

IMPROVING WASTE MANAGEMENT PRACTICES ON BOARD FISHING VESSELS IN THE ARCTIC

WORKSHOP REPORT

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Content brief

This report summarizes content and outcomes from the workshop held on 27-28 January 2026 at the Marine and Freshwater Research Institute, Hafnarfjörður, Iceland on *Improving waste management practices on board fishing vessels in the Arctic*. The workshop and surrounding event were hosted by the PAME Secretariat. This report is written by SALT on assignment by the PAME Secretariat.

SUMMARY OF WORKSHOP OUTCOMES

This workshop gathered perspectives from participants across the Arctic region on the current status, challenges and opportunities related to net cuttings from trawling vessels, fishing gear waste management and associated policy frameworks. The findings reflect participant experiences and not verified facts. The workshop was organised by the Netherlands, Iceland, Norway and the Kingdom of Denmark, supported by the PAME Secretariat and SALT.

Overall Conclusion

Across all topics, the workshop revealed meaningful progress in awareness, regulation and emerging systems, but also persistent gaps between ambition and operational reality. Operational realities at sea, where safety, catch efficiency and time pressures dominate, often deprioritize waste handling, making gear waste one of the main sources of beach litter in the Arctic.

The central challenge is ensuring that policies, port reception facilities and on-board practices are coherent, practical and aligned with the working conditions of Arctic fisheries. Stronger collaboration with the sector, improved standardization and communication, and a focus on operationally realistic solutions will be critical to advancing effective management of net cuttings and fishing gear waste in the Arctic.

A set of tangible actions were proposed by the workshop participants to address the identified challenges and opportunities, ranging from targeted research to understand behavioural and operational factors that lead to net cuttings ending up at sea, development of practical onboard solutions, advance policy & management frameworks, as well as creating standardized training programs and tailored materials for crew, ports, and fisheries stakeholders.

Waste Management, Storage and On-Deck Practices

Participants highlighted clear progress in recent decades. Technological improvements in vessels and gear have reduced wear and tear, leading to fewer net panel replacements at sea. Awareness of fisheries waste management has increased significantly, particularly among younger fishers, contributing to improved on-board practices. Some larger trawlers now have enhanced waste sorting systems and incinerators, and initiatives such as Fishing for Litter have strengthened routines for collecting and landing litter. Education, best-practice guidance and regulatory requirements, including gear marking, signal a sector moving toward greater professionalization and recognition of circular value chains for fishing gear.

Despite this progress, a substantial gap remains between awareness and consistent practice. Operational realities at sea—where safety, catch efficiency and time pressures dominate—often deprioritize waste handling. Harsh Arctic conditions, limited storage space, constrained deck layouts handling, improved communication through fisheries organizations, manufacturer-provided recycling guidance, and further research into behavioral drivers were identified as promising pathways. Solutions must prioritize safety and practicality in Arctic conditions to achieve durable behavioral change.

Port Reception Facilities (PRFs)

Regulatory frameworks require PRFs, and several countries report functioning systems, particularly in larger ports. Iceland has strengthened its collection and recycling systems for discarded gear, the Netherlands has well-established PRFs supported by Fishing for Litter, and Norway's larger harbours are considered adequate. Extended producer responsibility is being implemented in EU states, potentially strengthening downstream waste systems.

However, implementation gaps are significant, particularly in small and remote ports. There is no uniform standardization of PRFs, labour shortages constrain operations, and responsibilities are often unclear. Costs related to gear waste management and transport are high, especially for municipalities and remote Arctic regions such as Greenland, where reception facilities are limited. Sorting mixed waste streams for recycling remains challenging, and communication to vessels—including foreign vessels—about PRF availability is insufficient.

Key opportunities include improving accessibility and standardization of PRFs, clarifying responsibilities for establishing and operating facilities in smaller ports, strengthening communication to vessels, and introducing mechanisms to address non-compliance. Greater dialogue with fishers is essential to ensure systems reflect operational needs.

Policy, Regulations and Control

At the policy level, MARPOL Annex V prohibits waste discharge at sea, and issues such as ALDFG, plastic litter and port reception facilities are firmly on the regulatory agenda. Developments such as no-special-fee systems, extended producer responsibility, OSPAR best practices on net cuttings, circular design standards and improved fisher education demonstrate progress. Monitoring efforts are increasing, and coordination across international and regional bodies is strengthening.

Nevertheless, a core challenge lies in translating policy into effective practice. Regulations are often perceived as one-size-fits-all and insufficiently aligned with operational realities. Enforcement capacity is limited, compliance mechanisms are unclear, and high transport costs in remote regions complicate implementation. There is also concern that fisheries stakeholders are not sufficiently engaged in shaping policies, and that regulators may lack practical insight into on-board conditions.

A more comprehensive life-cycle approach to gear management is needed.

No distinct new regulatory instruments were identified as immediate solutions; rather, improved alignment, incentives and engagement were emphasized as priorities.

Development of a Fishing Gear Management Plan (FGMP)

A Fishing Gear Management Plan is seen as having potential, particularly through the introduction of structured gear inventories that could improve documentation, identify causes of gear loss and enhance overall operational efficiency. However, fishers currently perceive limited direct benefit, and adoption may face resistance if additional workload is not offset by tangible gains.

Implementation in Arctic states must remain flexible across vessel types and scales. Integration into skipper education, development of electronic gear logbooks linked to existing reporting systems, and simplified documentation requirements are recommended. Designating a responsible crew member appears feasible, but workload constraints and enforcement capacity are concerns. Aligning FGMP routines with existing on-board procedures and exploring synergies with manufacturer inventory systems may improve feasibility.

