

## **ON-BOARD MONITORING FORMS - INSTRUCTION GUIDE**

### **TRIP COVER REPORT**

Fill a cover for each fishing trip, corresponding to only one departure and entry into the fishing port. The cover is a summary of the trip, containing information in relation to the vessel and its characteristics, as well as about the crew and the registration material used, the quantity of fish and its commercial value and waste released into the sea.

- **OBSERVER(S)\_ID:** Observer's first and last name.
- **VESSEL AND CAPTAIN NAME:** Full name of boat and captain.
- **REGISTRATION:** Registration number.
- **TRANSIT:** date and time of departure and entry into the fishing port. Identify which port.
- **VESSEL SPECIFICATIONS:** This information must be requested from the captain of the boat.
  1. **Size:** Length of the boat, in meters.
  2. **Year:** Year of manufacture of the vessel.
  3. **Number of crew:** Number of fishermen on board the boat (the observer is not included).
  4. **Number of gears:** Number of fishing gears lost by the vessel; number of fishing gear lost by the vessel that were taken on board; number of fishing gear collected on board that did not belong to the vessel.
  5. **Height of observation point:** Indicate the height (in meters) of the observer's position from sea level.
  6. **GPS:** Indicate if there is a GPS device.
  7. **SOUNDER:** Indicate if there is a sounder.
  8. **Engine:** Boat engine power, in horses, and consumption, in L / h



9. **Waste container:** Indicate if there is a container for waste, its size (in liters) and if the waste is separated.
10. **Place of disposal:** Indicate whether the waste is rejected in the recycling bin or unsorted container.
11. **Fuel:** Indicate whether it is gasoline, diesel or another type of fuel.
12. **Water used:** Amount of water, in liters.
13. **STOWAGE:** Indicate the place where the catches are stored, electric box, box with ice or other (specify type of packaging), and indicate its size (in liters).
14. **Function:** Indicate the type of gear used during the fishing trip (more than one option can be selected).

- **SAFETY ON BOARD:** This information must be requested from the captain of the boat.

1. **Number of life jackets:** Number of life jackets on the boat.
2. **Number of life buoys:** Number of life buoys on the boat.
3. **Safety boat:** Indicate if there is a safety boat and the obligation to have capacity.
4. **Logbook:** Indicate if there is a logbook on the boat and if it is filled.
5. **Blue box:** Indicate if there is a blue box on the boat and indicate if it is always on, always off, or off at least once.
6. **SOS KIT ON-BOARD:** Indicate if there is an SOS kit on board.
7. **UDHR:** Universal Declaration of Human Rights. Indicate if there is any type of verbal, physical, discrimination, harassment, or other type of aggression.
8. **Animosity:** Indicate if there is animosity between the elements of the crew or with elements of other boats.

- **LANDINGS:** Total amount unloaded at the auction of the respective port in kg / species (collect this information from the sales sheet delivered by the auction). If possible, take a picture of the sales sheet.

- **EQUAL DISTRIBUTION OF THE FISH AMONG CREW:** Indicate whether the fish unloaded is distributed equally or not among the crew. If not, indicate the



percentage each crew member is entitled to, with the exception of the captain / ship-owner.

- **FILLED FORMS:** Specify which forms were filled in and the respective number of pages. The name to be designated for each form must correspond to the figure in the title of each one.
- **GPS:** In the ID\_DEVICE it indicates the number present in the GPS. If the vessel's GPS is also used, identify the vessel's master as the responsible observer.
- **CREW TRAINING COURSE:** Indicate the crew training courses (full name of the course) and the number of crew with the course completed (Fishermen skipper (local) / Foreman fisherman / Master coastal fisherman / Fisherman / Traceability and food safety on board / Netting / Environment, safety, hygiene and health at work / Basic first aid on board / Maritime safety - Personal survival techniques / Others).
- **SPILLS AND OTHER POLLUTANTS:** Indicate the type of material spilled or thrown into the sea, the number of times this material has been released and indicate the size of this material, in cm.

## **OBSERVATION EFFORT**

### **(FORM E\_F)**

This form allows you to keep a regular record of the sea and weather conditions, being essential in case it is not possible to save the vessel's route on the GPS or if marked points are lost. It is on this form that all activities that take place on the vessel must be indicated, as well as all fishing moments.

