

THE FISHERIES (CONSERVATION AND MANAGEMENT) ORDINANCE 2005

LICENCE NUMBER:

LICENCE PART 2

DORYTEUTHIS GAHI

SPECIFIC CONDITIONS

No Doryteuthis gahi (Calamari) is to be discarded

Doryteuthis gahi (Calamari) is not to be made into fish meal

A. Fishing Area

A1. The license is only valid for fishing in the area depicted as the permitted fishing area on the chart attached and titled: **Falkland Conservation Zones – Valid Fishing Area: Licence Category C.**

A2. The licensee must not fish in the area depicted on the attached chart as the area closed to vessels operating on a category **C** licence.

A3. The licenced vessel shall not proceed through the closed area for transit purposes **unless all nets and fishing gear are stowed in such a way as to be unavailable for use.**

B. Mitigation of Seabird Mortalities

B1. In order to minimise seabird interactions with trawl warps and net:

- a) **All trawlers must deploy Bird Scaring Lines or an approved Fixed Aerial Array. The Fixed Aerial Array should remain deployed throughout fishing operations. The Bird Scaring Lines should be deployed as soon as the trawl doors are submerged during net deployment, and throughout the trawl, until hauling operations commence.**
- b) **Discards from the ship of unwanted whole fish, offal and waste must cease during manoeuvres (net shooting, hauling, door and net retrieval, net and door deployments, turning and paying out of warp cables).**
- c) **Nets must be cleaned thoroughly prior to shooting to remove items that might attract birds.**

B2. For trawlers using Bird Scaring Lines instead of a Fixed Aerial Array

- a) All trawlers using Bird Scaring Lines must deploy two Bird Scaring Lines, one on each side of the ship outboard of the trawl warps.

b) Bird Scaring Lines must be fixed at the stern of the vessel from attachment points higher than the trawl blocks and **no more than 2 metres horizontally** from the trawl blocks. Extension pieces may need to be fabricated to allow correct positioning of the Bird Scaring Lines. Fisheries Officers may advise of correct fixing points during inspections.

c) The first Bird Scaring Lines streamer must be positioned at 1 metre distance from the stern of the vessel, **as measured at the waterline**.

d) A third spare Bird Scaring Lines must be available for immediate deployment in the event of a mishap with either of the two Bird Scaring Lines in use.

e) All vessels must conform to the following design of Bird Scaring Lines as shown in figures 1a and 1b. This design has been tested and shown to significantly reduce the number of seabirds hitting the trawl warps whilst foraging astern of fishing vessels, reducing bird entanglements and improving durability.

(i) The lines must be made from **8-10 millimetre floating line**, either laid or pleated. The recommended total length of the line astern the vessel is **30 metres**. Depending on the distance between the stern of the vessel and the warp/water interface, the total Bird Scaring Line length **may vary between 27 metres and 33 metres**. This variation in length can only be adjusted for between the last streamer and the buoy.

(ii) Six double streamers are to be attached at intervals indicated in Fig 1. Attachment may be by light weight swivels (less than 50 grams) with stoppers or directly into the lay of the rope (Fig 1a). Streamer lengths range from 2 x 8 metre streamers closest to the stern to 2 x 3 metre streamers nearest the buoy. The length of the first set of streamers (2 x 8 metre and 2 x 7 metre) may be adjusted to optimise mobility and reduce drag (Fig 1b). The length of these two sets may vary between 2 x 7.5 - 8.5 metres and 2 x 6.5 - 7.5 metres for the first and second respectively (Fig 1a).

(iii) It is required that the streamers be made from semi-flexible tubing of high visibility (red, orange or yellow). The recommended tubing is **Red Mazzerpur 10 millimetre** polyurethane tubing. Polythene and materials such as fire hose; old waterproofs, nylon covered rope, and dark coloured tubing are **NOT ACCEPTABLE**.

(iv) The drag buoy is a net covered 300 millimetre diameter HDP moulded fishing float attached by a swivel. Any other buoys are **NOT ACCEPTABLE**.

