Friend of the Sea Audit Guidance

FOS – Audit Guidance on the Wild Welfare Standard for Gillnet and Trammel net fisheries

www.friendofthesea.org

REV	DATE	REASON	VALIDATION	APPROVAL
1	23/01/2024	Provide guidance to the checklist	Paolo Bray	

Foreword

Friend of the Sea has been established in 2008. Its objective is safeguarding the marine environment and its resources, encouraging a market and implementing specific conservation projects.

The Friend of the Sea certification program allows for the assessment of fisheries and aquaculture products according to criteria and requirements. The certification, granted following an audit by independent certification bodies, ensures that a product complies with the requirements.

This standard shall be considered a pilot project with the purpose of checking the applicability and feasibility of the requirements in fisheries.

Requirements are classified as Essential, or Recommended, according to their level of importance.

Essential Requirements: The unit of certification shall be 100% compliant with essential requirements to be recommended for certification by the Certification Body (CB). Failure to comply with essential requirements is a major non-conformity. To achieve certification, corrective actions shall be implemented within three months from the date of assessment of non-conformities.

Recommended: It is not compulsory for the unit of certification to comply with recommendations to achieve certification. Nonetheless, compliance with recommendations shall be verified during the audit and any non-conformities shall be highlighted in the audit report as a "recommendation". The unit of certification shall inform the CB, during the following audit, regarding any corrective measures implemented.

Requirements that are not applicable to the audited unit of certification will be marked with "N.A."

Carefish/catch project

The welfare of wild-caught fish has been overlooked in practice, research, advocacy, and policy. The Carefish/catch project (https://carefish.net/catch/) aims to promote better fishing standards, by addressing 5 main goals:

1. assess global animal welfare impacts in fisheries,
2. identify the potential of reducing animal suffering in various fishing methods and species,
3. analyse the economic and social feasibility of the improvements suggested,
4. raise problem and solution awareness in general and specific audiences,
5. implement welfare guidelines into the Friend of the Sea fisheries certification scheme.

The international consortium responsible for this project is formed by:

- Fair-fish international,
- FishEthoGroup,
- Friend of the Sea,
- Centre of Marine Sciences (CCMAR),
- DeMoS Institute.

The funding is awarded through a grant from **Open Philanthropy**.

This project is an absolutely pioneering approach to a highly complex field, integrating both animal, social, economic and policy perspectives, and the outcomes will impact the way we look into fisheries.

Animal Welfare

Animal welfare is an emerging issue in aquaculture and fisheries, relating to ethics, animal health, and product quality. A growing number of researchers, decision-makers, and advocacy groups have been pushing for fish welfare to be thoroughly researched and integrated into the conversation about the future of seafood standards. In scientific and technical terms, welfare is defined as the state of the animal as it copes with its environment. The welfare of fish throughout the catching process can therefore be monitored.

Following these lines, the Carefish/catch project aims to promote better fishing standards, by assessing animal welfare impacts in fisheries and improving fishing practices.

One important objective of the project is to identify key points of welfare hazards and suggest improvements to reduce the suffering of individuals in specific fishing methods. This would enable the establishment of welfare standards in the fisheries sector through a series of recommendations and guidelines to be implemented into the fisheries certification program Friend of the Sea.

Definitions and Abbreviations

(2) **Bycatch**: Part of a catch of a fishing unit taken incidentally in addition to the target species towards which fishing effort is directed. Some or all of it may be returned to the sea as discards, usually dead or dying.

(1) **Endangered** (threatened with extinction):
1 - Endangered Species is used as an Element within the GSSI Benchmark Tool and is explained below. The related term "Threatened" appears in the text of two Indicators as an example of bycatch species that are particularly vulnerable. The phrase "threatened…with serious risk of extinction" appears in the FAO Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries (paragraph 31.1).
2 - Endangered: Taxa in danger of extinction and whose survival is unlikely if causal factors continue operating. Included are taxa whose numbers have been drastically reduced to a critical level or whose habitats have been so drastically impaired that they are deemed to be in immediate danger of extinction. Also included are those that possibly are already extinct, in so far as they definitely have not been seen in the wild in the past 50 years.
3 - Threatened with extinction: A category of organisms listed in CITES Annex 1. The vulnerability of a species to threats of extinction depends on its population demographics, biological characteristics, such as body size, trophic level, life cycle, breeding structure or social structure requirements for successful reproduction, and vulnerability due to aggregating habits, natural fluctuations in population size (dimensions of time and magnitude), residency/migratory patterns. This makes it impossible to give numerical values for population size or area of distribution that are applicable to all taxa.
"Protected" refers generally to any plant or animal that a government declares by law to warrant protection; most protected species are considered either threatened or endangered. A species that is recognized by national legislation, affording it legal protection due to its population decline in the wild. The decline could be as a result of human or other causes.

