

Webinar Summary Conclusions

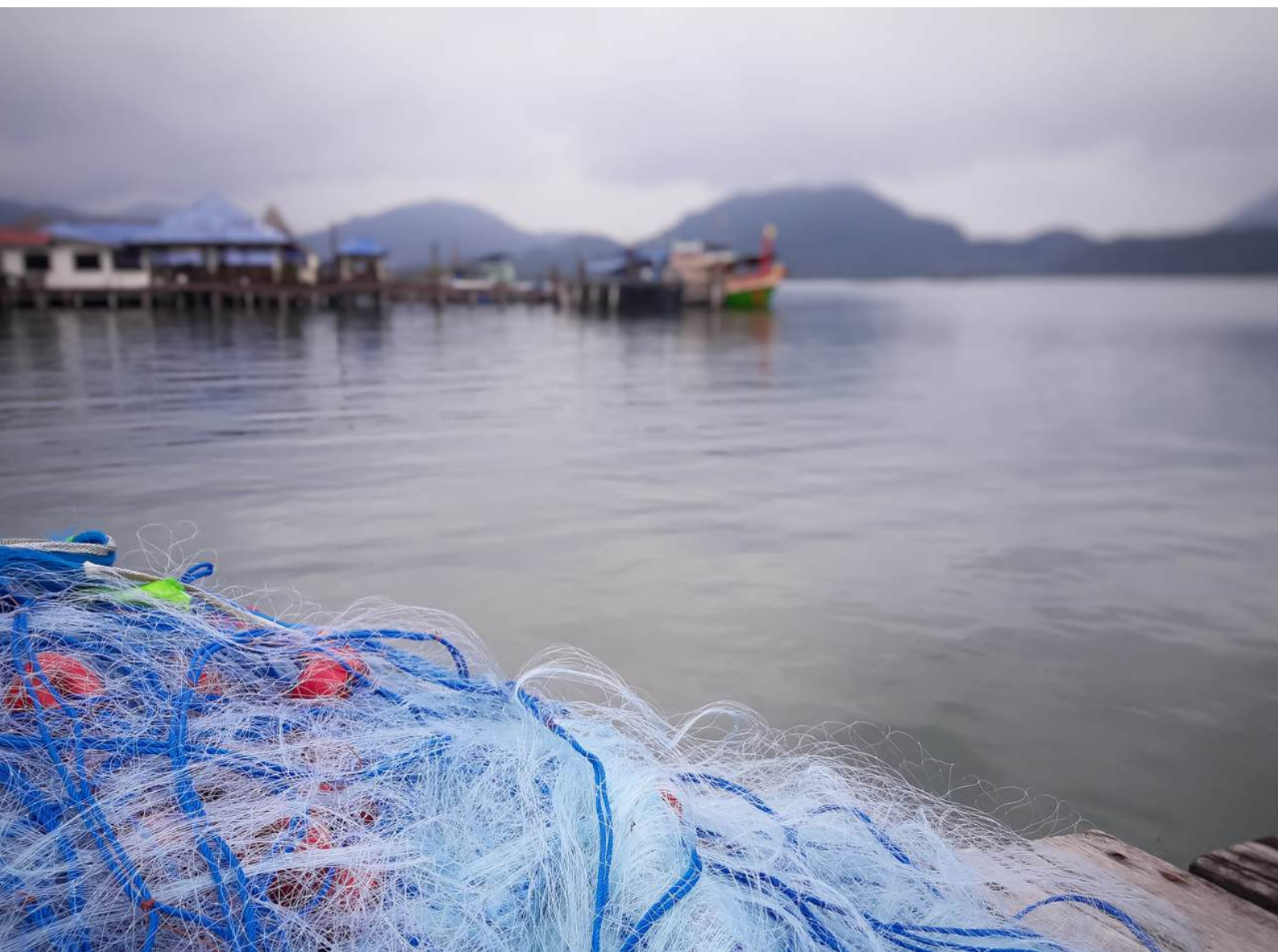
How can Marking of Recreational Fishing Gear Help Reduce Gear Loss?

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Baltic Marine Environment
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for Marine and
Water Management



Executive Summary

Abandoned, lost, or otherwise discarded fishing gear (ALDFG) is a persistent and harmful form of marine pollution. While efforts to reduce the input of ALDFG have traditionally focused on commercial fisheries, recreational fishing is also part of the solution.