Fig 1a. Design of Approved Bird Scaring Lines

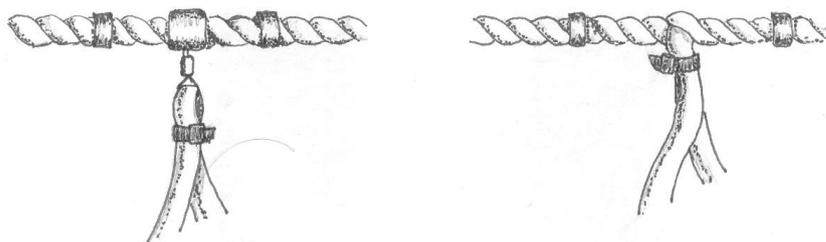
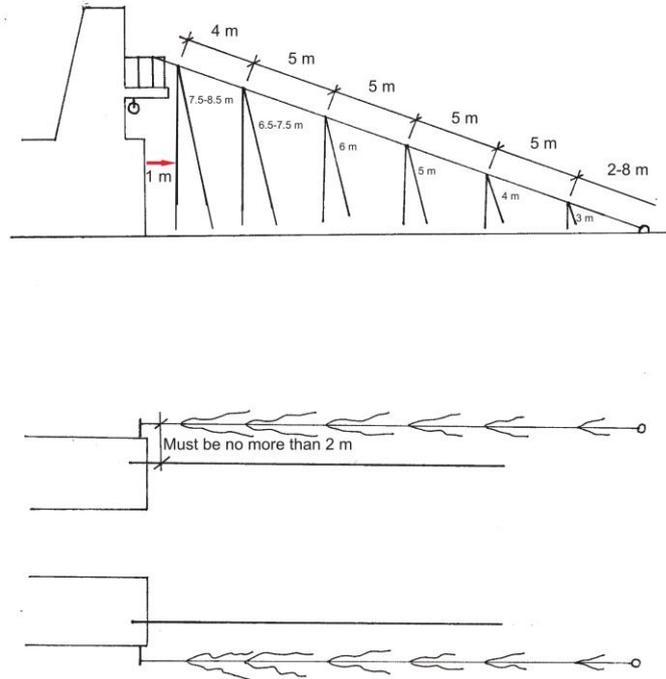


Fig 1b. Bird Scaring Line specifications



C. Mitigation of Seal Mortalities

C1 Marine Mammal Observer and/or use of SED's

1. If a vessel has a Marine Mammal Observer on board, the vessel will not be required to deploy a Seal Exclusion Device at the start of the fishing season.
2. If a vessel does not have a Marine Mammal Observer on board at the start of the fishing season, the vessel will be required to deploy a Seal Exclusion Device (see Section C4 below for FIFD approved models) from the start of the fishing season.
3. Following the mortality of 2 marine mammals between all vessels with an MMO on board, Seal Exclusion Devices are to be immediately deployed and to continue to be used for the remainder of the season. FIFD will send a formal notification to all vessels at this time following the MoU protocol.
4. Following the mortality of 2 marine mammals between all vessels with an MMO on board and the SED deployed, FIFD will immediately review the possible causes, including the location and time frame of mortalities. FIFD will close an area on a temporary basis, only, following careful consideration of all the contributing factors. The size and length of time of the closure will be determined by the factors that have triggered the closure. Only vessels with MMO on board will be allowed to re-enter closed areas to check if the situation has improved. Following a short period of monitoring, the area will then either remain closed for a further period or be open for the entire fleet. At all times FIFD will do its utmost to ensure that the fishery remains as open and accessible as possible.

C2. Vessels not using an approved SED are requested to use a metal grid across the fish bin in order to avoid seals entering the hold. The maximum distance between the metal rods should be no more than 30cms. Note that vessels using an approved SED, shouldn't need to use a fish bin metal grid as the seals should be able to escape through the hatch.

