

## **1.** Arrangements of the Joint SIOFA-CCAMLR Workshop on the exchange of scientific toothfish data

The Joint SIOFA-CCAMLR Workshop on the exchange of scientific toothfish data was held on 29 November and 1 December 2021, and co-convened by Dr Dirk Welsford (CCAMLR Scientific Committee Chair) and Mr Alistair Dunn (SIOFA Scientific Committee Chair).

The Workshop participants (Annex C) agreed that the Conveners would develop this report, drawing on the proceedings of the workshop and highlighting recommendations from the Workshop for consideration by the SIOFA and CCAMLR Scientific Committees. The authors note that this report does not represent the consensus view of the workshop participants, but rather represents the views of the Conveners based on the discussions that occurred, and is presented without prejudice to the decision-making processes used by SIOFA and SC-CAMLR.

### 2. Specifications for the data to be exchanged

The Workshop participants noted the usefulness of exchanging tagging data between SIOFA and CCAMLR for understanding the population structure and dynamics of toothfish stocks that straddle or potentially straddle the SIOFA and CCAMLR Areas and for conducting assessments and managing those stocks.

The Workshop participants noted the large difference in the number of tags released and recaptured in the SIOFA (approximately 150 released in 2020) and CCAMLR Areas (approximately 350 000 released and 40 000 recaptured across the entire CCAMLR Convention Area since 1998). The toothfish tagging requirement in SIOFA was adopted from the 2019-2020 season, whereas CCAMLR members have been tagging toothfish since 1998.

The SIOFA SC Chair explained that the SIOFA Meeting of the Parties requested the SIOFA Secretariat, in consultation with the CCAMLR Secretariat, to develop a toothfish tagging protocol for the SIOFA Area that is consistent with that of CCAMLR, agreed to adopt the use of CCAMLR tags and tagging protocols in the interim, and requested the Secretariat to provide information on the SIOFA website regarding how CCPs can obtain CCAMLR tags and tagging equipment.

The Workshop participants agreed that it would be beneficial for SIOFA to continue using a tagging protocol that is consistent with that of CCAMLR, and for SIOFA CCPs to use CCAMLR tags. This would ensure that information collected by SIOFA and CCAMLR are as compatible as possible for scientific analysis and reduce the additional coordination that would be required to avoid issues such as duplication of tag serial numbers. It would also enable the SIOFA Secretariat to benefit from the tagging capacity and experience of the CCAMLR Secretariat.

The CCAMLR Secretariat confirmed that the CCAMLR materials on using and ordering tags were publicly available information and that there would be no issue with providing this information on the SIOFA website. The CCAMLR Secretariat also confirmed that it would have no problem issuing tags that were ordered from SIOFA CCPs. But the CCAMLR Secretariat also noted that if an order is received from a fishing vessel that does not operate in the CCAMLR Area, it may not be a vessel known to the CCAMLR Secretariat.

The Workshop participants agreed that it would be useful for the CCAMLR Secretariat to obtain key information (Vessel name, IMO number, Flag state) from the SIOFA Secretariat either at the time of issuing tags or acquiring data on tag releases and recaptures.

The Workshop participants noted that CCAMLR and COLTO have scheduled a workshop on toothfish tagging likely to be in Jul/Aug 2022 and that it may be useful for SIOFA to attend this workshop.

The Workshop participants noted that it would be useful for the SIOFA and CCAMLR Secretariats to inform each other if there are any substantive changes to either SIOFA or CCAMLR's tagging protocols.

The participants noted that SIOFA and CCAMLR have similar data collection protocols and data requirements for observer data and catch and effort data.

The Workshop participants agreed that the SIOFA Secretariat should inform the CCAMLR Secretariat of any tagged toothfish released or recaptured in the SIOFA Area. Based on that information, the CCAMLR Secretariat should verify and inform the SIOFA Secretariat of any linking across the two Areas, i.e., tagged toothfish released in the SIOFA Area but recaptured in the CCCAMLR Area and vice versa.

The Workshop participants suggested that the data to be exchanged could include the relevant date, location (latitude/longitude), depth, tag information details (colour, type, serial number, inscription (i.e., text or wording on the tag)) and scientific observer data including species, length, sex, maturity, and whether or not an otolith has been collected. Any data exchanged should also be accompanied by metadata that would describe any issues that scientific analyses would need to be aware of and describe how data was collected and various related regulations/forms regarding the collection/use of those data. Any data exchanged should also be assigned a unique database identifier.

The Workshop participants noted that fine scale catch and effort data were typically not necessary to interpret release and recapture data for the purposes of identifying links and movement. Rather, the number of fished scanned for recaptures was the parameter that needed to be estimated for Peterson type population estimates, which could be estimated using the total catch numbers.

