

Terms of Reference: Protecting vulnerable species from the intersection of illegal, unreported and unregulated fishing, bycatch and abandoned, lost and otherwise discarded fishing gear

Research

In 2020 we identified a need to conduct research with the intention of elevating the linkages between illegal, unreported and unregulated fishing (IUU) and bycatch, including bycatch in abandoned, lost and otherwise discarded fishing gear (ALDFG) in the international policy arena in order to accelerate efforts to protect vulnerable cetacean species and ecosystems.

Recognising in particular the threat to small cetacean species from fishing gear through our work on the conservation of the vaquita and a 2019 scientific paper¹ identifying specific cetacean species under threat, we are seeking to recruit a consultant to assist with this work and use the findings to inform a campaign strategy and related intervention points in regional and international policy processes such as at the International Whaling Commission (IWC) and the Food and Agricultural Organisation of the United Nations (FAO), amongst others.

Background

ALDFG, otherwise known as 'ghost gear', has risen to international attention from an environmental and animal welfare perspective. So in recent years has the issue of IUU, often with a focus on the human and economic impact of this illicit practice. Both issues are a major threat to marine species, sustainable fisheries and food security. Though bodies such as United Nations Environment Programme (UNEP) and FAO have recognised the links, there is a gap in understanding of the intersections between these challenges though interaction with fishing gear is frequently referenced as a driver in marine species decline. Indeed, bycatch is the greatest direct cause of cetacean mortality² and is inherently linked to these issues.

IUU fishing poses a significant risk to species and ecosystems, undermining efforts to manage fisheries sustainably and threatening the livelihoods of legitimate fishers. Furthermore, vessels fishing illegally are more likely to lose their gear through fishing in risky grounds, conflict with other gears or through dangerous practices such as fishing at night. The dumping of gear has been connected with IUU fishing, as vessels seek to dump gear to evade capture, destroy evidence or ensure port access.

Although these linkages are poorly documented, Macfadyen and Huntington asserted in their 2009 paper a number of reasons why deliberate discarding and abandonment may be connected to IUU.

These included:

- a failure to mark/identify gear so as to prevent its association with particular vessels, or failure to mark gear may itself be a form of IUU fishing;
- an unwillingness to communicate with other fishers about activities, thereby increasing the risk of ALDFG from gear conflicts;
- increased risks of losing gear if fishing in poor weather or at night in an attempt to conceal IUU activity; and

¹ Brownell, R.L. *et al*, 2019 Bycatch in gillnet fisheries threatens Critically Endangered small cetaceans and other aquatic megafauna, *Endangered Species Research* (40):285-296.

Available at: <http://www.int-res.com/articles/esr2019/40/n040p285.pdf>

² https://www.un.org/depts/los//general_assembly/contributions_2020/IWC.pdf

- an unwillingness to be apprehended by inspections authorities if vessel has been identified at sea as engaging in IUU.³

Though many organisations campaigning on IUU have focused on the seafood sustainability impacts and appalling human rights conditions on board IUU vessels, the environmental risks of IUU are potentially catastrophic for species conservation, the case of the vaquita in the Upper Gulf of California being one documented example of the decline of a species as a direct result of illegal fishing and the abandonment of nets. Methods used in IUU fishing are also linked to bycatch, environmental damage (e.g through drift nets, dredging and dynamite fishing) and the inhumane treatment of animals (eg illegal shark finning).

EIA has substantial experience investigating the linkages between IUU and bycatch of the endangered vaquita in the Upper Gulf of California. Our investigations have revealed how the pursuit of totoaba has driven criminal networks to strip Mexico's waters of many valuable marine species, including sea cucumbers, abalone and sea horses.⁴ The abandonment of illegal nets has been an exacerbating factor driving the imminent extinction of the vaquita. Though the outcome for the vaquita is bleak, coordinated action to address similar threats to other cetacean species could make a difference. Indeed, gillnets have been identified as a factor in the decline of multiple critically endangered cetaceans,⁵ and it is worth noting that gillnets have also been identified as fishing gear posing both the greatest potential for loss and biggest risk to the environment once lost.⁶

Objectives and Description of Work

We wish to build on our experience by further researching connections between IUU and bycatch in specific locations and/or fisheries to see where intervention points may be possible. The research should build on the work of Brownell *et al* outlining the threats to 13 critically endangered cetacean species and assess linkages with legal and illicit fishing practices in these cases in order to determine a strategy to increase protection through national, regional and international policy and enforcement initiatives.

The background research should also identify where possible where ALDFG is involved, drawing upon existing research about the links between IUU and ALDFG from Macfadyen and Huntingdon, Richardson and Wilcox, and supplementing this by direct outreach to relevant stakeholders, for example via interviews, webinars and any relevant meetings.

Deliverables

- Conduct scoping into linkages between IUU and bycatch, including bycatch in ALDFG to identify impacts and intervention points (at least three locations and/or species), compiling findings into an internal briefing for EIA;
- Make recommendations to EIA for specific policy interventions to improve the conservation of species identified in the research outlined above, with a specific focus on IUU and ALDFG. Policy recommendations should be categorised according to local

³ Macfadyen and Huntingdon, *Abandoned, Lost or otherwise Discarded Fishing Gear*, 2009

⁴ CITES Last Chance, EIA, 2019

Available at: <https://eia-international.org/wp-content/uploads/EIA-report-citess-last-chance-single-pages-for-print.pdf>

⁵ Brownell, R.L. *et al*, 2019 Bycatch in gillnet fisheries threatens Critically Endangered small cetaceans and other aquatic megafauna, *Endangered Species Research* (40):285-296.

Available at: <http://www.int-res.com/articles/esr2019/40/n040p285.pdf>

⁶ GGGI, Best Practice Framework for the Management of Fishing Gear, 2018

Available at: www.ghostgear.org

(eg. regional and national action plans), regional (e.g RFMOs) and international (e.g FAO, IWC) and build on existing mechanisms and initiatives.

Timings

Expressions of interest in responding to this tender to be received by 15th February 2021.
Work to be completed by 15th April 2021.

Monitoring and Management

Expressions of interest and questions related to this work to be addressed to Christina Dixon,
Senior Ocean Campaign, christinadixon@eia-international.org