# The Southern Indian Ocean Fisheries Agreement (SIOFA) 5<sup>th</sup> Meeting of the Parties 25-29 June 2018

Cape Panwa Hotel, Phuket, Thailand

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Summary	of reports	provided to	the Secretariat
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Relates to agenda item: 6	Proposal	Other Document 🔀	Info Paper
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# SIOFA SECRETARIAT

## **Abstract**

The report presents a summary of reports provided to the secretariat in accordance with CMM2017/02 paras 6, 7 and 13 and the status of the databases held at SIOFA Secretariat in June 2018.

A description of the databases currently up and running at SIOFA is provided in 1st part, the 2nd part provides a summary of their content plus the status of the 2017 data submission according to CMM 2017/02.

#### Preamble

The SIOFA data manager took position in January 2018. At that time the Secretariat already had a lot of datasets (historical and current) provided by the contracting parties in various formats and a database already designed by a previous consultant for the catch and effort data (tow-by-tow) which contained data from Australia and French Austral Territories.

Summary of the main developments made in regard of the SIOFA databases

During the January 2018 – June 2018 period the development mainly consisted of:

- Designing a datasets database to record fisheries data datasets received by the Secretariat.
- Designing the catches summary database to contain catch summary data to be submitted by CP, CNCP and PFE (CMM 2017/02 para 7)
- Updating the structure of the catch and effort (tow-by-tow) database that stores the vessel catch and effort data to be submitted by CP, CNCP and PFE (CMM 2017/02 para 6)
- Recording of the recent and historical datasets received by the Secretariat
- Processing of the historical fisheries data sent to the Secretariat into the catch and effort database and the summary catches database.
- Processing of the 2016 fisheries data sent to the Secretariat into catch and effort database and summary catches database.
- Recording of the 2017 datasets received at the Secretariat

Note: the 2017 fisheries data received by May 31<sup>st</sup> 2018 by the Secretariat have not been yet processed into their respective databases.

The report below provides details for each of the main database developed at SIOFA to manage data provided under CMM 2017/02 specifications.

## 1. Database roles and structure

#### 1.1. The datasets database

This database is a preliminary management tool that has been developed to store the datasets received at the Secretariat and to help in the dataset processing.

This database consists of:

- a table of the datasets received at the Secretariat
- a table that describes the content of the datasets
- a table that check the datasets content against the CMM 2017/02 main requirements.

These tables are structured as shown in the picture below

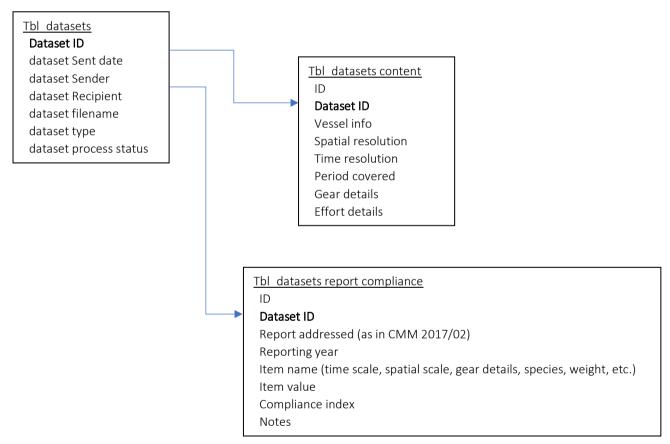


Figure 1: simplified structure of the datasets database

When a dataset is added into the database it receives a unique number (the dataset ID) that is used in every databases so that each piece of data has its originating source kept. This can be used to trace back every data stored in the fisheries databases and helps in the management of the data (e.g. if a dataset must be removed from the database)

#### 1.2. Vessel catch and effort.

This database has been built according to the CMM 2017/02 about conservation and management measures for the collection, reporting and exchange of data relating to fishing activities in the Agreement Area (Data standards). Paragraph 6 and Annex A of the CMM provides extensive details and data standards for the collection of vessel catch and effort data.