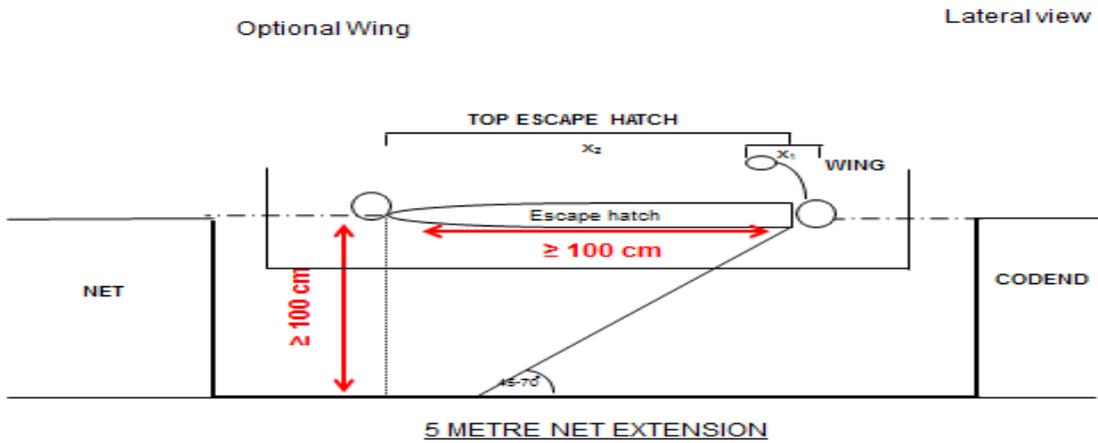
C3. In order to minimise seal interactions with the net during shooting and hauling:

- a) **Discards from the ship of unwanted whole fish, offal and waste must cease during shooting, hauling and turning** to avoid attracting seals.
- b) Before each shoot, the net **must be properly cleaned** to prevent scavenging.
- c) An approved Seal Exclusion Device (SED) must be installed to allow the fur seals and sea lions to escape safely from the net.
- d) During the haul, the deck crew should make their best efforts to detect seals trapped in the net and facilitate their escape whilst the SED is still in the water, by working cables/bridles back and forth.

C4. Three models of SED have been approved (see diagrams A, B, C, below), and their standard components are:

1. Grid with vertical bars made of metal or other rigid material. [The grid is likely to be most effective if it matches the shape of the net at the point of attachment]
2. The angle of the grid with respect to the bottom of the net must be **45-70°** to easily guide the seals to the escape hatch;
3. The space between the vertical bars must be **≤ 15 cm**;
4. The shape of the top escape hatch should be either semi-circular or triangular with the base at the **top** of the grid, and it must keep its shape at all times. The distance from the base to the apex of a triangular design or zenith of a semicircular design must be **at least 100cm**;
5. The seal escape hatches (top and internal) must be **at least 120 cm** wide, or 90% of the top bar of the grid or whichever is greater;
6. The height of any internal seal escape hatch must be **at least 100 cm** above the bottom of the net (see red vertical arrows in the diagrams);
7. All escape hatches (top and internal) must **not be obstructed** by any **mesh** or **ropes**.
8. Several floats must be attached to **both** the upper side of the grid and the border of the escape hatch in order to prevent the SED from collapsing during shooting/hauling of the net.

9. If an optional wing is installed at the base of the top escape hatch, its maximum width x_1 should be **not more than** a quarter of the SED's escape hatch length x_2 and it should have enough flotation to avoid covering part of the top seal escape hatch, as it may discourage seals from escaping.



C5. Approved net configurations with SED:

1. **SED – Model A:** The SED is installed in a net extension piece [a net extension of c 5m has proved effective] in front of the codend to improve the water flow (Fig.1, 2).