Further investigation is needed into behavioral barriers, enforcement options, digital solutions, interoperability between on-board and port systems, and the potential for pilot projects. Ensuring that documentation of gear use, repairs and waste flows can serve as both management and control mechanisms may strengthen the practical value of an FGMP.

Identified actions for future work

A set of tangible actions were proposed by the workshop participants to address the identified challenges and opportunities:

- Conduct targeted research with fishing vessel crews to better understand the behavioural and operational factors that lead to net cuttings ending up at sea, in order to inform effective and practical prevention measures
- Develop practical onboard solutions, such as developing a standardized “pouch” that can be attached to a belt to store small net cuttings, through design contests, prototype testing with fishers, and organise industry adoption
- Advance policy & management frameworks, including the development of an Arctic-specific Fishing Gear Management Plan and improved port waste communication
- Strengthen education and training, by creating standardized training programs and tailored materials for crew, ports, and fisheries stakeholders
- Enhance collaboration and implementation, through stakeholder engagement, follow-up workshops & webinars, and better use of existing tools and best practices.

CONTENT

Summary of workshop outcomes	3
Overall Conclusion	3
Waste Management, Storage and On-Deck Practices	3
Port Reception Facilities (PRFs)	4
Policy, Regulations and Control	4
Development of a Fishing Gear Management Plan (FGMP).....	4
Identified actions for future work.....	5
Background.....	7
Workshop outcomes	9
Waste management, storage and on deck practices	9
Current status.....	9
Challenges	10
Opportunities and the way forward	10
Port Reception Facilities (PRF)	12
What is going well and status today	12
Challenges	12
Key opportunities and the way forward.....	13
Policy, regulations and control.....	14
What is going well and status today	14
Challenges	14
Key opportunities and the way forward.....	15
Development of a Fishing Gear Management Plan	16
Identified actions for future work.....	17
Extended methodology	23
Breakout Groups	23
Day 1	23
Day 2	24
Defining Next Steps	25

BACKGROUND

This report summarizes the content and outcomes from the workshop held on 27-28 January 2026 at the Marine and Freshwater Research Institute, Hafnarfjörður, Iceland on *Improving waste management practices on board fishing vessels in the Arctic*. The workshop and surrounding event were organised by Iceland, the Netherlands, Norway and the Kingdom of Denmark, supported by the PAME Secretariat and SALT.

This report is written by SALT on assignment by the PAME Secretariat. The authors were involved in the planning and implementation of the workshops. This report has undergone review by the organizing team under the PAME Marine Litter Working Group.

A summary of the workshop is available on the PAME Secretariat webpage¹, including the workshop agenda and presentation slides. The workshop was attended by 40 participants in person and 18 participants online from several sectors, including policy-makers, fishing industry leaders — including vessel captains, policy-makers from Arctic and European countries, researchers and technical experts, NGOs and environmental organisations. The program featured an interactive session on fishing net mending, a visit to a research trawl vessel in the harbour, and a visit to Hampiðjan, a leading international fishing net manufacturer.

The workshop was aimed to support the Arctic Council and Arctic States in reducing Abandoned, Lost or otherwise Discarded Fishing Gear (ALDFG) and mitigating its environmental impacts in the Arctic by focusing on improving waste management practices on board fishing vessels operating in Arctic waters, with particular attention to bottom-trawl fisheries.

The general aim was to:

- Bring operational and policy perspectives together to better understand the challenges involved to tackle this issue
- Identify practical solutions to improve on board waste management practices
- Build on existing initiatives and industry efforts
- Strengthen collaboration between industry, policymakers, and researchers
- Support development of an Arctic Fishing Gear Management Plan

The insights gathered will contribute to ongoing efforts to reduce marine litter within the Arctic Council, OSPAR, and the IMO, and support in the gathering of guidance for the further development of Fishing Gear Management Plan for fishing vessels, in support the IMO Action Plan on Marine Litter adopted at MEPC 83 (April 2025).

¹ <https://pame.is/ourwork/arctic-marine-litter/improving-fishing-gear-waste-management-practices-on-board-fishing-vessels-operating-in-the-arctic-workshop/>

This report summarizes the content and outcomes of the three interactive and participative work sessions held during the workshop:

- Session 3: Breakout Groups: What is Going Well, What Challenges Exist? - Day 1 (Jan 27th)
- Session 5: Breakout Groups: Discussing the Way Forward and Identifying Opportunities for Improvement - Day 2 (Jan 28th)
- Session 6: Defining Next Steps - Day 2 (Jan 28th)

A set of thematic topics were covered and discussed in breakout groups during the interactive sessions:

- Waste management, storage and practices on deck
- Port Reception Facilities
- Policy, regulations, and control
- The development of a an Arctic Fishing Gear Management Plan

WORKSHOP OUTCOMES

Important note: outcomes presented in this report reflect participant input, and therefore represent their perspectives and experiences. They should not necessarily be interpreted as verified facts or as the views of the authors.

Leaning on the lectures held previously at the event and the visit to a research trawling vessel docked in port, comprehensive input was provided by the workshop participants on the current status of practices with regards to net cuttings and waste on board bottom trawling vessels in the Arctic, what challenges exist with regards to it and key opportunities for the way forward. The input was collected by the table hosts and are reflected in the subsections below. Overlapping and similar input from the different working groups have been merged and consolidated by the authors.

Waste management, storage and on deck practices

Current status

Over the last decades, the technological improvement of fishing vessels, the equipment used to determine the ship's position, to steer the fishing gear and the fishing gear itself has led to reduced wear and tear. According to the participants, trawling gear is therefore currently less prone to be critically damaged during fishing operations and, hence, less trawl net panels need replacement on site than before.

