Friend of the Sea Standard

FOS - Wild Welfare Standard for Gillnet and Trammel net fisheries

www.friendofthesea.org

REV	DATE	REASON	VALIDATION	APPROVAL
1	11/10/2023	Pilot Project	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 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 a 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 per cent 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

Description of the unit of certification

This document shall only be filled out by personnel of the CB in charge of the audit.
It shall be filled out in English, if spoken fluently.

a) NAME OF THE UNIT OF CERTIFICATION TO BE AUDITED:
b) NAME OF THE UNIT OF CERTIFICATION REQUESTING THE AUDIT:
c) IS THE UNIT OF CERTIFICATION TO BE AUDITED PART OF A GROUP? IF SO, PLEASE SPECIFY THE NAME OF THE GROUP AND LIST ALL MEMBERS:
d) ADDRESS OF THE UNIT OF CERTIFICATION TO BE AUDITED:
e) NAME AND CONTACT DETAILS OF THE PERSON AT THE UNIT OF CERTIFICATION RESPONSIBLE FOR THE AUDIT AND CONTACTS WITH THE AUDITOR:

f) FLEET TO BE AUDITED:

Name of the fishing vessel	Registration number	Vessel's flag	Fishing method	Capacity (MT)	Unloading harbour	Ship owner, if different from “a)”

g) VESSELS AUDITED ON SITE (the auditor shall list the vessels which have actually been audited on site as a sample representing the fleet)**:**

Name of the fishing vessel	Registration number	Unloading harbour

h) FISHING ZONE *(Coordinates and/or FAO area and/or subarea and/or ICES area and/or EEZ. If available, please include a map.)**:***

i) COMMON AND SCIENTIFIC NAME OF THE SPECIES TO BE AUDITED, WITH THE RESPECTIVE FISHING METHODS:

Common Name	Scientific Name	Fishing method

j) TOTAL NUMBER OF EMPLOYEES:

k) ENVIRONMENTAL CERTIFICATIONS AND AWARDS:

I) ADDITIONAL INFORMATION:

Please specify the type of audit (initial, surveillance, additional, unannounced or recertification). In the case of multi-site audits, please specify also the method for calculation of sites inspected.

☐ **The Carefish/catch project was introduced** *(If not, the auditor shall provide a short description).*

☐ **The unit of certification and the ship owners were informed of the opportunity, in case of approval, of using the Friend of the Sea logo on the certified products.**

☐ **The unit of certification has a document qualifying and confirming the roles of the staff carrying out the audit.**

☐ **The duration of the audit was agreed upon.**

☐ **The information included in the Preliminary Information Form (PIF) was confirmed** (in the case of changes to the PIF, an updated version has to be promptly provided).

<table>
<tr><td>CERTIFICATION BODY:</td><td>AUDIT TEAM:</td><td>AUDIT START AND END DATE:</td></tr>
<tr><td rowspan="2">SIGNATURE OF AUDITOR:</td><td rowspan="2">NAME OF THE PERSON IN CHARGE OF THE UNIT OF CERTIFICATION AND ACCOMPANYING THE AUDITOR DURING THE AUDIT:</td><td>AUDIT CODE:</td></tr>
<tr><td>TYPE OF AUDIT:</td></tr>
</table>

NOTES TO THE AUDITOR

1) The auditor shall fill out all fields in the checklist.

2) The Auditor shall provide an explanation when requirements are not applicable.

3) The Auditor shall write YES when the unit of certification complies with a requirement and NO when it does not.

4) The Auditor shall comment and explain the positive or negative answers. Simple "YES," "NO," or "N.A." are insufficient.

5) Each relevant document shall be added to the final audit report in a separate and numbered attachment.

6) Photographic evidence added to the checklist or attached is appreciated.

7) The application process is NOT discriminatory on size, scale, management, minimum number of operators and number of vessels involved.