(2) **Fishery:** A unit determined by an authority or other entity that is engaged in raising and/or harvesting fish. Typically, the unit is defined in terms of some or all of the following: people involved, species or type of fish, area of water or seabed, method of fishing, class of boats, and purpose of the activities.

Unit of Certification (UoC): a vessel, fleet, or individual operator using a certain gear type, fishing on a particular target stock that is undergoing audit.

References:
(1) GSSI Glossary https://www.ourgssi.org/assets/GSSI-Benchmarking-Tool/GSSI-Global-Benchmark-Tool-V.1-October-2015.pdf
(2) FAO Term Portal http://www.fao.org/faoterm/en/?defaultCollId=21

Gillnet and Trammel net Fisheries

Net fisheries are widely used worldwide and both drift nets and bottom set nets are commonly used to catch fish from the pelagic or benthic habitats. They are also associated with ghost fishing, which happens as lost or unchecked nets continue to carry on fishing after they have been abandoned. Drift nets are rather controversial worldwide, already prohibited in some EU countries and conditioned in international waters by the UN, as they are responsible for high mortality rates of PET (Protected, Endangered, and Threatened) species, like marine mammals, sea turtles, and sea birds. Therefore, the focus of Carefish/catch is on temporary bottom set nets (e.g., gillnets and trammel nets).

Because the Carefish/catch project aims to identify and assess the potential of reducing fish suffering in fisheries when captured, addressing the fishing procedure for each method has vital importance.

Bottom set nets are a passive or static fishing method, as nets are not actively towed by boats, the gear is hung from buoys which keep them suspended in the water and staked to the bottom (set nets). In this fishing method, the nets hang like vertical walls in the water and capture fish as they try to swim through the mesh of the net and get entangled through their head (Gill nets) or body (trammel net). They are also named gills if made of only one panel of one mesh or trammel nets if made of more than one panel with different meshes each. Bottom set nets as these may unintentionally also catch non-target and even PET species.

Bottom set nets are one of the important fishing gear used in small-scale fisheries. The small-scale fisheries sector tends to be firmly rooted in local communities, traditions, and values. It is estimated that about 90 percent of all people directly dependent on capture fisheries work in the small-scale fisheries sector. Small-scale fisheries contribute about half of global fish catches. When considering catches destined for direct human consumption, the share contributed by the small-scale fisheries increases to two-thirds according to FAO.

Reference: *Carefish report – Welfare assessment in gillnet and trammel net fisheries.* https://esszett.cloud/s/8CQos3JA3SbG5tD

1 – CAPTURE

Requirement		Level
1.1	**Reduce soaking time as much as possible.**	**Recommended**

Soaking time: Soaking time is the length of time that the fishing gear remains in the water, between setting and hauling

ref. https://www.bmis-bycatch.org/mitigation-techniques/soak-duration

The Unit of Certification (UoC) shall reduce soaking time to decrease the risk of pain, injuries or death by depredation, suffocation, exhaustion, physical injuries (e.g., scale loss, cuts, bleeding wounds), or psychological impact due to restraining stress during net entangling.

The auditor shall find out how does the soaking time lasts by interviewing the crew and find out if there is a margin to reduce the soaking time as much as possible. If there is space to reduce it, the UoC shall do it and the auditor is requested to verify it.

Requirement		Level
1.2	**Reduce hauling speed as much as practically possible.**	**Recommended**

Hauling speed: it is the speed at which the fishing gear is hauled (i.e. pulled on board).

The UoC shall reduce the speed with which the nets are hauled on board to minimize the capture ascent rates and barotrauma.

The auditor shall refer to the log, as per requirement 1.9 of this document.

The auditor shall assess the catches to verify the presence of barotrauma. If present, the auditor shall recommend the UoC to reduce the speed to the speed that avoids barotrauma.

Requirement		Level
1.3	**In net assembly thicker twines should be used instead of fine twines and monofilaments, softer materials and knotless net construction should be preferred in all nets including gill and trammel nets.**	**Recommended**

The auditor shall verify if the UoC is using the twines, softer materials and knotless net. The auditor shall attach

to the report pictures and a short description about what is used by the UoC.

Requirement		Level
1.4	**The fleet is equipped with measures that guarantee a quick retrieval of lost fishing gear to avoid "ghost fishing".**	**Recommended**

"Ghost fishing" refers to abandoned, lost or discarded fishing gear and has detrimental effects on fish stocks, endangered species, and benthic environments. Ghost gear can continue catching fish for many years, as they are persistent in the marine environment.
It is required that the unit of certification does not deliberately abandon gears at sea and adopts measures to reduce the risk of losing gears during fishing operations. The auditor shall review and report on all measures, procedures, and protocols adopted by the unit of certification to ensure quick retrieval of lost fishing gear, including gear marking (e.g. tags), gear storage, and gear retrieval strategies used.
Permanent gear marking is compulsory in some countries.