In recent years, there is also an increased awareness in both the fishing industry as well as the broader public on the issue of waste management from fisheries, especially amongst younger generations of fishers. As a result, waste management practices on board have improved throughout the industry.

However, several structural and operational barriers continue to limit consistent implementation of effective gear waste management. The findings point to a need for practical guidance, behavioural alignment, and systemic support across the sector, and not least must solutions fit the operational reality of fishing vessels.

Some fishing vessels have increased their waste management capacity, including on-board sorting of gear-related and other kinds of waste. The larger trawlers nowadays have effective incinerators on board.

Mechanisms such as Fishing For Litter schemes contribute meaningfully to the return of fished litter, including fishing gear related litter and ghost gear to land. For those countries and vessels participating in this programme, it has helped in introducing the use of big bags and sacks that help in collecting and sorting of such litter and to keep it secure on deck, including fishing gear waste produced on deck.

There is also an increased awareness about the potential in recycling of discarded fishing gear vs. other types of waste treatments (such as incineration or landfill). The awareness has increased across the Arctic region, reaching also smaller communities, for example in Alaska.

Education and trainings are contributing positively to improved waste management practices. The adoption of best-practice guidance by industry bodies and the integration of environmental topics into fisheries education indicate a sector moving toward greater professionalization.

Fisheries regulations include the obligation of marking of fishing gear, especially for passive fishing gear, and this obligation is also being extended to recreational fishing.

Challenges

Despite the progress mentioned above, a persistent gap remains between awareness and day-to-day practice. Operational realities at sea, where safety and (focus on) catch take precedence, often push adequate waste handling down the list of priorities. This is especially evident on smaller vessels, where limited storage capacity constrains proper waste handling.

Rough weather conditions, urgency during gear handling makes proper handling of discarded gear and waste on board a challenge. Cold temperatures, strong winds, vessel movement, and waves washing onto the deck can make routine tasks more hazardous and less precise. Reduced fine motor skills in cold environments further complicate activities such as net mending and handling cuttings.

Even with increased training and education, its uptake is uneven. Not all crew members receive environmental training, and on board practices remain highly dependent on contextual factors such as vessel size, company culture, leadership, ownership structure, regulatory focus, and economic pressures. Time constraints, often linked directly to fuel costs and operational efficiency, push adequate waste handling down the list of priorities and thus further complicate adherence to best practices. Differences between countries, combined with language and cultural barriers, may add another layer of complexity.

Participants also noted that the underlying technical and behavioural drivers of gear waste handling are not yet fully understood.

There is a lack of solutions and practical tools tailored to handle waste in the working conditions on board fishing vessels, including the challenge of insufficient storage space on board (i.e. vessel design challenge). Constrained space available on deck for mending large gear sets, with net mending repairs being done on top of the retrieved net instead of being able to expand the net, make gathering of rope cuttings once repair is complete very difficult. Even for large trawling vessels the storage capacity is limited and can be reached when accidentally retrieving large amounts of bulky passive fishing gear like crab pots. In case waste is sorted on board, the port reception facilities often lack appropriate waste facilities for handling the sorted waste fractions.

Even if progress is being made, there is still a lack of an understanding of the value of litter and fishing gear related waste. Not all fishermen or personnel on fishing vessels understand that there is a value chain behind it and understand that the value chain of fishing gear is not linear but it possible to make it circular. This lack of understanding constitutes a motivation challenge to the proper collection, sorting and storage of waste on board fishing vessels.

The often-times lack of personnel at port reception facilities reduces the peer pressure on board fishing vessels of delivering tidily sorted waste.

Opportunities and the way forward

Effective gear waste management must fit within the operational reality of fishing vessels. It is therefore essential to involve fisheries organisations and their members in the development of solutions.

Measures perceived as impractical are unlikely to be adopted consistently, regardless of awareness levels. At the same time, participants identified opportunities to strengthen progress, including:

- Formal commitments to a “no waste at sea” culture when on boarding new crew members
- The development of broadly accepted operational guidelines
- Greater knowledge exchange across countries and fleets
- Continued collaboration between industry, policymakers, and researchers

- The manufacturer of the fishing gear could include guidelines on best handling/recycling of the produced gear as part of the invoice. The guidelines could be regional.
- There could be a marking on marine traffic that the ship has implemented a green waste management policy on net cuttings.
- Mandatory education and trainings for crew should include the proper handling of (both small and large) net cuttings of bottom trawl nets.
- Solutions to the challenges with harsh weather conditions should prioritize safety and practicality, for example through improved protective equipment, insulation, or workflow adaptations.
- While education raises awareness, behavioural change requires alignment between training, incentives, leadership, and operational feasibility throughout the wider fishing industry and across fleets. The development of clear operational guidelines or gear waste management plans widely supported by the fishing industry (and gear manufacturers) could help bridge the gap between policy ambitions and on board realities.
- Communications efforts should be formulated in a way that resonates with fishers, and fisheries organisations should use their communication channels (online, in paper and in person) to engage with their members on this issue.
- Further research into the underlying social and technical mechanisms behind gear waste handling is expected to provide better insights into the issue and to tailor measures to ‘nudge’ crewmembers into non-littering behaviour.