The form must be completed every 30 minutes or whenever there is any change in activity (ACT) and fishing time (MOM), recording all changes in a new line, always filling in the following fields:

- **VESSEL:** Full name of the boat.
  - **DATE:** Indicate the day, month and year of departure.
  - **SHEET No.:** Indicate the sheet number.
  - **TOTAL SHEETS IN THE DAY:** Indicate the total number of sheets completed in the day referring to the observation effort.
  - **TIME:** Indicate the observation time. Notes should be taken every 30 minutes and each time the vessel changes its activity (ACT) or fishing time (MOM).
  - **GPS POINT:** Identify the position at that moment, indicating the latitude and longitude.
  - **OBSERVER POSITION:** Indicate the observer's position on the boat (Port, starboard, deck, stern; bow; center).
  - **DOUGLAS:** Indicate the sea state (see table provided).
  - **BEAUFORT:** Indicate the wind strength (see table provided).
- WIND DIRECTION:** Winds are named after the direction they blow. For example, a north wind blows from north to south, an east wind blows from east to west. The wind direction is therefore the cardinal point from which the wind comes: N, NE, E, SE, S, SW, W and NW.
- VISIBILITY:** Indicate the scale of visibility – 1.0–50m; 2. 50-300m; 3. 300-1000m; 4. >1000m.
- **TEMP°C:** Air temperature in degrees centigrade.



- **CLOUD:** Fraction of the sky covered by clouds where 0 – clear skies and 8 – completely cloud-covered skies

**WEATHER:** Weather – 1. Sun; 2. Fog; 3. Rain

**GLARE:** (Dazzle caused by the position of the sun that reduces the detection field). Indicate whether it is non-existent, mild, moderate or strong.

- **FUNCTION:** Identify the activity of the boat itself (ACT), the gear being used (GEAR) and the time of fishing (MOM).

## **FISHING EVENT (Form P\_F)**

This form contains all information about each fishing event, including catches, namely those of sea birds.

A fishing event is defined as a specific moment of fishing, a moment that is well defined in time and well characterized, usually corresponding to a start or a haul.

In the case of longlines, a fishing event starts with the start/collection of the first buoy and ends with the start/collection of the last buoy, associated through a single device.

In the case of traps, an event is defined as the operation of a set of traps attached to two buoys (one at the beginning and one at the end). Hauling begins with collecting the first buoy and ends with collecting the last trap. Setting starts with the set of the first trap (this probably corresponds to the last hauled trap) and ends with the setting the buoy.

This form records all the information that characterizes the fishing event, such as the location where it takes place, the type of gear and characteristics of the gear. It also includes the registration of all catches and their destination. This form must then be filled in whenever a new fishing event starts.

- **OBSERVER:** First and last name of the observer.
- **VESSEL:** Full name of the boat.
- **REGISTRATION:** Registration number.
- **DATE:** Indicate the day, month and year of the set.



- **EVENT NUMBER:** Numerically identify the fishing event number.
- **TEMP. H20:** Indicate the water temperature, in °C (when this information exists).
- **DEATH:** Indicate the depth at which the event is executed (preferably in meters, but often the captain gives this information in fathoms, which should be converted into m -> 1fathom: 2.2).
- **GPS POINT:** Coordinates (latitude and longitude) recorded at the beginning and end of each event.
- **OBSERVER LOCATION:** Location of the observer (Port, Starboard, Aft, Cabin).

• **EVENT TYPE:** Indicate the type of gear being used: Purse-seine, gillnets, traps or pots, Longline (bottom or surface), Beach-seine, Trawl or Other. (Note: net pots consist of a variable-shaped iron frame that is lined with netting, plastic net or wire; ceramic/plastic pots are pot-shaped, constructed of clay or plastic, and are characterized by not requiring bait).

**GILLNETS / TRAPS / LONGLINE / LINE OF HOOKS:** Indicate the size of the individual net in meters, number of nets (in the case of gillnets) or number of traps (in the case of traps); and length of main-rope and main line in meters, size of hooks in cm, distance between hooks in cm, number of hooks and hook class (in the case of longlines).

Indicate the type of bait and activity (setting or hauled). In case of mitigation measurement testing, indicate the type of mitigation performed and the event category with or without mitigation (control or experimental).