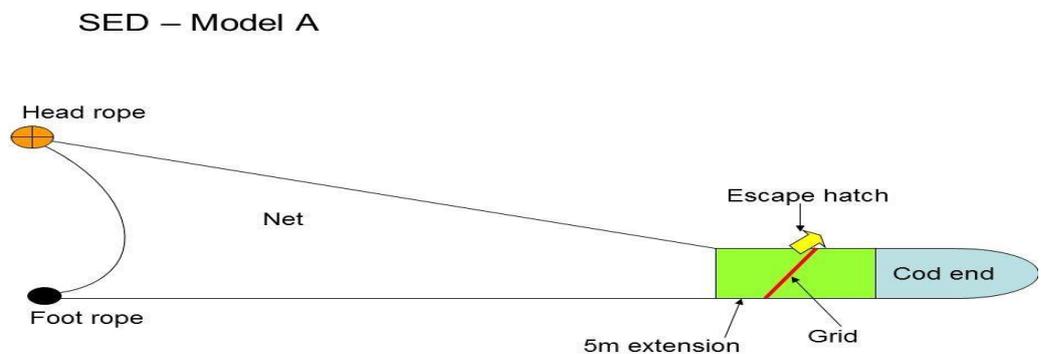


Fig.1. General diagram SED-A with 5 m net extension

SED - Model A

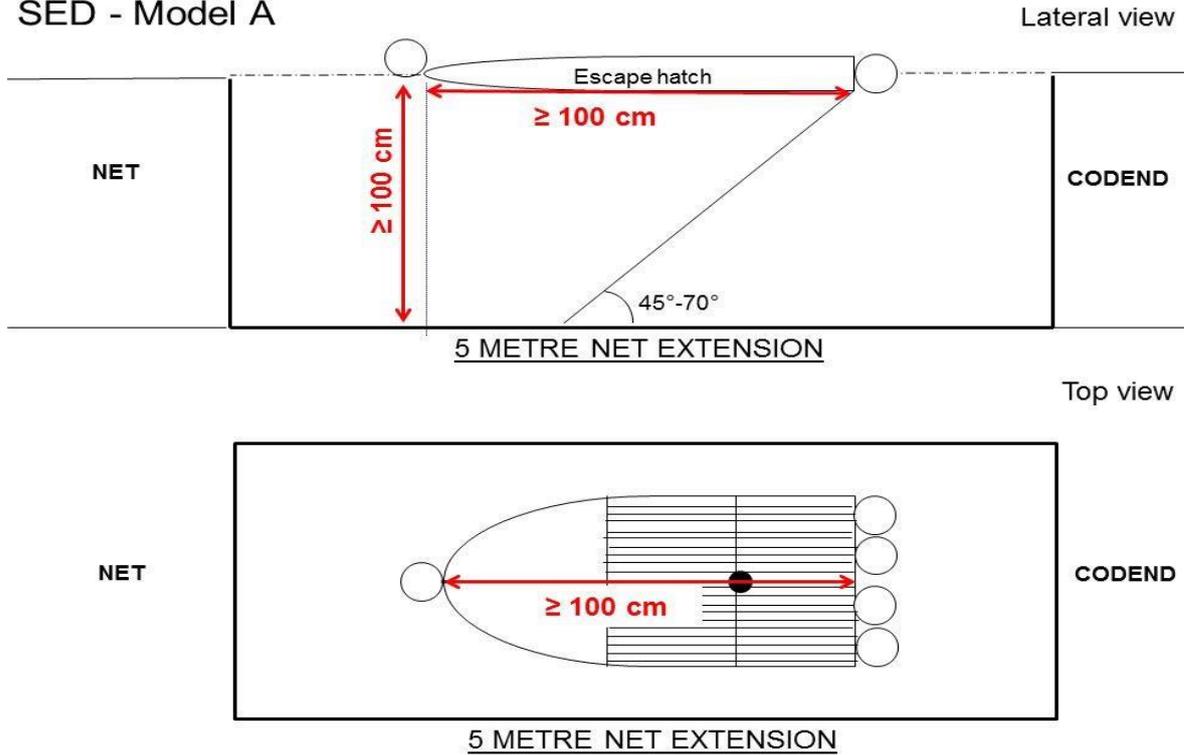


Fig.2. Lateral and top view of SED-A.

2. **SED - Model B:** A small mesh panel is installed to direct the water flow to the lower part of the grid (Fig.3, 4).