Port Reception Facilities (PRF)

What is going well and status today

- Regulations as per today require that waste management systems should be available in harbours.
- Better attitudes and knowledge has potentially brought better behavior
- **Iceland** has seen an increase in awareness on functional PRFs and the number of functional PRF has increased. Iceland has a well-functioning system in collecting discarded fishing gear at PRFs and sorting for waste streams to Recycling of fishing gear that is collected
- **Netherlands:** There are only around 15 ports with fishing vessels and PRFs are quite well established. Fishing for Litter has been in place for quite some years with success
- **Norway:** PRFs are “OK” now in big harbours. Adequate waste management should not mean extra costs for the fishers, according to input from a Norwegian participant.
- **Greenland:** Frydendal is starting to set up collection systems for smaller pieces of waste. The larger waste items are to be handled in in the shops, such as Qalut Vónin, but these are only available at a few of the larger towns.

Challenges

- There are regulations in place for PRFs, but implementation is lacking. There are needs for instructions and guidelines for vessels. A need for closer dialogue and involvement with the fishers of their needs and preferences to accommodate for implementing regulations in a good way.
- Extended producer responsibility is under implementation in the EU countries, but each state has different approaches to implementation.
- There is no uniform standardization of PRF, which is especially needed for smaller ports.
- Smaller ports have bigger problems with waste management. There is a lack of labour available in small and remote ports to accommodate for adequate handling of waste received.
- Knowledge transfer to foreign vessels of rules and customs is a challenge.
- Unclear responsibilities for who does what with regards waste management.
- Sorting of mixed waste streams upon reception in port is a challenge if to enable for recycling downstreams
- Costs with management of fishing gear is a challenge in general, especially for municipalities responsible for waste facilities. Both with regards to prediction and cover of costs, including transport.

- In **Iceland**, there are differences in ports depending on size, type of vessel, infrastructure in place, local culture, quality of personnel
- **Greenland**
 - No reception facilities in Greenland other than some separate arrangements with gear retailer companies, which export waste to Denmark.
 - Education and awareness across regions is different.
 - Collection and Recycling of fishing gear is not possible at all locations
- **Netherlands**
 - Quaysides are sometimes left dirty, especially in smaller ports with regular visitors. I.e. PRF have not been used adequately

Key opportunities and the way forward

Improve the accessibility and standardization of port reception facilities

Focus should be on allocating clear responsibilities for setting up port reception facilities – especially at small informal ports

Establish whistleblower functions for non-compliance vessels

Improve information and communication to vessels on availability of port reception facilities



Photo of table outcomes when discussing port reception facilities as part of the issue of net cuttings from trawlers in the Arctic.

Policy, regulations and control

What is going well and status today

- There is a clear need for better data sources on annual gear use, including requirements for fishers to report to authorities the type and quantity of gear used each year.
- IMO MARPOL Annex V prohibits waste overboard. There is however still a need to strengthen regulations with regards to ALDFGs.
- Port reception facilities and plastic litter from sea-based sources are on the regulative agenda and will potentially provide better waste management.
- No special fee system (same fee irrespective of amount of waste disposed of at port) implemented through revisions in EU regulations, driven by MARPOL Annex V. This may provide for more landings of waste.
- Extended producer responsibility for fishing gear made of plastic is currently under implementation in EU countries, potentially bringing a shift in management of fishing gear.
- The topic of net cuttings and ALDFG is worked on at different levels and regions (IMO, OSPAR, Arctic Council, UN plastics treaty, etc.)
- OSPAR has developed and is promoting best practices for net cuttings.
- There are active efforts to coordinate monitoring, solutions and policy between countries.
- There is a CEN standard on circular gear design.
- Improving fisher education as a policy is working (through training and schemes such as Fishing for Litter) – there is a definite change in on board waste management in general
- The importance of fisheries regulations was discussed as an improvement measure, for example limitations on the amount of gear used during fishing.
- Monitoring of waste management reporting requirements are starting to be implemented and data used.

Challenges

- There is a general challenge in operationalizing existing policy measures into industry practice.
- There is a general lack in understanding amongst regulators of how policies and regulations work in practice and turn out in reality, and fisheries are not enough involved in informing policy-making.
- Costs associated to transport of fishing gear waste are high in remote areas, which is a challenge with regards to regulative requirements for collection.

- Surveillance and control of regulations is a challenge. Are regulations on EPR and PRF flexible enough to fit the different circumstances on different vessels, ports and states? Will they work effectively? What if the industry would be better off handling these things unregulated?
- Policies are shaped with a “one-size-fits-all” and lack of incentives.
- Policies need to reflect the state of the art, but not re-invent the wheel.
- Persistent challenge (from a Dutch perspective) that there is a lack of engagement of the fisheries sector with soft-policy stakeholder engagement
- How to enforce regulations? Who enforces, who has to answer, and what incentives or penalties exist or should exist? There is a need for non-compliance mechanisms.
- There is a need for policy which encompasses the entire life-cycle of the gear.
- Small administration and control units of waste infrastructure means limited resources to deal with added regulations and enforcement of them.
- Potential gap in treating the regulatory landscape holistically (including e.g. PRF and SUP directives) to prevent ALDFG.

Key opportunities and the way forward

None identified relevant for the specific topic.

