

Regional Action Plan for Prevention and Management of Marine Litter in the North-East Atlantic

(OSPAR Agreement 2014-1)

- 1. This Regional Action Plan (RAP) sets out the policy context for OSPAR's work on marine litter, describes the various types of actions that OSPAR will work on over the coming years and provides a timetable to guide the achievement of these actions.
- 2. The RAP is organised in four sections:
 - **Section I** follows the brief introduction below and sets the objectives, the geographical scope, principles and approaches that should frame implementation.
 - Section II presents the actions to be implemented. The actions have been grouped in four themes as follows: A. the reduction of litter from sea-based sources and B. the reduction of litter from land-based sources, C. the removal of existing litter from the marine environment and D. education and outreach on the topic of marine litter.
 - Section III describes the necessary monitoring and assessment.
 - Section IV outlines how the plan will be implemented and followed up by OSPAR. This final section includes reference to Annex I, consisting of a Implementation Plan for the development and adoption of OSPAR's measures supporting the implementation of OSPAR actions in this agreement and Annex II which outlines an implementation reporting format through which OSPAR's Contracting Parties, and also OSPAR's relevant stakeholders and observers, are invited to report on implementation. These annexes are to be considered part of this RAP, however the RAP Implementation plan will be updated annually based upon progress.

INTRODUCTION

Marine litter

3. Marine litter covers any solid material which has been deliberately discarded, or unintentionally lost on beaches and on shores or at sea, including materials transported into marine environment from land by rivers, draining or sewage systems or winds. It includes any persistent, manufactured or processed solid material. Marine litter originates from different sea- and land-based sources and is largely based on the prevailing production and consumption pattern.

- 4. Marine litter consists of a wide range of materials, including plastic, metal, wood, rubber, glass and paper. Although the relative proportions of these materials vary regionally, there is clear evidence that plastic litter is by far the most abundant type. In some locations plastics make up 90 % of marine litter of shorelines. A similar predominance of plastics is reported from sampling at the sea surface and on the seabed.
- 5. Most plastics are extremely durable materials and persist in the marine environment for a considerable period, possibly as much as hundreds of years. However, plastics also deteriorate and fragment in the environment as a consequence of exposure to sunlight (photo-degradation) in addition to physical and chemical deterioration. This breakdown of larger items results in numerous tiny plastic fragments, which, when smaller than 5mm¹ are called secondary micro plastics. Other micro plastics that can be found in the marine environment are categorised as primary micro plastics due to the fact that they are produced either for direct use, such as for industrial abrasives or cosmetics or for indirect use, such as pre-production pellets or nurdles.
- 6. Marine litter is not only an aesthetic problem but incurs socioeconomic costs, threatens human health and safety and impacts on marine organisms. It is broadly documented that entanglement in, or ingestion of, marine litter can have negative consequences on the physical condition of marine animals and even lead to death. Ingestion of micro plastics is also of concern as it may provide a pathway for transport of harmful chemicals into the food web. Additionally, marine litter is known to damage and degrade habitats (e.g. in terms of smothering) and to be a possible vector for the transfer of alien species.
- 7. The large majority of biodegradable plastics can only biodegrade under specific conditions of constant temperature and humidity in industrial composting installations. Therefore they do not degrade in a reasonable time when entering the marine environment as litter. Moreover, many biodegradable plastics may not degrade in the intestines of marine species. Hence injury and starvation are likely to remain issues.

The background for the Plan

- 8. OSPAR Ministers declared in 2010: "We note that quantities of litter in many areas of the North-East Atlantic are unacceptable, and therefore we will continue to develop reduction measures and targets, taking into consideration an ambitious target resulting in a reduction in 2020" (Bergen Statement). The OSPAR objective with regard to marine litter, as laid down in the Strategy for the protection of the Marine Environment of the North-East Atlantic for the years 2010-2020, is "to substantially reduce marine litter in the OSPAR maritime area to levels where properties and quantities do not cause harm to the marine environment". The OSPAR objective and this RAP are supportive of the Rio+20 global commitment to "take action to, by 2025, based on collected scientific data, achieve significant reductions in marine debris to prevent harm to the coastal and marine environment" in the "The Future We Want" and with the 2013 UNGA resolution A/RES/68/70 in which States noted concern on marine debris.
- 9. The OSPAR objective is also in line with the definition of Descriptor 10 of the Marine Strategy Framework Directive, where Good Environmental Status can be seen to be achieved, when "Properties and quantities of marine litter do not cause harm to the coastal and marine environment. It will also support the achievement of an EU-wide "quantitative reduction headline target" for marine litter, as agreed in the 7th Environment Action Programme.
- 10. OSPAR 2013 agreed to develop a Regional Action Plan for Marine Litter by 2014. The sources of marine litter are diverse and ocean dynamics turn it into a transboundary issue requiring collective action. Therefore, OSPAR examined the feasibility of developing a Regional Action Plan to implement the commitments in the North-East Atlantic Environment Strategy as well as to coordinate actions to deliver

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¹ EU MSFD GES Technical Subgroup on Marine Litter Marine Litter: Technical Recommendations for the Implementation of MSFD Requirements, JRC 2011

² The Future We Want, paragraph 163: http://www.uncsd2012.org/content/documents/727The%20Future%20We%20Want%2019%20June%201230pm.pdf

Good Environmental Status across the MSFD descriptors. Moreover, the RAP is contributing to the UNEP and GPA Global Partnership on Marine Litter, a global framework for prevention and management of marine debris, and the Honolulu Strategy developed at the 5th International Marine Debris Conference. In that sense, the RAP for prevention and management of marine litter can be seen as an exemplar for regional effort supporting multiple regional and global commitments.