• **PURSE-SEINE / BEACH-SEINE / TRAWL**

Record the length of gear in meters and the diameter of the seine.

• **START OF EVENT / END OF EVENT**

Record the start and end time of each event, event duration (in minutes) and time the gear was in the water (in hours, for passive gear only - gill, trap, longline and hook line).

• **MESH CLASS, FLOATING AND BALLAST TYPE, GEAR DEPTH, NET HEIGHT** (in mm), **FILAMENT TYPE** (mono or multi), **NET COLOR, LINE THICKNESS** (in



mm) as well as **MAIN TARGET SPECIES**: Applies to all gears. This information is usually requested from the captain.

#### **CATCH:**

- **SPECIES**: Register of target and discarded species and marine litter.
- **AGE**: Indicate the age of the captured individuals – Immature (I) or Adult (A), (only for bycatch species). If *Morus bassanus* is caught, consult the age indicated in the bird guide.
- **TYPE OF INTERACTION**: Indicate the type of interaction (only for bycatch species): INSIDE THE GEAR / DEAD ON THE GEAR PROXIMITY / CATCHED IN FIRST/LAST NET / COLISION WITH THE BOAT / COLISION WITH SKIFF / COLISION WITH CABLES / ENTAGLED IN THE NET / CAUGHT BY THE BILL / CAUGHT BY THE FEET / CAUGHT IN THE HOOK / CAUGHT IN THE FIRST/LAST HOOK.
- **No.**: Number of captured individuals.
- **ALIVE/DEAD**: Indicate whether individuals are alive or dead at capture.
- **END**: Indicate the purpose of the catch: Consumption on board, rejected, for sale or kept on board.
- **MOTIVE**: When rejected, indicate the reason for the rejection: individual below the minimum size, low commercial value, prohibited species, closure.
- **SEX**: Identify the sex of the bird species captured whenever possible.
- **NOTES**: Observations made by observers. This field must also contain the size of marine litter captured, according to the scale indicated at the bottom of the form.

### **SEABIRD INTERACTION**

#### **(Form I\_F)**

The methodology consists on snapshots every 15 minutes (every 30 minutes on trawlers). In other words, counting every bird in the surroundings of the vessel in the second 00 every 15 minutes, specially on the board / zone where the fishing gear is active.

The monitoring must start as soon as the vessel leaves the port until its return, except in situations where visibility does not allow observation (in the case of



the vessel leaves at night, the observation must start to be made 15min before sunrise).

- Register the name(s) of the OBSERVER(S), VESSEL, DATE, START TIME of the snapshots.
- To each SNAPSHOT is given an ascending number, which corresponds to the TIME of the snapshot.
- FISHING EVENT ID: if it is the first, second, third (and so on) event that is performed. This must have correspondence with the "EVENT\_ID" of the Fishing Effort form.
- FISHING OPERATION: The same as the one in the Observation Effort form, and according to codes.
- FIELD OF VISION: Sometimes observers might not able to scan the entire 360° area surrounding the vessel. Here, it should be recorded the portion of effective observed area.
- All seabird SPECIES are registered in a snapshot (with age if possible), No OF INDIVIDUALS, AGE, DISTANCE to the boat and BEHAVIOUR (as indicated in the legend).

### **SEABIRD DIVES TO GEAR (Form M\_F)**

This methodology was first designed to aim longlines but might also be used in other gears to assess the risk of seabird bycatch.

This methodology should be applied during the setting and hauling only. Counting is performed during daylight time. Counting of seabirds that dive in the longline area is performed in continuous 3-min periods during the setting, and in a 3-min period every 15 minutes during the hauling.



- Register the name(s) of the OBSERVER(S), VESSEL, DATE, START TIME of the counts.
- Register the distance (DISTANCE SAMPLING) counts are being recorded, if between 0 to 50 or 0 to 100m from the boat.
- To each counting period (ID) is given an ascending number, which corresponds to the TIME of the beginning of the counting period.
- FISHING EVENT ID: if it is the first, second, third (and so on) event that is performed. This must have correspondence with the "EVENT\_ID" of the Fishing Effort form.
- FISHING OPERATION: The same as the one in the Observation Effort form, and according to codes.
- All seabird SPECIES are registered in a snapshot (with age if possible), No OF INDIVIDUALS, AGE and DISTANCE to the boat (as indicated in the legend).