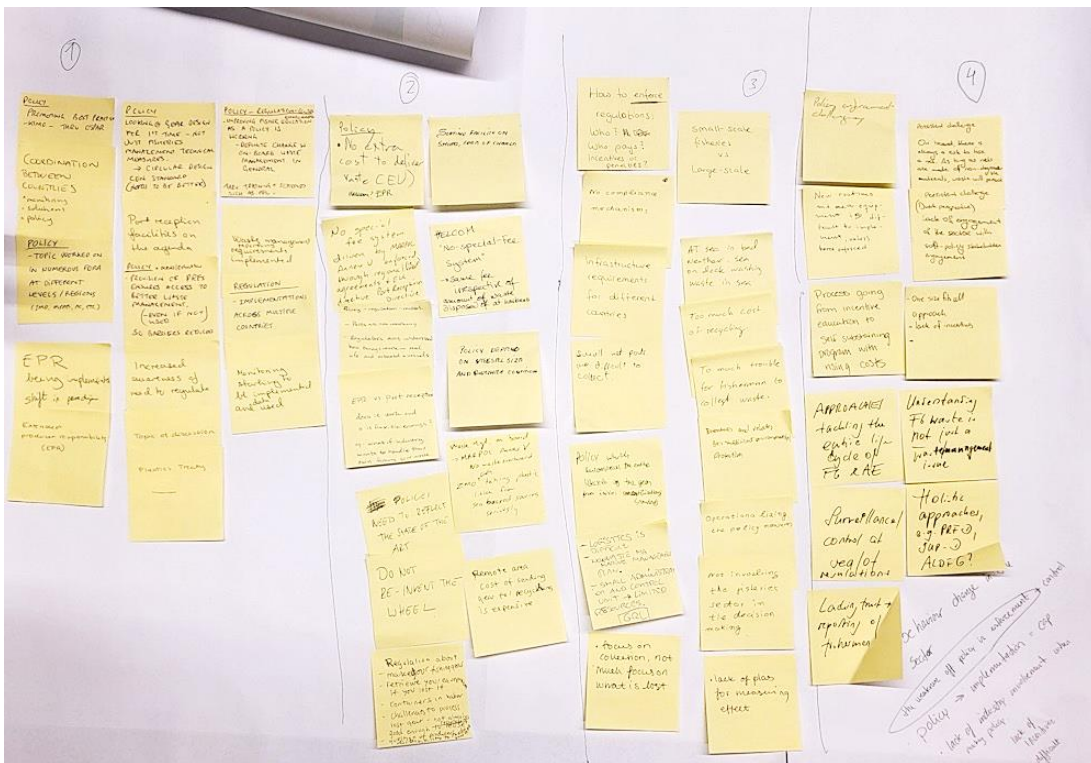


Photo of table outcomes when discussing policy, regulation and control of the issue of net cuttings from trawlers in the Arctic.

Development of a Fishing Gear Management Plan

The following is a summary of input from group discussions on the topic of the development of a Fishing Gear Management Plan, with a focus on adaptations specific for trawl fishing in the Arctic.

Does a FGMP show potential in actually preventing ALDFG? Why, why not?

The added value to the fishermen is somewhat unclear, i.e. a lack of clear “What is in it for us”. However, a fishing gear inventory could potentially provide valuable insights on causes for gear losses and preventive adaptations/solutions.

Usage of gear parts is usually logged manually on paper ad hoc by the deck crew, and an inventory may hence provide more structure and quality in logs whilst contributing to routines that lead to benefits beyond prevention of marine litter, e.g. more effective gear management and on board processing of fish.

How should the requirements of a FGMP be implemented in the Arctic states?

- There is a need for flexibility in how to implement the plan’s elements to accommodate different vessel types and scales.
- Include the FGMP (or aspects of it) into the syllabus of formal fishing vessel skipper education.
- An electronic gear logbook would provide an opportunity to record gear status or incidents that led to damage. The logbook could be connected with the fishing log, which is already mandatory in the EU Fisheries control regulation.
- Documentation requirements should be made as simple and user-friendly and possible, adapted to the conditions on board.
- It is encouraged that the integration of a FGMP is discussed and developed in cooperation with the fisheries sector and end users.
- Enforcement of FGMP requirements during inspections is mentioned as a challenge, partly due to the constrained capacity of authorities.

How could a FGMP be adapted to the specific conditions of trawling vessels?

- A responsible person for a FGMP would be relatively easy to designate amongst the crew as there is likely already a person that is responsible for fishing gear on board, but the distribution of duties in the FGMP requires attention and careful involvement of the sector to function.
- A FGMP will likely be hard to implement on board due to the workload on back deck crew and boatswain. New routines are also potentially hard to adopt in practice and will need proper tending to by crew officers. Combining the FGMP with already existing boat procedures could prove successful to reduce resistance and cater for adoption.

- Gear producers already have a gear and supplies management system for each customer (trawling vessel) to support the stocking of spares for maintenance. Consider potential overlap with an on board inventory.

What should SALT investigate further to evaluate the potential in FGMP?

- Consider barriers with regards to resistance to change amongst crew
- Consider how training and adoption of a FGMP best would be rolled out. Consider integration with current training with regards to safety and boarding of new crew members.
- Investigate whether a designated person in charge of the FGMP have adequate capacity to add the FGMP duties to their current responsibilities on board.
- Consider ways of enforcement
- Consider a potential GIS system for sharing information on benthic obstacles amongst peers
- Consider the potential of a pilot project with a selection of vessels as the way of further developing the FGMP.
- Consider the connection and interoperability between on board waste systems and port reception facilities for waste.
- Consider synergies with garbage record books and online reporting systems in use today.
- Consider the current development of Integrated fisheries management plans by Fisheries and Oceans Canada
- Include record of repairs including cutting off sections or panels of net in the fishing gear log.
- Possibility to use the consistency/inconsistency between the input to the gear inventory and the output from the gear related waste logbook as a control mechanism. The amount of new gear purchased and used gear discarded should balance each other over time.

Identified actions for future work

During the final step of the workshop, participants concretized a set of tangible actions based on the opportunities identified earlier on. The following is a summary of the actions presented by the different groups of participants.