Action RS9 of the [HELCOM Regional Action Plan on Marine Litter](#) (RAP ML) aims to “investigate available options for fishing gear marking as a tool to prevent and reduce gear losses and produce recommendations to improve gear marking to increase the effectiveness of this tool”. In addition, in February 2025, the European Commission adopted a new regulation requiring clear marking of certain types of passive fishing gear.

To support the ambitions of the RAP ML and successful implementation of the new EU rules on 20 January 2026 HELCOM hosted a webinar titled: “How can marking of recreational fishing gear help reduce gear loss?”. The purpose of the webinar was to raise awareness, exchange knowledge and experiences about challenges and solutions to using gear marking as a tool to reduce the input from recreational fishery to ALDFG.

Experts from FAO, the Global Ghost Gear Initiative (GGGI), DG MARE, national authorities, NGOs, researchers, and recreational fishers contributed to a shared understanding of the challenges and opportunities ahead.

These summary conclusions synthesize insights from the webinar which was organised by Local Authorities International Environmental Organisation (KIMO) and funded by the Swedish Agency for Marine and Water Management (SwAM).

The webinar reached a shared conclusion: **gear marking is a cornerstone of ALDFG prevention**, but its success depends on complementary actions, including enforcement, reporting, education, and accessible disposal systems.

ALDFG in the Baltic Sea Context

ALDFG continues to harm the marine environment through entanglement of wildlife, continued “ghost fishing”, habitat degradation, introduction of microplastics, and navigation hazards.

Although commercial fisheries produce large volumes of gear, recreational fisheries generate losses that are widely dispersed and often poorly reported. In the Baltic Sea—one of the world’s most ecologically sensitive and semi enclosed seas—the persistence of lost gear has disproportionate consequences. Addressing recreational gear loss is therefore essential for achieving long-term environmental objectives.

The European Union Framework: Regulation (EU) 2025/274

The revised EU fisheries control framework has introduced mandatory gear marking for passive recreational fishing gear, including nets, traps, and longlines. Hand held gear (rods, spearguns, handlines) is excluded.

The EU regulation requires Member States to ensure that:

- gear is identifiable at sea,
- gear is clearly marked to link it to a specific user or owner
- markings are durable,
- markings appear both on surface floats and on the gear itself, and
- implementation remains technology neutral to allow national flexibility.

The regulation is complemented by the EU-wide RecFishing digital catch-reporting system, which ensures that recreational catches—and associated gear use—are recorded in a harmonised manner across Member States.

These combined initiatives represent a significant shift in EU fisheries governance, extending traceability obligations beyond commercial fleets to the millions of recreational users across Europe.

Key Insights

Global Developments: FAO Guidelines and Future International Standards

The Food and Agriculture Organization (FAO) has established the core technical basis for gear marking through its Voluntary Guidelines on the Marking of Fishing Gear, supported by a risk assessment framework and practical manual. These instruments outline how gear should be marked and the administrative systems needed to ensure traceability, recovery, and compliance.

Presentations from the Global Ghost Gear Initiative (GGGI) and FAO highlighted that recreational fisheries are globally recognized as being both part of the problem and the solution to effectively tackling ALDFG. The GGGI has developed several resource and guidance documents, including best practice frameworks for the management of fishing and aquaculture gear. These documents have been prepared by a global team experts on ghost gear prevention, recycling and removal. Building on this past experience and FAO's global guidelines for recreational fisheries, the GGGI is developing new best practice guidance for recreational fisheries, focused on simple and durable marking, clear loss reporting procedures, and practical methods that support compliance at community level. Together, FAO's global guidelines and GGGI's forthcoming recreational guidance provide a coherent framework that countries and regions — such as the Baltic Sea — could utilize to reduce ALDFG from recreational sources.

FAO specifically informed about available tools to guide gear-marking practices, stressing that effective gear marking requires both physical identifiers and institutional systems (registries, reporting pathways, enforcement). These are:

- Voluntary Guidelines for the Marking of Fishing Gear;
- A risk assessment framework; and
- A practical manual for implementing gear marking.

During the webinar, anticipated amendments to MARPOL Annex V were discussed, as they might introduce mandatory global gear-marking requirements by the end of this decade. This shift reflects a broader movement toward traceability, accountability, and the reduction of IUU (Illegal, Unreported and Unregulated) fishing.

