## CC-05-14 REV-1 VERSION (track changes)

## 5th Compliance Committee of the Southern Indian Ocean Fisheries Agreement(CC5)

**01-03 July 2021 (online)**

Protocol for documenting marine mammal interactions in deep-sea demersal longline fisheries

*Relates to agenda item: 4.1* Working paper[x]  Info paper[ ]

Delegation of [France-Overseas Territories]

**Abstract**

SC6 has adopted the FR-OT proposal of a protocol to be used to document marine mammal interactions with longliner vessels operating in the SIOFA area, and has recommended it for adoption (SC6 report, paragraph 112).

Firstly, the present proposal suggests amendments to CMM 2019/02 in order to take into account the adoption of this protocol in the CMM and to ensure its implementation onboard vessels. These amendments would be added as a new paragraph in the provisions applicable to the observers section of the CMM (annex B), in the section applicable to “longline fishing activities only”.

Secondly, the said protocol would be added as a new annex E to CMM 2019/02. It has been reduced in comparison to the previous version, to focus only on the key data to be collected by order of priority.

**Recommendation**

1. CC5 to consider and recommend for adoption by the MOP the amendments to CMM 2019/02.

1 - Proposed amendments to CMM 2019/02 – Annex B

Annex B

Observer Data

**For Longline fishing activities ONLY**

***Longline Description***

Longline Type (FFSSCV)

Period in which the gear was used (YYYY.MON.DD)

Start and end date (YYYY.MON.DD)

Target Species (FAO species code)

***Main Line***

Material

Diameter (mm)

Integrated Wt (g/m)

***Branch Lines***

Material

Length (M)

Spacing (m)

***Hooks***

Type

Make

Total length (mm)

Shank (mm)

Gape (mm)

Throat (mm)

Front length (mm)

Usual setting position Line off bottom (m)

Hooks off bottom (m)

Method of baiting (manual/automatic)

Automatic baiting equipment (make and model)

***Hook sinkers***

Size (g)

Position from hook (mm)

Offal dumping position (port, starboard, stern) longline setting position (port, starboard, stern)

Offal dumping during hauling (never, occasionally, always)

Propeller rotation direction (clockwise/anti-clockwise)

Detail the weight and distance between the line weights for the longline system used Single (Auto) Line (kg:m)

Double (Spanish) Line (kg:m)

Trotline (vertical droppers/trots attached to a mainline) (kg:m)

***General Streamer Line Description***

Vessel equipped with a streamer line (y/n)

Number of streamer lines regularly set

Streamer line position (port, starboard, stern)

Streamer line length (m)

Streamer length min/max (m)

Attached height above water (m)

Distance between streamers (m)

Number of streamers Streamer design (single or paired)

Aerial extent of line (m)

Method used to assess aerial extent Streamer material Streamer line diameter (mm)

Streamer colours

Streamer line over bait entry position? (y/n/u)

Distance from stern to bait entry point (m)

Towed object (Y/N)

Horizontal distance from bait entry point to streamer line (m)

***Daily setting observations***

Set Number (as referenced in catch and effort log)

Set Type: Research or Commercial (R/C)

Longline Type Code (FSSCV)

Trotline cetacean exclusion device used (Y/N)

Date of observation (YYYY/MON/DDy)

***Setting information***

Vessel setting speed (knots)

Number sets unobserved since last set

***Start and End setting for each haul***

Date (YYYY/MON/DD)

Time (hh:mm)

Latitude

Longitude

Bottom Depth (m)

Total length of longline set (km)

Total number of hooks for the set

***For each Observation***

Start date (YYYY.MON.DD)

Start time (hh:mm)

End date (YYYY.MON.DD)

End time (hh:mm)

***Details of Longline Setting***

Main line length (m)

Number of hooks set

Number of Baskets/Magazines Set

Number of hooks per Basket/Magazine

Percentage hooks baited

Distance between branches (m)

Distance of hooks off bottom (m)

Bait species (FAO species code)

Deck lights during setting (On, Off)

Streamer lines used (Yes, No)

Number of streamer lines used Offal dumping during setting (Yes, No)

Bait entry position (Port, Starboard, Stern)

***Daily hauling observations***

Set number

Date of observation (YYYY.MON.DD)

***Hauling Information***

Number of hooks observed for seabird and fish by-catch (tally period)

Offal dumped during hauling (Yes / No)

***Interactions with marine mammals***

Data is to be collected in accordance with the protocol set out in annex E.