Action 1 Research on empathy driven behaviour

The group with researchers proposed an action for further research on “Empathy driven behavior” to better understand crew on board fishing vessels and fishing companies with regards to why net cuttings end up overboard, and preventive measures. The research will provide local and regional understanding of such drivers in behavior, as well as increased awareness on the issue amongst the interviewees in the fisheries industry and other contact points to the research. The study would supposedly provide valuable knowledge for the development of effective regulation and preventive measures, as well as a heat map of potential gear losses. The research project could be initiated 2027, depending on if funding. A set of international research institutes would apply and own the project.

Action 2 Empathy driven research to understand operational aspects resulting in net cuttings ending up in the ocean

The group with researchers proposed an action for further research to understand why net cuttings end up in the ocean. Through insights directly from the fishers in different Arctic regions, the research should investigate the diversity of mechanisms and challenges on board vessels and in harbours that result in net cuttings ending up overboard. Insights can be utilized for co-creating solutions together with the fishing industry. The research will capture the diversity of fishing operations and logistical challenges across the Arctic (and beyond) and hence provide advice that is relevant both at a regional and a local level. The knowledge could be utilised for development of effective preventive measures and learning of best-practices across the Arctic. If funding is acquired, the research project could be initiated by 2027. A set of international research institutes would apply and run the project in close cooperation with the fishing industry and harbours.

Action 3 The pouch

The NGO/others group proposed a “A design contest” for the design of a so-called “pouch” for collecting net mending cut-offs on board fishing vessels. An NGO is suggested to host the contest with support from fisheries organizations and gear producers. The contest should include testing of product designs on board fishing vessels. A winning product design will be awarded with adhering benefits and publicity to catalyze adoption of the product in the market. Measurable outcome: A winning design awarded

Action 4 Pouch-athon

The policy-maker/authority group suggested a so-called “pouch-athon”, with reference to the concept of “hackathons”, where programmers gather during an intense and time-limited session to collectively solve programming challenges and create prototypes. The pouch-athon event would have the goal of developing a pouch or another technical solution for collecting net mending cut-offs on board fishing vessels, to be market-ready by 2027. The event would involve design students, with feedback loops directly from the fishing sector on the practicability of the proposed solutions. The event would be hosted by the EU, the Regional Seas Conventions (RSCs) and/or a global entity or initiative (e.g. the Global Partnership on Plastic Pollution and Marine Litter or the Global Ghost Gear Initiative) with an award and prize money. Measurable outcomes: number of fishermen using the market-ready pouch or other solutions by year 2030; a legal framework for mandatory use of the technical solution.

Action 5 Development of a Fishing Gear Management Plan

The concept of a Fishing Gear Management Plan was introduced to the participants during a lecture prior to the workshop and is adopted under IMO’s action plan on marine litter at MEPC 83 (April 2025). The concept of a FGMP adapted to Arctic trawling vessels is currently already under investigation as an implementation activity under PAME’s Regional Action Plan on Marine Litter, to be finished fall 2026 by the consultancy SALT. The concept of FGMP is not yet integrated into regulations but could show potential in preventing marine litter from better management of gear on board.

Action 6 Template for port authorities

Template for port authorities: Development of a template for port authorities to use for communications to all vessels of all sizes, informing of waste facilities, services and rules when these ships enter the port. A plan for the roll-out and implementation of the template shall be developed in parallel. **When:** by 2028. In the longer term, updating the PRF Directive could be considered to

make such communication mandatory. **Measurable outcome:** All waste in port is disposed of correctly. No waste is left unattended on the quayside or blows away.

Action 7 Special training for crew

Special and mandatory education every three years for crew management and young/new fishers on board fishing vessels on waste management practices on board and handling of net cuttings. Ports should be involved in setting the bar of expectations on a regular basis.

Action 8 Standardized education on net cuttings

OSPAR and its contracting parties will gather an overview of marine education on marine litter and net cuttings, and produce a standardized education on net cuttings to be implemented on a national basis.

Action 9 Develop educational material

Develop educational material specifically for stakeholder groups such as captains, fisheries inspectors, shipping companies and harbours. The education materials will be translated for international crews and be applied in different kinds of trainings: safety, on boarding of new crew members, etc. The development of education material should be funded by public authorities and in harmony with FAO, IMO and the RSCs. Measurable outcome: Evaluation of increased awareness and knowledge about options for action in stakeholder groups mentioned above by year 2030.

Action 10 A follow-up webinar on workshop outcomes and FGMP recommendations

PAME proposes to host a follow-up workshop to share outcomes from the event in January. As part of SALT's tender, an online meeting is to be arranged late spring 2026 where SALT presents findings and preliminary recommendations, a suggestion on how these will feed into the customization of the FGMP for Arctic and Near-Arctic fisheries, followed by a moderated discussion to provide nuanced feedback from stakeholders and input to the report production.

Action 11 Utilize existing knowledge and tools

One participant suggested that there already is sufficient knowledge, education and communications materials and tools (such as designs of pouches for net cuttings), but that they are under-utilized. The action is then to make better use of already existing resources. It is however unclear from the workshop input on "how" to realize the objectives of this action.

Action 12 Port/Company contribute to gear management tech

The action was presented at the workshop but due to lack of documentation, it cannot be specified further in this report.

The workshop was finished with a voting exercise, where each participant were handed three points to allocate, with maximum two on the same action. The voting outcomes are summarized in the table below. If summarized by thematic grouping, the three Education actions were by far the most popular vote (37). The action on Research collected many votes (20), whilst the four different actions on waste management and practices on board together collected 20 votes. The two actions on Port

reception facilities summed 17 votes. Other actions not related to a thematic collected the last six votes.