This database consists in

- a vessels registry (shared with other databases)
- vessel fishing operations (date and location of the activity, gear used, depth reached, species targeted)
- fishing operations catch (species and quantity retained and discarded for each operation)

These tables are structured as shown in the picture below

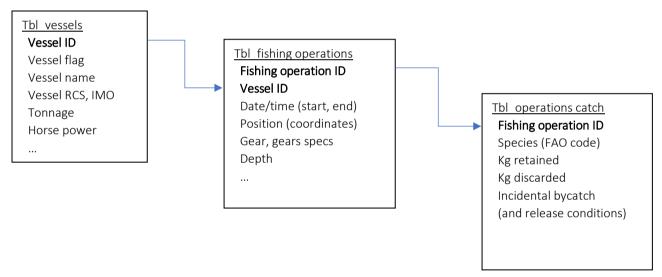


Figure 2: vessel catch and effort (tow-by-tow) database simplified structure

### 1.3. Annual catch summaries

This database has also been built according to the CMM 2017/02 about conservation and management measures for the collection, reporting and exchange of data relating to fishing activities in the Agreement Area (Data standards). Paragraph 7 states that the CP, CNCP and PFE shall provide annual catch summaries.

This database consists in a

- fishing activity table
- fishing activity catch table
- fishing activity effort summary table

The CMM specifies that the catch summaries should at least contain the following information: calendar year, FAO statistical area, Species (or group) names, Species (or group) FAO code, annual catch (tons).

However, the corresponding database that has been designed can deal with more detailed information in order to:

- (a) enable addition of too low definition of vessel catch and effort data than those specified in the CMM (e.g. catch provided by degrees and not by fishing operation coordinates) and that could not be included into the tow-by-tow database,
- (b) enable inclusion of higher detailed catch summary reports (e.g. catch provided by SIOFA subareas and not by FAO statistical area)

And these tables are structured as shown in figure 3

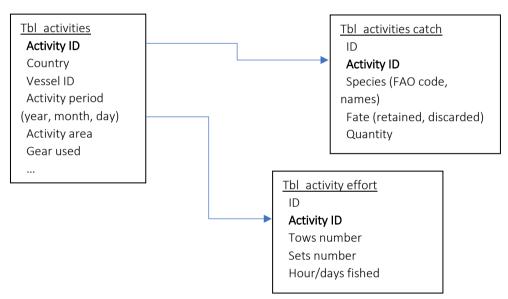


Figure 3: Structure of the annual catch summaries database

Note: if the tow-by-tow database could be complete with all CP fishing operation, the annual catch summaries could be automatically calculated from it.

## 1.4. Voluntary observer's data

SIOFA CMM 2017/2 para 13 states that CP, CNCP and PFE shall endeavour for all observed trips collection of data (details supplied in Annex B of the CMM). All the data shall be reported to the Secretariat on a yearly basis.

Today very few observer data have been submitted to the Secretariat; only Australia provided a dataset with information collected in 2015-2016. Therefore, the observer's database has not been implemented yet.

## 2. Database contents

# 2.1. Summary table of databases content (vessels catch and effort and annual catches summaries)

This section provides a status of the data contained within the current SIOFA database on June 8<sup>th</sup> 2018. Some 2017 submitted data have not been added in the databases.

	Countries (CP only)									
Year	AUS	COK	EU-FR	EU-SP	FR-OT	JPN	KOR	MAU	SEY	THA
2000										
2001										
2002										
2003										
2004										
2005										
2006										
2007										
2008										
2009										
2010										
2011										
2012										
2013										
2014										
2015										
2016										
2017										

Figure 4: Overview of data stored in SIOFA databases by country and by year

tow-by-tow data
summary data only
statement of no fishing received
no data

# 2.2. Detailed 2017 data submission status for vessels catch and effort (CMM 2017/02 - para 6)

This section provides a detailed status of the 2017 data received at the Secretariat from the CP in accordance with CMM 2017/02 para 6.

Scores (0-10) indicates the data requirement fulfilment (0=nothing to 10=fully match CMM standard)

#### **AUSTRALIA**

No fishing made in the SIOFA area in 2017

## **COOK IS**

Only a 2017 catch summary was provided (annual national report for the SC3 meeting), no tow-by-tow data provided.

item	data status	
Vessels details	no	0
Time scale	year	1
Spatial scale	area	0
Gear type	yes	10
Gear details	no	0
Effort	yearly	2
Depth	no	0
Species	yes (some as other)	9
Retained catches	yes	10
Discarded catches	no info	0
Bycatches	no info	0

## **EU-FRANCE**

Data provided by 20 minutes square, not by fishing operations

item	data status	
Vessels details	no	0
Time scale	day	4
Spatial scale	20' square	2
Gear type	yes	10
Gear details	no	0
Effort	no	0
Depth	100m class	8
Species	FAO code	10
Retained catches	Kg	10
Discarded catches	no info	0
Bycatches	no info	0