These insights underscore that gear marking cannot be implemented in isolation; it must be part of a broader systems-based approach.



National Perspectives: Implementation and Operational Challenges

Estonia

The presentation from Estonia illustrated a well-functioning and highly compliant system of gear marking for recreational fishers using passive gear.

Strengths include:

- Clear visibility and identification requirements (buoys, flags, labels).
- Personal identification codes directly linking gear to fishers.
- High voluntary compliance through digital reporting tools.

Challenges remain:

- Increased use of cheap monofilament gillnets, which are easily lost or discarded.
- Buoys may detach from nets, leaving the gear itself untraceable.
- Loss reporting is not mandatory but needed to significantly reduce ALDFG.
- Persistent illegal fishing with unmarked nets.

Sweden

Given Sweden's legal principle of the public right to fish, implementing unique identifiers for recreational fishers presents political and administrative challenges.

Current rules rely heavily on name and telephone number marking and Sweden is now considering how to adapt the current practices to the EU requirement for owner-linked identifiers.

Issues under consideration include:

- How to mark linked nets (one label or several).
- How to label large stationary traps without requiring inspectors to haul them.
- Whether to introduce a prohibition of unmarked gear onboard, similar to commercial rules.
- Updating national rules on buoy colour and visibility.

New Swedish regulations are expected by mid-2026 and aiming to more closely align recreational marking practices with those in commercial fisheries.



The Community Perspective

The Danish Recreational Fishing Association offered important perspectives on how gear marking works in practice and challenges to its successful implementation. The presentation emphasized that gear marking supports environmental goals and fisheries management while also contributing to transparency by making it easier to distinguish legal from illegal activities.

Key points raised by the representative of the Danish fishers included:

- Law-abiding fishers follow marking rules; illegal operators generally do not.
- Enforcement is limited, with some fishers reporting only a single inspection in decades.
- Without increased enforcement capacity, new rules may burden compliant fishers while leaving illegal activities unaddressed.

Concrete advice was also offered on how to make marking of passive gear a success among recreational fishers:

- **Make marking practical and durable.** Use tags that survive salt, sun, ice, and abrasion (e.g., engraved metal) so responsible fishers are not forced to re-label gear each season.
- **Mark both buoy and gear.** If a buoy detaches, fixed identifiers on the net or trap still allow recovery and return—saving time and avoiding fines for users.
- **Avoid new hazards.** Low-profile tags that do not snag lines or nets are essential, especially for gillnets, so that safety and gear performance are not compromised.
- **Keep administrative procedures simple.** Clear, lightweight registration and easy loss-reporting channels (mobile/online) help fishers to comply with the requirements without extra bureaucracy.
- **Support recovery, not just punishment.** Pair marking with quick retrieval options, local drop-off points, and incentives so that lost gear can be returned or recycled efficiently.
- **Plan for the future.** Over time, material-ID marks can make recycling easier—turning end-of-life gear into a resource rather than waste.



Summary of Technical and Behavioural Considerations in Implementing Gear Marking

Effective gear marking requires attention to both operational and human factors. Based on insights from the presentations as well as the interactive discussion held during the webinar the following considerations can be pointed out.

From an operational perspective:

- **Marks must be durable but environmentally responsible:** ensure that markings survive long-term exposure without contributing to plastic pollution by using durable materials such as aluminum or stainless steel tags, as QR codes, printed labels and plastic tags degrade in marine environments.
- **Ensure that marks do not entangle or impair gear performance:** Marking solutions shall be designed so that they do not interfere with the operation or handling of the gear. Tags must be low-profile, securely fixed, and non-snagging, avoiding any protrusions that could create drag, compromise hauling, or introduce safety risks. This is particularly important for gillnets, where even small rigid elements can catch on meshes or lines.
- **Fix identification both to the surface marker and directly to the gear:** Aimed to avoid that buoys and flags may detach and leave nets or traps untraceable.
- **Effectiveness is contingent on visible, risk-based enforcement:** Marking obligations primarily affect compliant users as illegal or unlicensed gear typically remains unmarked. Effective implementation of gear marking requirements requires a dedicated focus on compliance gaps and illegal activity.
- **Awareness and reporting:** Knowledge of marking obligations and correct application varies widely among recreational fishers, particularly in areas where marking requirements have been introduced recently or where guidance has not been consistently communicated.
- **Regional coordination:** Coordination under HELCOM can support countries on the harmonized application and targeted controls in high-risk areas where limited inspection resources and divergent national interpretations reduce regional coherence.