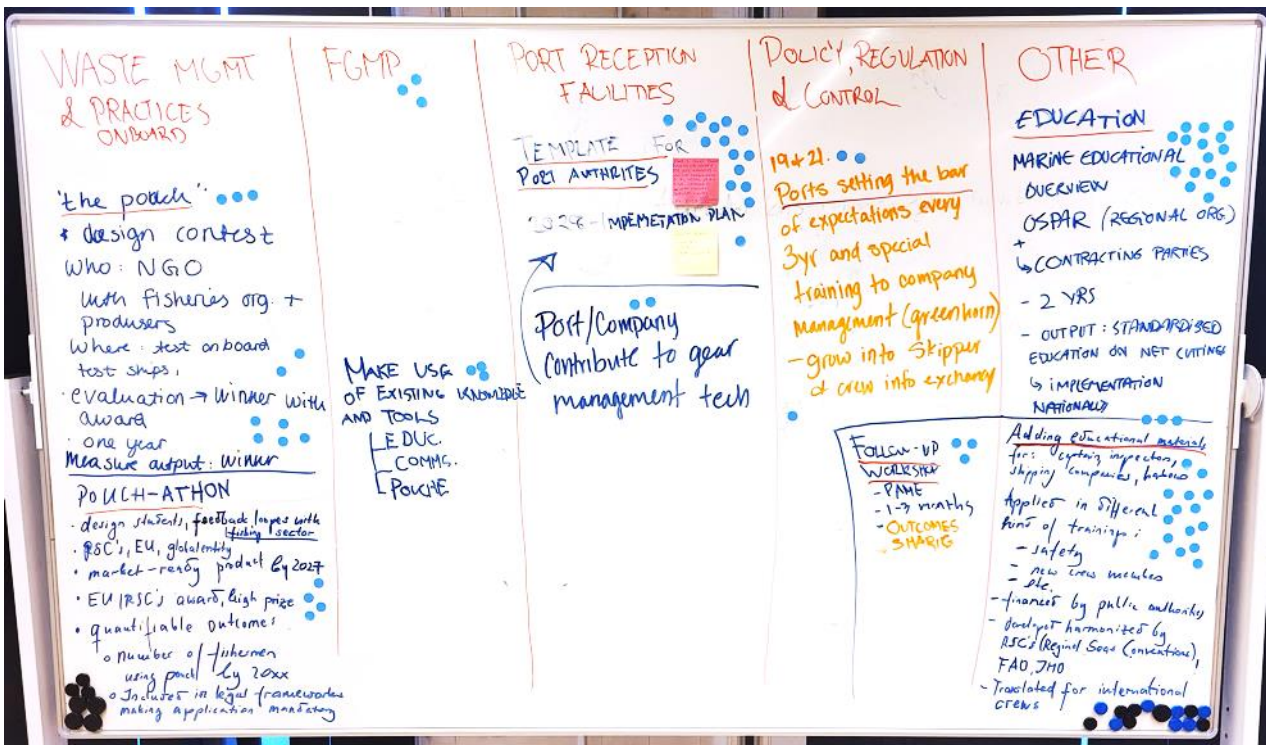
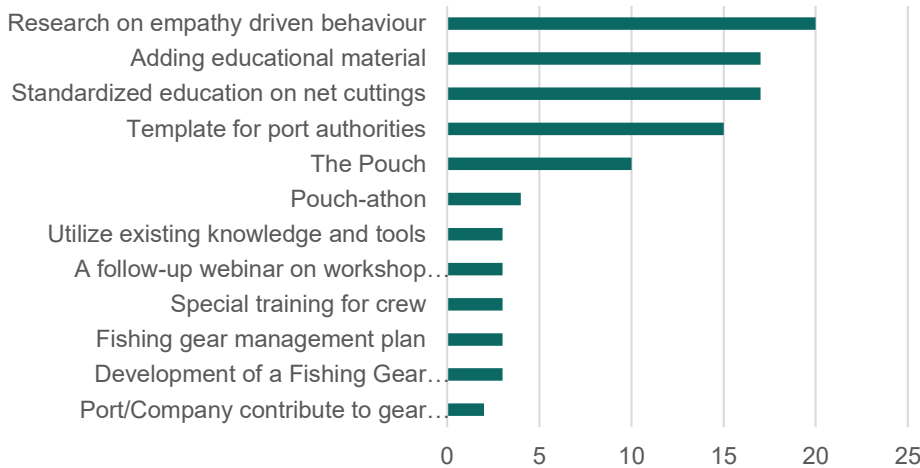
Action title	Thematic grouping	Number of votes
Research on empathy driven behaviour	Research	20
The Pouch	Waste management and Practices on board	10
Pouch-athon	Waste management and Practices on board	4
Development of a Fishing Gear Management Plan	Waste management and Practices on board	3
Fishing gear management plan	Waste management and Practices on board	3
Template for port authorities	Port Reception Facilities	15
Port/Company contribute to gear management tech	Port Reception Facilities	2
Special training for crew	Education	3
Standardized education on net cuttings	Education	17
Adding educational material	Education	17
A follow-up webinar on workshop outcomes and FGMP recommendations	Other	3