The auditor is strongly recommended to verify what the applicable regulation prescribes in terms of gear marking and verify compliance during the onsite inspection.

Requirement		Level
1.5	**Vessels shall have appropriate equipment on board to assist in the safe recovery of lost fishing gear.**	**Recommended**

The auditor shall verify the existence of appropriate equipment on board through inspection on-site and purchase invoices.

Requirement		Level
1.6	**When retrieval is not possible, the vessel must record the last known position of lost gear and report to the relevant authorities.** **If fishing authorities do not have the means to collect information on lost fishing gear, an alternative option is to report the details to the Global Ghost Gear Initiative via the Ghost Gear Reporter App.**	**Recommended**

The auditor shall collect evidence of the procedure and ask for a logbook. This shall include information on the lost fishing gear (type and amount) and the reason for the loss. Additional information is available at https://www.ghostgear.org/news/2018/7/6/gggi-ghost-gearreporter-app

Requirement		Level
1.7	**Vessels shall be prepared and commit to the recovery and salvage of fishing gear lost by other vessel operators and to recycle damaged or found fishing gear, where appropriate and practically possible.**	**Recommended**

A standard procedure has to be established about how to recover lost fishing gear from other vessels. The auditor shall verify if there is a person on the staff in charge of this task and if all the workers on board are aware of how to proceed in case of necessity. Where not appropriate and practically possible, the auditor shall justify.

Requirement		Level
1.8	**The unit of certification undertakes an annual assessment of the lost gear records (amount and reasons for loss) and, in high-risk areas or during high-risk times, implements mitigation measures to address, where appropriate and practically possible.**	**Recommended**

The auditor shall get evidence of the annual assessment and specify in the report which are the measures used by the unit of certification to reduce the amount of gear lost.
Such measures could include reducing soak times, implementing gear use limits in high-risk areas or during high-risk times (e.g. inclement weather), implementing other spatial or temporal measures as needed (e.g. to avoid severe weather or crowded fishing areas) and measure to reduce gear conflict that could result in gear loss. Where not appropriate and practically possible, the auditor shall justify.

Requirement		Level
1.9	**The UoC shall log nets hauling speed.**	**Essential**

A dedicated log that includes gear length and the relative hauling time shall be kept on board. The auditor shall assess it and take a picture of at least a page to be attached to the audit report.

2 – ONBOARD HANDLING

Requirement		Level
2.1	**The UoC shall create and apply a codified procedure for hauling and handling catches.**	**Essential**

There shall be a written procedure that has to take into account what is addressed in the requirements of this section 2 – Onboard Handling.
All the staff involved in fishing operations shall undergo training on the procedure.
Appropriate refresh courses shall be organized by the UoC annually and for all new employees.
A designated and clearly identifiable person in charge of training and monitoring shall be appointed.
The auditor shall report in the checklist:

- If a procedure exists.
- When the last course has been done or when is scheduled.
- Who is the designated person in charge, by stating the name and role in the company.

The auditor shall attach the procedure and relevant documents to the audit report.

Requirement		Level
2.2	**Handling time and method.**	**Essential**

The UoC shall appropriately handle fishes to reduce damage and stress to them.
The appropriate way is here intended as calm, wet gloves, handling with 2 hands, avoiding the use of excessive force when removing fish from nets, avoiding throwing on deck and kicking of fishes.

The auditor shall verify the presence of appropriate handling tools and review and attach to the report a video of the operation.
Note: *for a privacy reason, the video shall be considered confidential and cannot be made publicly available*.

Requirement		Level
2.3	**Air exposure.**	**Essential**

The removal of fish from their natural environment and their prolonged air exposure can produce stress and pain to fishes, so, the UoC shall reduce to the minimum as much as possible capture's air exposure from the time when fishes are hauled on board and when are dead.

The auditor shall gather information and data on it, and verify the on-board procedure.

Requirement		Level
2.4	**Sorting activities.**	**Essential**

The sorting activity shall be conducted after hauling as quickly as possible. Leaving the fish on deck, entangled in the net or thrown shall be avoided. Appropriate fish boxes, in kind, number, and state of maintenance shall be used.

The auditor shall gather information and data on it, and verify the on-board procedure.

