

Fact Sheet

Abandoned, Lost and Otherwise Discarded Fishing Gear

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INTRODUCTION

Sea-based marine plastic pollution is roughly estimated to comprise around 20% of all marine plastic pollution and represents a major threat to marine ecosystems. However, sea-based marine plastic pollution has not been sufficiently addressed to date, representing a significant gap in global governance. Sea-based plastic pollution largely stems from shipping (35%), with an estimated share of 65% from the fishing sector¹. Abandoned, lost and otherwise discarded fishing gear (ALDFG) is an ever-growing problem, impacting marine resources, wildlife and habitats². When fishing gear is lost, it continues to catch both target and non-target species – also known as ‘ghost-fishing’ – entangling and killing threatened and protected marine animals and commercially important fish species³. Lost gear also damages coral reefs and the seabed, while surface ALDFG presents a significant safety hazard for shipping and maritime activities, such as propeller entanglement. The existing governance framework to address fishing gear requires significant improvement due to the current fragmentation of laws and regulation across instruments – predominantly the Food and Agricultural Organisation (FAO) and the International Maritime Organisation (IMO), in addition to a myriad of regional conventions and fisheries management bodies. In 2019, UN Environment published a report calling for the “development of a comprehensive global strategy to address ALDFG”, building on existing work and ensuring coordination across several key areas⁴. For this reason, member states have been discussing potential measures for addressing ALDFG within the negotiations for a new International Legally Binding Instrument (ILBI), with particular consideration for what ending plastic pollution ‘including in the marine environment’ could look like.

Relevance to the Pacific Context

ALDFG poses a threat to human health, food security and livelihoods. It presents a hazard to navigation and safety at sea, contributes to the proliferation of microplastics in the ocean and has a disproportionate impact on Small Island Developing States (SIDS).

- Estimates have suggested that as much as 5.7% of all fishing nets, 8.6% of all traps and 29% of all lines are lost to the world’s ocean annually⁵. Regional differences exist, with fishing gear comprising an estimated 27% of beach litter in Europe, 46% of the floating debris in the Great Pacific Garbage Patch⁵ and, in a study in the North Pacific Ocean, nearly 90% of marine debris intercepted by longline fisheries was ghost gear⁶.
- This accumulating plastic poses a particular risk to the integrity of regional ecosystems and is now becoming ubiquitous in food chains. A recent study in the Pacific found plastic debris in 97% of examined fish species⁷. This is a concern given how plastics leach harmful toxic chemicals into the environment⁸ and that consumption of fish in the Pacific is three to six times higher per capita than the global average⁹.
- Marine plastic pollution such as ALDFG causes widespread direct and indirect harm and degradation to the marine environment, including threatened marine life such as marine mammals, turtles, seabirds and corals. Often the impact of intensive fishing activities in the ocean are disproportionately felt in SIDS where the pollution accumulates and is transported on oceanic currents.
- Beyond fishing gear such as nets, lines and traps, different gear types and their plastic components are known to cause specific and complex environmental and governance challenges for Regional Fisheries Management Organisations (RFMOs) and enforcement agencies. For example, between 2016-20, 96,599 drifting Fish Aggregating Devices (FADs) were deployed in the Western Central Pacific Ocean. Investigation of FAD fates showed 44.1% of FAD buoys (with transmitters) were abandoned, 9.6% were retrieved; 6.6% were beached; 18.4% were sunk, appropriated or had a malfunctioning buoy; and 21.3% were deactivated by the fishing company and left drifting and unmonitored at sea.



Key Considerations

The causes of ALDFG are multiple and include enforcement pressure leading illegal fishers to abandon their gear to avoid capture, operational pressure leading to gear conflict and accidental losses, weather events increasing the likelihood of loss or discarding for safety reasons and spatial and temporal pressures on fishing areas from both legal and illegal fishing activity. Indirect causes, such as expensive, inaccessible or non-existent disposal facilities at or around ports, also increase gear dumping and mismanagement¹¹.

There are also multiple challenges at the design phase including the mixing of polymers in plastic gear and contamination which make recycling challenging, the use of toxic additives and coatings in gear which not only hamper recycling but pose a risk through toxic leaching as gear degrades in the environment and the very nature of fishing gear designed to capture marine life making it high risk when fishers lose operational control. During the negotiations for the ILBI to date there has been limited time to discuss potential control measures on fishing gear though among the Member State submissions made to INC2 mentioning fishing gear¹², the recovery of ALDFG and remediation of legacy pollution, Extended Producer Responsibility (EPR) schemes for fishing gear, as well as the development of guidance, were emphasised. However, there was a tendency to rely on existing frameworks and initiatives such as those from FAO and IMO. There was also strong support for a 'sectoral approach' (including fishing gear) to dealing with plastic pollution.