For each haul and each species of depredating whales (killer whales *Orcinus orca* and sperm whales *Physeter macrocephalus*) :

- Priority 1 data to be collected include:

1. Presence/absence data: Presence / Absence / Not observed;

2. When presence, photo-identification data: photographs of specific body parts (for killer whales: dorsal fin, saddle patch and eye patches; for sperm whales: tail flukes) visible when whales come to the surface.

- Priority 2 data to be collected include:

1. Estimates of the number of individuals present around the vessel in the vicinity of the fishing gear.

- Priority 3 data to be collected include:

1. Information about whether or not whales interact with the gear;

2. Estimate of the time of arrival of whales in the vicinity of the gear.

***Gear lost***

Number of sections lost

Number of hooks lost that were attached to lost sections of the longline

Number of other hooks lost (excluding hooks attached to lost sections)

***Observed catch composition***

Was Haul observed for fish/invertebrate by-catch (Y/N):

Estimate percentage of the haul observed for by-catch (%)

***Species***

Species code (FAO species code)

Total retained catch weight (kg)

Total discarded catch weight (kg)

***Species Retained***

Observed number retained Observed number retained with tags

***Species Discarded***

Observed number discarded Observed number discarded dead

Observed number discarded alive

***Species Lost***

Observed number lost/dropped off at surface

2 – Proposal for a new annex E to CMM 2019/02

Annex E

Protocol for documenting whale interaction in deep-sea demersal longline fisheries

## Priority 1 Data to be collected

### Presence

For every haul and for each species:

|  |  |  |
| --- | --- | --- |
| Haul | Presence ? | Comment |
| 1 | Absent |  |
| 2 | Present |  |
| 3 | Present | Night time but clearly see them in projectors |
| 4 | Not observed | Night time, can’t see them but can’t say they are not present around. |

Requirement: data mandatory and must be collected for every haul.

 “Presence”: Favourable conditions (visibility is at least several hundred meters with sufficient light) and observation by the observer (observer can be alerted by the crew when whales are sighted). The presence of whales is confirmed by direct observation of at least one individual at the surface in the vicinity of the vessel at least once during 1 haul. Note that presence can also be observed at night when killer whales come very close to the boat.

“Absence”: Favourable conditions and no odontocete spotted at any time during the entire haul.

“Not observed” is used either if the observer did not have time to gather information (e.g. if line broke), or if conditions are too bad to observe (either weather conditions, or hauling at night).

### Photos

For every haul and for each species:

|  |  |  |  |
| --- | --- | --- | --- |
| Haul | Presence ? | Photos? | Comment |
| 1 | Absent | No |  |
| 2 | Present | Yes |  |
| 3 | Present | No | Night time: too dark for pictures |
| 4 | Not observed | No | Night time: too dark for pictures |

Requirement: data mandatory and must be collected for every haul.

With this additional field, observers indicate whether they took pictures of whales for photo-identification purposes or not during the haul of the set.

## Priority 2 Data to be collected

### Number of individuals

For every haul and for each species:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Haul | Presence ? | minimum | maximum | comment |
| 1 | Absent | 0 | 0 |  |
| 2 | Present | 15 | 22 |  |
| 3 | Present | 1 |  | At least one but too dark for accurate estimate |
| 4 | Not observed |  |  |  |

Requirement: data must be collected for every haul when present.

Providing exact counts of individuals from the surface may be difficult for observers as whales can dive for long periods of time. To account for uncertainty around counts, observers may fill in two fields:

* Minimum estimate of the number of individuals,
* Maximum estimate of the number of individuals.

## Priority 3 Data to be collected

### Interaction with fishing gear

For every haul and for each species:

|  |  |  |  |
| --- | --- | --- | --- |
| Haul | Presence ? | Interaction with fishing gear? | Comment |
| 1 | Absent | No |  |
| 2 | Present | Yes | Saw them diving close to the line |
| 3 | Present | Yes | Head of fish were observed |
| 4 | Not observed |  |  |

Requirement: data must be collected for every haul when present.

When Presence, interaction with fishing gear is taken into account if whales are diving close to the lines or directly observed with fish in their mouths.

### Estimated Time of Arrival (ETA)

For every haul and for each species:

|  |  |  |  |
| --- | --- | --- | --- |
| Haul | Presence ? | ETA | Comment |
| 1 | Absent | NA | Not applicable |
| 2 | Present | 0:30 | We were able to haul 30 minutes before they arrive  |
| 3 | Present | 0:00 | Saw them in projectors even before first hook came on board |
| 4 | Not observed | NA | Not applicable |

Requirement: data must be collected for every haul when present.

The Estimated Time of Arrival here corresponds to the time between the first hook of the line hauled on board and the arrival of sperm whales / killer whales. If whales are already present when hauling starts then ETA is zero.