1 – CAPTURE

No.	Requirement	Level	Parameters and information	Y/N/ N.A.	Comments
1.1	Reduce soaking time as much as possible.	Reccomended	The 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.		
1.2	Reduce hauling speed as much as practically possible.	Reccomended	The UoC shall reduce the speed with which the nets are hauled on board to minimize the capture ascent rates and barotrauma. Soaking time Iis 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		
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.	Reccomended	The auditor shall verify compliance to this requirements during on site visit.		
1.4	The fleet is equipped with measures that guarantee a quick retrieval of lost fishing gear to avoid "ghost fishing".	Reccomended	"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 in fact 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 a quick retrieval of lost fishing gears, 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.		
1.5	Vessels shall have appropriate equipment on board to assist in the safe recovery of lost fishing gear.	Reccomended	The auditor shall verify the existence of appropriate equipment on board through inspection on site and purchase invoice.		

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.	Reccomended	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 loss. Additional information is available at https://www.ghostgear.org/news/2018/7/6/gggi-ghost-gearreporter-app.		
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.	Reccomended	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 of the staff in charge of this task and if all the workers on board are aware about how to proceed in case of necessity. Where not appropriate and practically possible, the auditor shall provide a justification.		
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, implement mitigation measures to address, where appropriate and practically possible.	Reccomended	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 highrisk 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 provide a justification.		
1.9	The UoC shall log nets hauling speed	Essential	A dedicated log that includes gear lenght and the relative hauling time shall be kept on board.		

2 – ONBOARD HANDLING

No.	Requirement	Level	Parameters and information	Y/N/N.A.	Comments
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 following requirements. 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.		
2.2	Handling time and method	Essential	The UoC shall handle fishes in an appropriate way to reduce damage and stress to them. Appropriate way is here intended as: calm, wet gloves, handling with 2 hands, avoid use of excessive forces when removing fish from nets, avoiding throwing on deck and kicking of fishes.		
2.3	Air exposure	Essential	The removal of fish from their natural environment and its prolonged air exposure can produce stress and pain to fishes, the UoC shall reduce to the minimum as much as possible capture's air exposure from		

			time when fishes are hauled on board and when are dead.		
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 and number, shall be used.		

3 - STUNNING AND SLAUGHTER

No.	Requirement	Level	Parameters and information	Y/N/ N.A.	Comments
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.		

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.		
3.3	The UoC doesn't use ice as a stunning method, although it should be used if no stunning or slaugher method are available	Recommended	The use of ice can only be considered in cases where alternative methods can not be made available. Use adequate amounts of ice and a slurry in the boxes where fish are stored.		

4 – BY-CATCH

No.	Requirement	Level	Parameters and information	Y/N/ N.A.	Comments
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 to ensure minimal stress and damage to by-catch species during the releaase procedure.		
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.		
4.3	The unit of certification uses some mitigation procedure in fishing activities during periods of high presence of air-breathing megafauna (cetaceans, seabirds and seaturtles): Examples of mitigation techniques should be in line with scientific studies performed in the area of operation.	Reccomended	The auditor shall assess which techniques are appropriate in relation to the area and the megafauna present (eg. UV lights, pingers, etc)		
4.4	The unit of certification is in contact with rescue centers or other competent entities specialized in the care of sea	Essential	This requirement covers: Sea turtles,marine		

	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.		mammals (cetaceans or seals), seabirds.		
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, dolphins, seabirds, etc.		
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.).	Reccomended			

5 – TRAINING

No.	Requirement	Level	Parameters and information	Y/N/ N.A.	Comments
5.1	UoC staff involved in fishing operations must undergo fish welfare training conducted by experts.	Essential	Evidence of conformity.		
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.		

Further comments:

CONCLUSIONS:

The Auditor shall fill out the following fields:

☐ **The unit of certification COMPLIES with Friend of the Sea Fish Welfare requirements.**

☐ **The unit of certification DOES NOT COMPLY with Friend of the Sea Fish Welfare requirements.**

MAJOR NON-CONFORMITIES (to be corrected within 3 months)

List major non-conformities.

RECOMMENDATIONS (to be communicated within the next inspection)

List recommendations