## **EU-SPAIN**

## + VME species discard catch provided

item	data status	
Vessels details	name only	8
Time scale	day	4
Spatial scale	coordinates	10
Gear type	yes	10
Gear details	no	0
Effort	yes	10
Depth	yes	10
Species	yes (a few without FAO code)	9
Retained catches	yes	10
Discarded catches	yes	10
Bycatches	no info	0

## FRANCE - Overseas Territories

item	data status	
Vessels details	partial	8
Time scale	day time	10
Spatial scale	coordinates	10

Gear type	yes	10
Gear details	yes	10
Effort	yes	10
Depth	yes	10
Species	missing FAO codes	7
Retained catches	yes	10
Discarded catches	yes	10
Bycatches	no info	0

## JAPAN

No tow-by-tow data provided, few species reported, aggregation on a monthly basis.

item	data status	
Vessels details	no	0
Time scale	month	0
Spatial scale	degrees	2
Gear type	yes	10
Gear details	partial	4
Effort	yes	10
Depth	partial	2
Species	2 species, no FAO code	1
Retained catches	yes	10
Discarded catches	no info	0
Bycatches	no info	0

## **KOREA**

No fishing made in the SIOFA area in 2017

## **MAURITIUS**

## Nothing provided

item	data status	
Vessels details	no	0
Time scale	no	0
Spatial scale	no	0
Gear type	no	0
Gear details	no	0
Effort	no	0
Depth	no	0
Species	no	0
Retained catches	no	0
Discarded catches	no	0
Bycatches	no	0

## SEYCHELLES

No data to be reported according to CMM 2017/02

## THAILAND

# Data aggregation by 1° square and by month.

item	data status	
Vessels details	yes	10
Time scale	month	0
Spatial scale	degree	2
Gear type	yes (from vessel)	10
Gear details	no	0
Effort	nb of sets/tows	5
Depth	no info	0
Species	sc species or genus, misc	3
Retained catches	yes	10
Discarded catches	no info	0
Bycatches	no info	0

## All country summary for vessel catch and effort data item submission

item	AUS	СОК	EU-F	EU-S	F-OT	JPN	KOR	MUS	SEY	THA
Vessels details		0	0	8	8	0		0		10
Time scale		1	4	4	10	0		0		0
Spatial scale		0	2	10	10	2		0		2
Gear type		10	10	10	10	10		0		10
Gear details		0	0	0	10	4		0		0
Effort		2	0	10	10	10		0		5
Depth		0	8	10	10	2		0		0
Species		9	10	9	7	1		0		3
Retained catches		10	10	10	10	10		0		10
Discarded catches		0	0	10	10	0		0		0
Bycatches		0	0	0	0	0		0		0

# 2.3. Detailed 2017 data submission status for annual catch summary (CMM 2017/02 para 7)

Scores (0-10) indicates the data requirement fulfilment (0=nothing to 10=fully match CMM standard)

## AUSTRALIA

No fishing made in 2017

## COOK IS

item	data status	
Area (FAO area)	whole SIOFA area	7
Species detail	FAO code + other	8
Quantity	ton	10

## EU-FR

item	data status	
Area (FAO area)	20° square	10
Species detail	FAO code	10
Quantity	Kg	10

## EU-SP

item	data status	
Area (FAO area)	SIOFA sub area	10
Species detail	Scientific name / group	7
Quantity	Ton	10

## France overseas territories

Data derived from catch and effort data

item	data status	
Area (FAO area)	coordinate	10
Species detail	FAO code	10
Quantity	Kg	10

## Japan

item	data status	
Area (FAO area)	SIOFA area	7
Species detail	FAO code + others	10
Quantity	Kg	10

## Korea

No fishing made in 2017

## Mauritius

## No data submitted

item	data status	
Area (FAO area)	SIOFA area	0
Species detail	FAO code + others	0
Quantity	Kg	0

## Seychelles

No data to be reported according to CMM 2017/02

## Thailand

item	data status	
Area (FAO area)	FAO area	10
Species detail	Scientific name/group only	7
Quantity	ton	10

All country summary for annual catch summary

item	AUS	СОК	EU-F	EU-S	F-OT	JPN	KOR	MUS	SEY	THA
Area (FAO area)		7	10	10	10	7		0		10
Species detail		8	10	7	10	10		0		7
Quantity		10	10	10	10	10		0		10

# 2.4. Detailed 2017 data submission for voluntary observers' data

No data received by the Secretariat.