does not know if fishing occurred or not.

Gear details: Complete provision of fishing gear specifications seems challenging to be achieve. The Secretariat requests that the Scientific Committee investigate the relevant fields to understand where the issues are and provide recommendations to improve data quality.

Benthos bycatch: CMM 2019/01 does not specify if the bycatch reports should contain all and any species (including benthos species). The Secretariat requests that the Scientific Committee consider recommendations to the MoP to clarify CMM 2019/02 to improve benthos (invertebrates) bycatch reporting.

Note that VME species information is requested in the observer data.

Birds/Mammal: Several CCPs do not provide any information about those interactions. The Secretariat reminds CCPs that that even if no interaction occurred, this should be recorded with a 0 or a NIL for all of the fishing operations.

CMM 2019/02 requires CCPs to provide the Secretariat with scientific observer data from 2018. There are several categories that are listed both in the observer data requirements and in the catch and effort requirements. The Secretariate requests that the Scientific Committee clarify whether some information should be provided in both submission (catch and effort from the industry,

scientific observer data from the on-board scientist) OR only in the catch and effort data OR only via the submission of scientific observer data.

CMM 2019-02 does not explicitly specify the data requirements for handline fisheries and pelagic longline fisheries. The Secretariat notes that the Meeting of Parties (MoP7) requested that Comoros and Thailand develop data submission requirements under CMM 2019-02 for handline fisheries, and Chinese Taipei develop data submission requirements under CMM 2019-02 for pelagic longline fisheries.