The Workshop participants noted the different reporting and meeting cycles of SIOFA and CCAMLR and that the Secretariats should coordinate when they report information about the existence of recaptured tags. In addition, it was noted that at various times of the year, neither CCAMLR nor SIOFA will have a complete holding of all information for the whole year. The participants agreed that the two Secretariats should exchange data periodically, and at least annually.

The Workshop participants noted that it would be impossible to determine if tag recapture data existed for toothfish that had moved across the SIOFA-CCAMLR boundary unless there was routine exchange of some data between SIOFA and CCAMLR. Noting that the volume of data held by CCAMLR was much larger than currently held by SIOFA, the participants noted it may be more practical for the SIOFA Secretariat to periodically provide tag release and recapture information to the CCAMLR Secretariat to run its tag linking algorithm on, and to then each maintain holdings of the subset of data on toothfish that have moved between management areas rather than conduct wholesale transfer of all tagging data.

The Workshop participants discussed different levels of information to be exchanged. They suggested that tag release and recapture information could be exchanged automatically between the two Secretariats, which should only release summary data to each SC. Member initiated requests for any data required for analyses, should identify whether requests related

to SC endorsed work or to analyst-initiated work. The proposed process for exchanging tag information between the SIOFA and CCAMLR Secretariats is given in Annex A.

The Workshop participants discussed the pathways for requesting datasets that span both the SIOFA and CCAMLR Areas, recognising the need to respect SIOFA and CCAMLR's data access rules. The participants agreed on the process given in Annex B: In the case of an analyst of a SIOFA CCP, they would make the data request to the SIOFA Secretariat. Then, for data owned by SIOFA CCPs, the SIOFA Secretariat would seek permission directly from those data owners. For data under the competence of CCAMLR and owned by a CCAMLR Member, the SIOFA Secretariat would seek permission via the CCAMLR Secretariat. The opposite would occur in the case of a request for data owned by SIOFA CCPs by an analyst of a CCAMLR Member.

The Workshop participants agreed on the need to keep the data owner involved in the abovementioned process, noting that data owners are often interested in participating in the analyses for which the data are being requested.

The Workshop participants agreed that it would be useful to include flowcharts illustrating the abovementioned data exchange (Annex A) and request pathways (Annex B) in Convener's report of the workshop.

The Workshop participants noted that there may be instances in which individual CCAMLR Members or SIOFA CCPs approach each other with data requests. In such cases, the arrangements for the sharing of the data, etc., can be worked out bilaterally.

The Workshop participants reviewed the CCAMLR template for data release requests and paragraph 2, subparagraphs (g-i) of the SIOFA CMM 2016/03 (Data Confidentiality). They noted that it may be useful for CCAMLR and SIOFA to consider a common template for data release requests and encouraged the CCAMLR and SIOFA Secretariats to coordinate on this activity.

The SIOFA SC Chair and members of the CCAMLR Secretariat explained that CCAMLR publishes annual fishery reports and statistical bulletins containing annual catch by total greenweight, species, gear code, area and vessel nationality, usually in February to April. However, these summaries do not include numbers of fish caught.

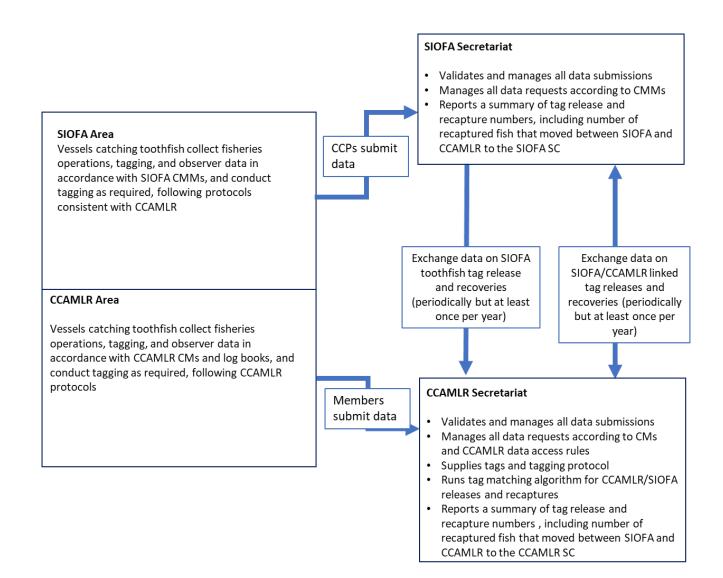
The SIOFA Data Manager explained that, as a SIOFA confidentiality requirement, the catch of any individual vessel cannot be made public at any resolution, and, because of the small number of vessels operating in the SIOFA Area, there are many instances where summary catch data cannot be published.