From a behavioural perspective:

- **Marking must be simple and tags easily accessible for recreational users:** Systems that rely on complex, costly, or hard to obtain tags risk low uptake. Ensuring that marking materials are inexpensive, readily available locally, and straightforward to apply significantly increases voluntary compliance.
- **Compliance increases when fishers are educated and engaged:** Clear, practical guidance—supported by awareness campaigns, local demonstrations, and cooperation with angling associations—helps fishers understand the benefits of marking and encourages a sense of shared responsibility for preventing gear loss.
- **Enforcement plays a critical role in deterring illegal, unmarked gear use:** Without a visible inspection presence, illegal operators continue to deploy unmarked gear with limited risk. Targeted, risk based controls are therefore essential to ensure that compliant fishers are not disadvantaged and that marking systems remain credible.
- **Drivers of abandonment must be addressed:** Low cost gear is more likely to be discarded rather than recovered or repaired, contributing disproportionately to ALDFG. Providing accessible disposal and recycling routes, along with simple incentive schemes—such as gear return vouchers or small recycling discounts—could help reduce abandonment and support more responsible behavior.



Developing a HELCOM Framework for Preventing Recreational ALDFG

The discussions highlighted that gear marking is most effective when combined with broader measures. A successful Baltic Sea strategy would likely include:

	Reporting of lost gear	Enabling timely retrieval
	Accessible disposal and recycling pathways	Reducing abandonment
	Targeted enforcement operations	Particularly in high-risk areas
	Educational efforts	Including codes of good practice for recreational fishers
	Cross-border coordination	Ensuring consistent implementation across the region
	Investment in retrieval campaigns	Especially where historical ghost gear accumulates

This multi-layered approach recognises that gear loss has technical, behavioural, economic, and governance dimensions—all of which must be addressed simultaneously.

Recommendations for Baltic Sea Countries

Based on the conclusions from the webinar, the following policy priorities are recommended :

- Develop a **harmonised Baltic interpretation of EU rules** to support consistent application.
- Introduce **gear-loss reporting** across all Baltic countries.
- Strengthen **regional ghost-gear retrieval initiatives**, building on existing projects.
- Provide **incentives for responsible behaviour**, such as easily accessible disposal and different kinds of bring-back schemes
- Pilot **innovative identification technologies** (e.g. micro-engraving, RFID).
- Enhance **enforcement capacity**, especially in areas with known illegal activities.
- Engage recreational fishers through **education and co-creation of best practices**.
- **Clear, accessible instructions** on how to mark and report gear losses, supported by simple reporting channels that minimise administrative burden for fishers.

Conclusion

The Baltic Sea region has an opportunity to lead globally in responsible recreational fisheries management. With EU-level rules now in force and international standards evolving, gear marking can serve as a central mechanism for increasing accountability, preventing ALDFG, and improving environmental outcomes.

This HELCOM webinar demonstrated that while challenges differ among countries, a strong regional ambition exists to address ALDFG proactively. By strengthening cooperation between authorities, fishers, NGOs, and international organisations, the Baltic Sea can move decisively toward cleaner, healthier, and more resilient marine ecosystems.



Appendix 1: Webinar Programme

Time (CET)	Programme item
09:00-09:15	Welcome by the moderator <i>Sandra Korpa, environmental journalist</i> Opening remarks <i>Rüdiger Stempel, Executive Secretary, HELCOM</i>
09:15-10:15	How data, guidance and regulation can advance action – Understanding the input from recreational fisheries to ALDFG <i>Joel Bazuik, Associate Director, Global Ghost Gear Initiative</i> – Global guidance to support marking of recreational fishing gear <i>Haraldur Arnar Einarsson, Fishing Gear Expert, Food and Agriculture Organization of the United Nations</i> – Gear marking as a tool to prevent losses: new EU rules <i>European Commission, DG MARE, Unit 4</i>
10:15-10:30	Break
10:30-11:30	The new EU gear marking rules in practice: cross-country knowledge exchange
11:30-12:30	What's next? Recommendations for concrete next steps
12:30	Closing remarks