3 - STUNNING AND SLAUGHTER

Requirement		Level
3.1	**A Codified procedure for stunning and slaughtering must be in place, with a designated supervisor and trainer.**	**Essential**

Stunning methods in net fishing shall include percussion by using a sharp blow to the head, destroying the central nervous system, and rendering the fish unconscious immediately and irreversibly; or electricity by providing an electrical shock either in water or in contact with two electrodes while emerging, rendering the fish unconscious, yet reversibly. While different vessels and sizes of operations may vary widely, manual percussive stunning seems to be more adequate for set net fishing than electrical stunning, which requires additional manpower and equipment.
All the staff involved in fishing operations shall undergo training on the procedure.
Appropriate refresh courses shall be organized by the UoC annually and for all new employees.
A designated and clearly identifiable person in charge of training and monitoring shall be appointed.
The auditor shall report in the checklist:

- If a procedure exists.
- When the last course has been done or when is scheduled.
- Who is the designated person in charge, by stating the name and role in the company.

The auditor shall attach the procedure and relevant documents to the audit report.

Requirement		Level
3.2	**Use of appropriate and effective stunning tools.**	**Essential**

A sharp blow to the head delivered by a trained member of the crew should be effective and fast to render

the fish unconscious. This method may be used with a fishing priest or with a captive bolt pistol.
The auditor shall verify the presence of the appropriate tools, and verify that these tools must undergo regular maintenance.
Tools shall be safely stored when not used.
The auditor shall attach to the report pictures of these tools.

Requirement		Level
3.3	**The UoC doesn't use ice as a stunning method, although it should be used if no stunning or slaughter methods are available.**	**Recommended**

The use of ice can only be considered in cases where alternative methods cannot be made available. Use adequate amounts of ice and a slurry in the boxes where fish are stored.
The auditor shall evaluate, based on the type of operation and fishing vessels of the UoC, if the use of ice is justified and provide evidence of good practices of the UoC in using it.

4 – BY-CATCH

Requirement		Level
4.1	**There shall be a written procedure to manage appropriately the welfare of all by-caught species.**	**Essential**

This procedure shall address the sorting and release of all the individuals alive and in good condition and ensure minimal stress and damage to by-catch species during the release procedure.
The auditor shall read and assess the procedure to ensure its efficiency.
It is requested to attach the procedure to the audit report.

Requirement		Level
4.2	**The unit of certification subjects its employees to a course, taught by experts on how to manage the release of accidental catches of Endangered Threatened and Protected (ETP) species (e.g.: sea turtles, sharks, birds, dolphins, etc.).**	**Essential**

The course must include general notions on the biology of the potential bycatch present in that marine area.
The auditor is requested to gather info on:

- Who is handling the course.

- The frequency of the course.
- Attendance.
- Verify the modality and the training material.

Requirement		Level
4.3	**The unit of certification uses some mitigation procedure in fishing activities during periods of high presence of air-breathing megafauna (cetaceans, sea birds and sea turtles): Examples of mitigation techniques should be in line with scientific studies performed in the area of operation.**	**Recommended**

The auditor shall report the peak of air-breathing megafauna presence, and list the megafauna species. The auditor shall assess which techniques are appropriate concerning the area and the megafauna present (e.g. UV lights, pingers, etc.). A practical example shall be attached as evidence of conformity.

Requirement		Level
4.4	**The unit of certification is in contact with rescue centers or other competent entities specialized in the care of sea turtles and/or other species, on which it relies if there is a need to treat one or more injured animals.** **The crew must be instructed on how to manage these emergencies.**	**Essential**

This requirement covers sea turtles, marine mammals (cetaceans or seals), and sea birds.
The auditor shall report with which rescue center or competent entity the UoC is in contact.
The auditor shall also verify the presence and the quality of instructions given to the crew.
Note: the rescue center or the competent entity shall provide appropriate instructions to the crew.

Requirement		Level
4.5	**The unit of certification informs the Port Authority and the nearest rescue center in case of accidental catches.**	**Essential**

This requirement covers sea turtles, marine mammals (cetaceans or seals), and sea birds.
The auditor shall verify that the UoC has the right contacts of the Port Authority and the nearest rescue center.

Requirement		Level
4.6	**The unit of certification must be equipped with devices for the rescue of sea turtles (landing net where necessary) and for the first aid of the same (mattress, blankets, etc.).**	**Recommended**

The auditor shall verify the presence on board of the right devices and where they are stored on board.

5 – TRAINING

Requirement		Level
5.1	**UoC staff involved in fishing operations must undergo fish welfare training conducted by experts.**	**Essential**

The auditor shall collect evidence of the training course held by experts (e.g. Fair Fish, FishEthoGroup) for all of its employees involved in fishing operations.

Requirement		Level
5.2	**The UoC must train one of its staff members as a fish welfare expert.**	**Essential**

The person chosen to become a fish welfare expert must complete the course required in requirement 5.1 and will be the point of reference for all fish welfare activities in their company.

The auditor shall indicate the person and collect evidence of training conformity.