#### 3. Conclusion of the workshop

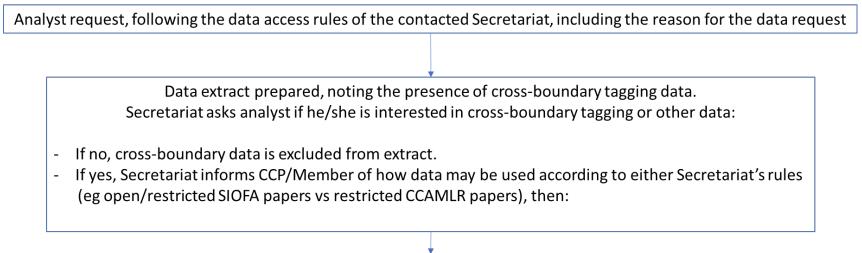
The Workshop participants noted that holding a joint workshop yielded a fruitful exchange of ideas and discussions and suggested that workshops of a similar format would be useful in the future as the need arises.

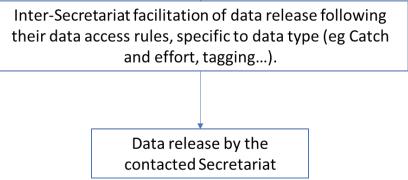
The co-conveners thanked all of the participants from SIOFA and CCAMLR for their cooperation and contribution to the success of the workshop.

# Annex A. Flowchart of data exchange of tagging information between the CCAMLR and SIOFA Secretariats



#### Annex B. Flowchart of data request pathways for analysts requesting data





### Annex C: Registered participants

Co-chairs			
SIOFA SC Chair	SIOFA Secretariat	Mr	Alistair Dunn
CCAMLR SC Chair	CCAMLR Secretariat	Dr	Dirk Welsford
Participants			
Delegation	Category	Title	Name
Australia	SIOFA CP/ CCAMLR Member	Dr	Philippe Ziegler
Australia	SIOFA CP/ CCAMLR Member	Mr	Brodie Macdonald
Australia	SIOFA CP/ CCAMLR Member	Mr	Trent Timmis
China	SIOFA CP	Dr	Zhou Fang
China	SIOFA CP	Mr	Sun Chong
China	SIOFA CP	Dr	Heng Zhang
China	SIOFA CP/ CCAMLR Member	Pr	Guoping Zhu
China	SIOFA CP/ CCAMLR Member	Ms	Lian Wei
Comoros	SIOFA CNCP	Mr	Abdillah Hassane
Comoros	SIOFA CNCP		Kamal Mohamed
European Commission	SIOFA CP/ CCAMLR Member		Luis Molledo
European Commission	SIOFA CP/ CCAMLR Member	Ms	Fiona Harford
European Commission	SIOFA CP/ CCAMLR Member	Mr	Ignacio Granell
European Commission	SIOFA CP/ CCAMLR Member	Mr	Benoît Marcoux
European Union	SIOFA CP/ CCAMLR Member	Dr	Sebastian Rodriguez Alfaro
EU-Spain	SIOFA CP/ CCAMLR Member	Ms	Margarita Mancebo
EU-Spain	SIOFA CP/ CCAMLR Member	Ms	Teresa Molina
EU-Spain	SIOFA CP/ CCAMLR Member	Ms	Gema De Frutos
EU-Spain	SIOFA CP/ CCAMLR Member	Dr	Roberto Sarralde Vizuete
France Territories	SIOFA CP/ CCAMLR Member	Mr	Matthieu Piron
France Territories	SIOFA CP/ CCAMLR Member		Charlotte Chazeau
France Territories	SIOFA CP/ CCAMLR Member	Mr	Patrice Pruvost
Germany	CCAMLR Member	Pr	Thomas Brey
Germany	CCAMLR Member		Jilda Caccavo
Japan	SIOFA CP/ CCAMLR Member	Dr	Tsutomu Nishida
Japan	SIOFA CP/ CCAMLR Member	Dr	Takehiro Okuda
South Africa	CCAMLR Member	Mrs	Melanie Williamson
Ukraine	CCAMLR Member		Leonid Pshenichnov
Ukraine	CCAMLR Member	Pr	Kostiantyn Demianenko
United Kingdom	CCAMLR Member	Ms	Georgia Robson
United Kingdom	CCAMLR Member	Dr	Tim Earl
USA	CCAMLR Member	Dr	Christopher Jones
CCAMLR	CCAMLR Secretariat	Dr	Stephane Thanassekos
CCAMLR	CCAMLR Secretariat	Mr	Daphnis De Pooter
CCAMLR	CCAMLR Secretariat	Mr	Isaac Forster
CCAMLR	CCAMLR Secretariat	Dr	Steve Parker
CCAMLR	CCAMLR Secretariat	Dr	David Agnew
SIOFA	SIOFA Secretariat	Mr	Alex Meyer
SIOFA	SIOFA Secretariat	Mr	Pierre Périès
SIOFA	SIOFA Secretariat	Mr	Thierry Clot