- i. The **escape hatch** in the small mesh panel must have the **same dimensions** as the escape hatch at the **top** of the net;
- ii. The base of the mesh panel must be **attached only to the sides** of the grid. Attachment ropes to the grid are **not acceptable**;
- iii. The point [level] at which the small mesh panel connects or meets the grid must be at least 100cm above the bottom of the net when measured vertically.

SED – Model B

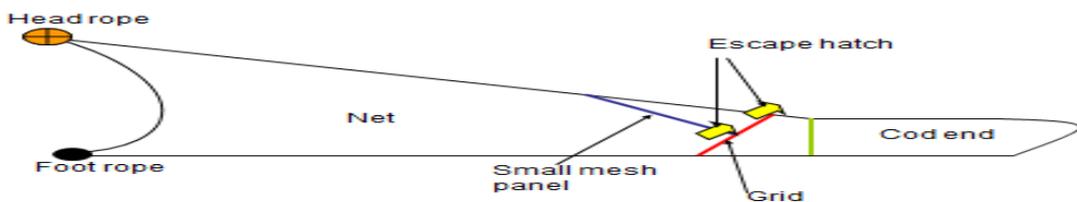


Fig.3. General diagram SED-B

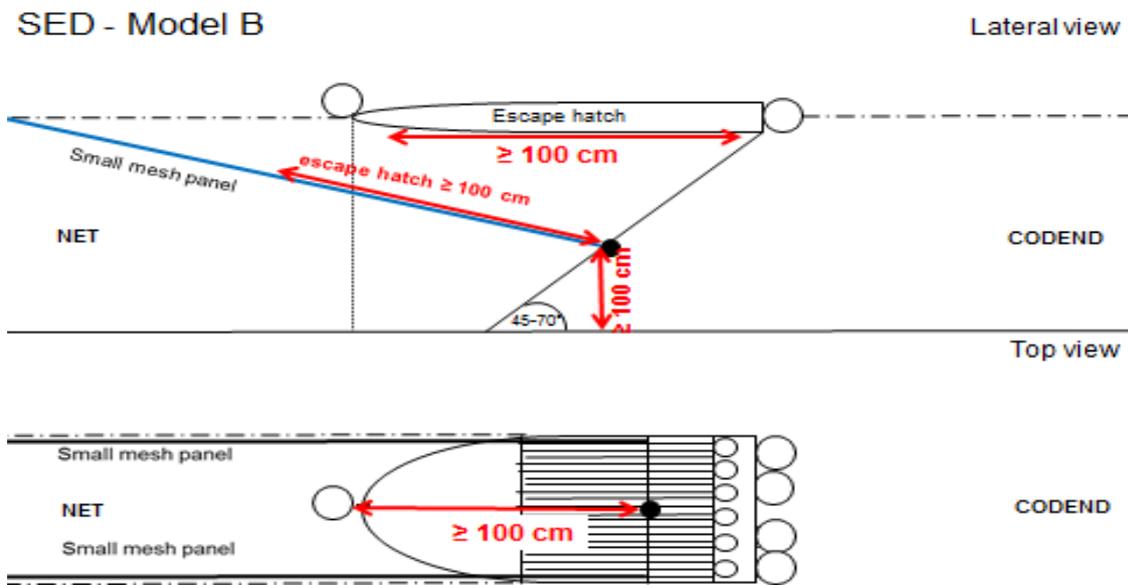


Fig.4. Lateral and top view of SED-B.

3. **SED - Model C:** A small mesh funnel is installed to direct water flow towards the grid (Fig.5, 6).

- i. The **width** of the small mesh funnel must be at least as wide as the escape hatch at the **top** of the net;
- ii. The small mesh funnel must be **attached only to the sides** of the net. Attachment ropes to the grid are **not acceptable**;
- iii. The horizontal distance from the mouth of the small mesh funnel to the bottom of the grid must be **at least 100 cm**.