The measures included for discussion to date, namely in the options for elements paper prepared for INC2, provide scope for further deliberations on approaches for fishing gear within the ILBI and promote coordination with existing instruments, the focus is solely on the elimination of releases into the environment. The proposed measures thus far do not yet capture the need for a holistic framework that deals with all stages of the fishing gear lifecycle, including production, design, use, trade and end-of-life treatment - all of which are necessary to prevent the release of plastic fishing and aquaculture gear from being released into the environment, thus delegates may wish to consider how to approach this in the negotiations and what measures may be appropriate throughout the fishing gear lifecycle.

Summary

If agreed, a comprehensive global ALDFG strategy could extend across and beyond the intersections of existing regional and international governance frameworks, with supportive roles for existing multi-stakeholder platforms and the global seafood network with its certification bodies and eco-labels. This includes the development of provisions to promote national and international cooperative measures to reduce plastic pollution in the marine environment and encourage action by all stakeholders, including the private sector¹³. In short, a bespoke and tailored approach to fishing gear may need to form part of the design of a global agreement on plastic pollution, taking into consideration existing instruments contributing within their core competencies, the supportive role of regional governance and, importantly, their current limitations. The specific consideration for Pacific Large Ocean States both as stewards of the ocean and recipients of high volumes of ALDFG pollution could be an important area for further exploration in the negotiations.

¹¹Arcadis 2021, Enumia 2016; OSPAR 2009; UNEP MAP 2015 as referenced in GESAMP Working Group Report 43. Available at: <http://www.gesamp.org/site/assets/files/2213/rs108e.pdf>

¹²GESAMP (2020). Sea-Based Sources of Marine Litter – A Review of Current Knowledge and Assessment Data Gaps (Second Interim Report of GESAMP Working Group 43).

¹³Convention on Biological Diversity (2016). Marine Debris: Understanding, Preventing and Mitigating Significant Adverse Impacts on Marine and Coastal Biodiversity (Report of the Subsidiary Body on Scientific, Technical and Technological Advice, UNEP/CBD/SBSTTA/20/INF/9). Greenpeace (2006). Plastic Debris in the World's Oceans.

¹⁴UNEP (2019). *Addressing Marine Plastics: A Systemic Approach - Recommendations for Action*. Pages 59-60. Available [here](#).

¹⁵Richardson, K., Hardesty, B. D., & Wilcox, C. (2019). Estimates of fishing gear loss rates at a global scale: A literature review and meta-analysis. *Fish and Fisheries*, 20(6), 1218–1231. Available [here](#).

¹⁶European Commission (2018). *New Proposal will Tackle Marine Litter and "Ghost Fishing."* Available [here](#). Lebreton, L. et al. (2018). *Evidence that the Great Pacific Garbage Patch Is Rapidly Accumulating Plastic* (Sci Rep 8, 4666). Available [here](#).

¹⁷Uhrin, A.V. et al (2020). *Relative Abundance of Derelict Fishing Gear in the Hawaii-based Pelagic Longline Fishery Grounds as Estimated from Fishery Observer Data* (Sci Rep 10, 7767). Available [here](#).

¹⁸Markic, A., Niemand, C., Bridson, J. H., Mazouni-Gaertner, N., Gaertner, J. C., Eriksen, M., and Bowen, M. (2018). Double trouble in the South Pacific subtropical gyre: Increased plastic ingestion by fish in the oceanic accumulation zone. *Marine pollution bulletin*, 136, pp.547-564.

¹⁹Gallo, F., Fossi, C., Weber, R., Santillo, D., Sousa, J., Ingram, I., and Romano, D. (2018). Marine litter plastics and microplastics and their toxic chemicals components: the need for urgent preventive measures. *Environmental Sciences Europe*, 30 (1), p.13

²⁰Charlton, K. E., Russell, J., Gorman, E., Hanich, Q., Delisle, A., Campbell, B., and Bell, J. (2016). Fish, food security and health in Pacific Island countries and territories: a systematic literature review. *BMC Public Health*, 16 (1), pp.285

²¹Macfadyen, G. et al (2009). *Abandoned, Lost or Otherwise Discarded Fishing Gear (FAO Fisheries and Aquaculture Technical Paper No. 523, UNEP Regional Seas Reports and Studies No.185)*. Available [here](#).

²²See for example, the Canada, Kenya, Norway, Philippines, UK, Switzerland or AOSIS submissions. Available [here](#).

²³United Nations Environment Assembly (2022). Resolution 5/14 – End Plastic Pollution: Towards an International Legally Binding Instrument. UNEP/EA.5/Res.14. Operative Paragraphs 3(c), (l). Available [here](#).

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