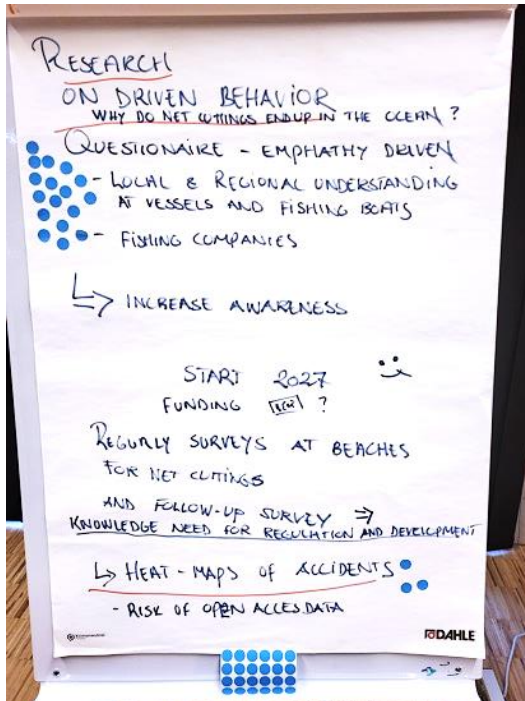
Utilize existing knowledge and tools

Other

3

Votes per action





Photos of actions against net cuttings resulting from the workshop's final exercise.

EXTENDED METHODOLOGY

The whole event in Hafnarfjordur on 27-28 January 2026 was carried out with basis in the Chatham House Rule, meaning that “When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.”². Abiding to this rule, none of the outcomes presented further on in this report are referenced to individual participants of the event.

Breakout Groups

Participants worked in parallel breakout groups during the interactive session on day 1 of the event, focused on what is going well and what challenges exist. The session on day 2 shifted focus to discussing the way forward and identifying opportunities for improvement. The sessions were designed to build a collective understanding of current practices, progress, and challenges related to fishing gear related waste management on deck/board bottom trawl vessels.

By progressively layering insights across four discussion rounds, the sessions aimed to:

- Capture input across regions and stakeholder groups
- Identify key challenges and constraints grounded in real-world experience
- Identify opportunities for improvement across operational, organisational, and regulatory levels
- Explore practical directions and enabling conditions for progress
- Support alignment between industry, policymakers, researchers, NGOs, and other stakeholders

A set of thematic topics were covered and discussed in separate groups:

- Waste management, storage and practices on deck
- Port Reception Facilities
- Policy, regulations, and control
- The development of a Fishing Gear Management Plan

For each discussion round (1-4), the participants moved to discuss a new topic, and were challenged by the host to delve into the different thematic topic using a set of guiding questions:

Day 1

Round 1 – Establishing the baseline

What is currently going well in relation to this topic?

² <https://www.chathamhouse.org/about-us/chatham-house-rule>

What positive developments or progress have you observed?

Round 2 – Deepening understanding

Reviewing what has already been identified, what additional examples or experiences can you add?

Are there differences across regions, vessel types, or stakeholder groups?

Round 3 – Identifying challenges

What challenges or constraints are most significant in practice?

Where do difficulties most frequently arise?

Round 4 – Consolidating challenges

Which challenges appear most persistent or widespread?

Are there common challenges emerging across different regions or contexts?

Day 2

Round 1 – Reflecting on challenges

Based on the challenges identified on Day 1, which issues are most important to address under this topic?

Where is there already momentum or willingness to improve?

Round 2 – Identifying opportunities

What opportunities exist to improve current practices, frameworks, or coordination in this area?

Where could relatively small changes lead to meaningful improvements?

Round 3 – Enabling conditions

What conditions would need to be in place to support progress (e.g. capacity, coordination, incentives, guidance)?

Who would need to be involved or engaged?

Round 4 – Priorities and focus

Which opportunities appear most realistic or impactful in the short to medium term? Identify Key Opportunities!

Where should attention be prioritised to achieve tangible progress?

The concept of a Fishing Gear Management Plan (FGMP) was adopted at the MEPC 83 (2025) under the IMO Action Plan on Marine Litter with the following aim formulation: “Consider development of requirements for a ship-specific management plan for the gear and equipment deployed in fishing activities, including the logging of fishing gear on board a fishing vessel (short-term action)”. Since the concept of a FGMP is not already in use in practice, it did not match the above general guiding questions of the other workshop topics. The topic of FGMP was therefore given specific guiding questions as follows:

- Round 1: Does a FGMP show potential in actually preventing ALDFG? Why, why not?

- Round 2: How should the requirements of a FGMP be implemented in the Arctic states?
- Round 3: How could a FGMP be adapted to the specific conditions of trawling vessels?
- Round 4: What should be the focus for further investigation on potential of a FGMP?

Defining Next Steps

The purpose of this final interactive session was to move from “opportunities” to a “joint action roadmap” with concrete actions to prevent discarding of net cutting waste from bottom-trawl vessels operating in the Arctic.

Participants were grouped by sector, as follows:

- Research and academia
- Fisheries and fishing gear industry
- Policy-makers and public authorities
- NGOs and others

Each group were to select a shortlist of key opportunities identified during the previous work session. A shortlist of opportunities to choose from was prepared by the table hosts and workshop facilitator (displayed under Workshop Outcomes below). Each group were then instructed to convert these opportunities into concrete actions, preferably following the suggested template formula: *Action verb + who + where + by when + measurable output*.

When groups were done with the exercise, 1 or 2 persons from each group presented their selected actions in plenary for all the other groups, whilst detailing the action in writing on the whiteboard in the room for everyone to see.

The last step of this work session was a voting exercise, where the individual participants were provided three adhesive dots to be used to vote for the presented actions they personally regarded as most impactful and/or feasible. A maximum of two votes could be given to the same action by the same participant.

Sustainable Coastal Development



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