SED – Model C

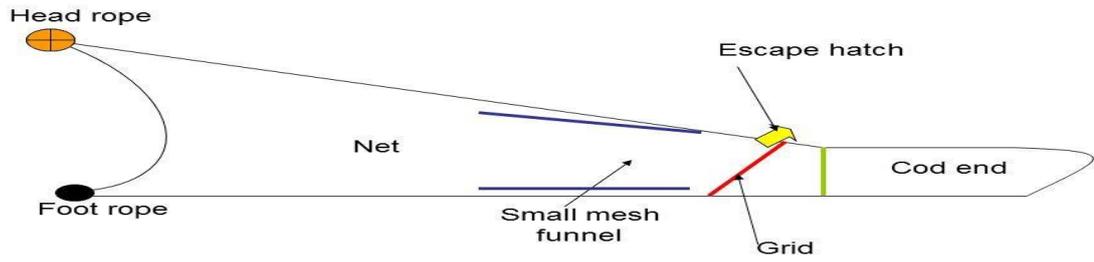


Fig.5. General diagram SED-C.

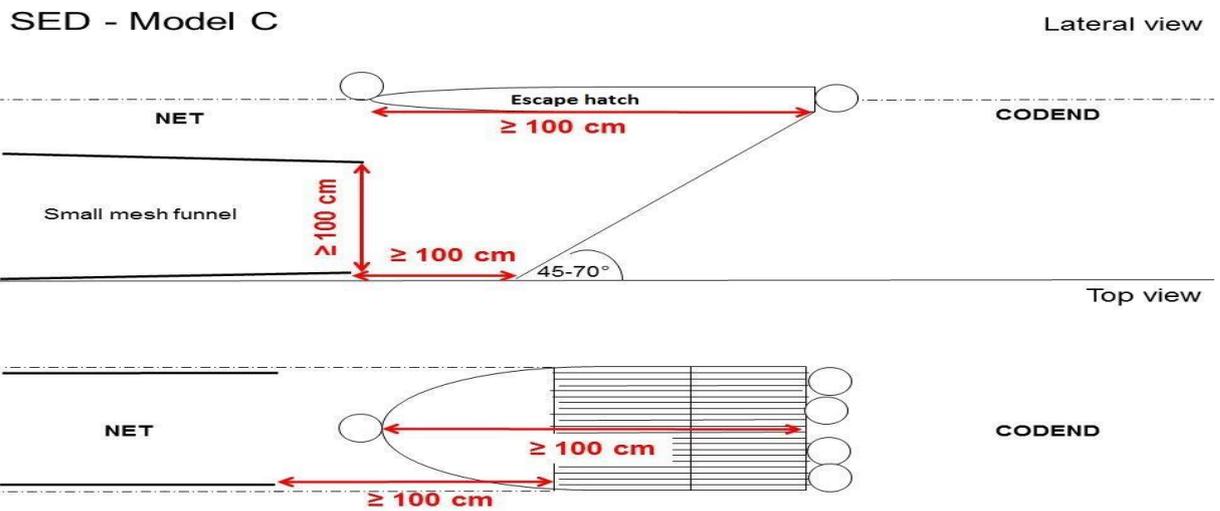


Fig.6. Lateral and top view of SED-C.

C6. Advisory Text:

[For attachment of either the small mesh panel (SED-B) or funnel (SED-C), a PVC tube with a rope inside can be a good option, as it gives stability].

(EXPLANATORY NOTES)

C5. Example of a compliant SED configurations:



Fig.7. Compliant SED-B. The arrows indicate the attachment of the small mesh panel to the sides of the net. The internal escape hole is neither blocked by ropes nor mesh. Note the PVC tube in the border of the panel.

D. Multiple Licences

D1. This section applies to vessels issued more than one licence type (multiple licences) with overlapping valid periods. If the licenced vessel is already fishing in the fishing waters of the Falkland Islands on a licence issued by the Falkland Islands Government it must not change to operating on another licence type without the Master giving the required notice that operations are to commence under a different licence type. A change of licence must apply to a full fishing day (whole calendar day). The minimum period of notice to be given to the Director of Fisheries (through FISHOPS) of a change of licence type is by noon (1200) Stanley time on the day prior to the change of licence type coming into effect.