- 11. This RAP emerged from a series of workshops, coordinated by Germany as lead country, involving relevant expertise from the public and private sectors, academics and non-governmental organisations and under a dedicated OSPAR intersessional correspondence group on marine litter (ICG-ML). Through this process OSPAR also actively contributed to the International Conference on Prevention and Management of Marine Litter in European Seas held in Berlin in April 2013.
- 12. Following the agreement of OSPAR 2013 this RAP and Implementation Plan aims to deliver the following elements:
 - a. a focus on specific sources or items of marine litter that are of most concern in each OSPAR region or the OSPAR maritime area as a whole;
 - b. the development of regional measures, taking into account the socioeconomic aspects including cost effectiveness, for reducing the input of marine litter from sea-based and land-based sources, and for removing litter from the marine environment. These measures should be based on an assessment of the OSPAR Marine Litter Checklist, the measures identified at the Berlin Conference and any existing and new initiatives within Contracting Parties;
 - c. regionally coordinated SMART³ reduction/operational targets, including those linked to sources, taking into account the MSFD targets submitted by EU Member State Contracting Parties to the European Commission;
 - d. monitoring and necessary arrangements required to assess progress towards reaching the targets, taking into account any outputs from the EU Technical Group Marine Litter, and including the work in progress for the MSFD monitoring programmes;
 - e. cooperation with other relevant regional and international organisations, including Regional Seas.
- 13. The OSPAR Regional Action Plan for prevention and management of Marine Litter in the North-East Atlantic has been adopted by OSPAR Contracting Parties as an OSPAR Other Agreement. The Regional Action Plan is designed as a flexible tool providing a set of actions to address marine litter. It contains actions requiring collective activity within the framework of the OSPAR Commission through, where applicable, OSPAR measures (i.e. Decisions or Recommendations) and/or other agreements such as guidelines.
- 14. Other actions listed are those that Contracting Parties should consider in their national programmes of measures, including under the Marine Strategy Framework Directive. The approach regarding these national actions is based around the core principle that the RAP allows Contracting Parties to identify which of the measures and actions listed they have already taken forward (e.g. as a result of existing or planned national or European legislation or other initiatives) and consider others needed to further combat marine litter. It therefore provides guidance to Contracting Parties and a framework for regional cooperation.
- 15. Finally, a third category of actions that address issues that fall under the competence of other international organisations and competent authorities

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³ SMART stands for Specific, Measurable, Achievable, Relevant and Time-bound

SECTION I: Objectives, scope and principles

Objectives and role

- 16. The main objectives of the RAP are to:
 - Prevent and reduce marine litter pollution in the North-East Atlantic and its impact on marine organisms, habitats, public health and safety and reduce the socioeconomic costs it causes;
 - Remove litter from the marine environment where practical and feasible;
 - Enhance knowledge and awareness on marine litter;
 - Support Contracting Parties in the development, implementation and coordination of their programmes for litter reduction, including those for the implementation of the Marine Strategy Framework Directive.
 - Develop management approaches to marine litter that are consistent with accepted international approaches (c.f. §20)

17. The role of the RAP ML is to:

- Coordinate work to improve the evidence base on the impacts of litter on the marine environment;
- Establish a range of measures and actions, identifying gaps and opportunities where OSPAR can add value through its marine focus. This should take into account existing activities;
- Be a framework under which Contracting Parties can identify where a regional approach can add value to the actions of individual Contracting Parties, including in relation to their implementation of the Marine Strategy Framework Directive, where appropriate;
- Promote reporting by Contracting Parties to OSPAR regarding their progress and cooperation in a manner consistent with obligations under the Marine Strategy Framework Directive, where appropriate.

B. Area of application

- 18. The Regional Action Plan targets litter discharges from sea-based and land-based sources as well as litter which is already present in the marine environment and applies to the whole OSPAR maritime area:
 - Region I Arctic Waters;
 - b. Region II Greater North Sea;
 - c. Region III Celtic Seas;
 - d. Region IV Bay of Biscay and Iberian Coast;
 - e. Region V Wider Atlantic.

C. Guiding principles

- 19. The key principles that should guide action to address marine litter are: the precautionary principle and the polluter pays principle, as described in Article 2(2) of the OSPAR Convention, as well as the aim to adopt programmes and measures designed to prevent and eliminate pollution (Art. 2 (3) (a and b):
 - The precautionary principle: "by virtue of which preventive measures are to be taken when there are reasonable grounds for concern that substances or energy introduced, directly or indirectly, into the marine environment may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between the inputs and the effects; " (Article 2 (2) (a) OSPAR Convention);

- The polluter pays principle: "by virtue of which the costs of pollution prevention, control and reduction measures are to be borne by the polluter" (Art. 2(2) (b) OSPAR Convention).
- Additionally there are other approaches that should help guide interpretation and decision-making on the implementation of actions within the framework of the RAP. These approaches are not legal formulations, but should help frame the development of measures.
 - Integration: marine litter management should be an integral part of the solid waste management to ensure environmentally sound management of human activities and rational use of resources;
 - The ecosystem approach: the comprehensive integrated management of human activities based on the best available scientific knowledge about the ecosystem and its dynamics, in order to identify and take action on influences which are critical to the health of the marine ecosystems, thereby achieving sustainable use of ecosystem goods and services and maintenance of ecosystems;
 - Public participation and stakeholder involvement: to create awareness about the problem of marine litter and ensure a sense of public ownership in order to build support for relevant measures;
 - Sustainable consumption and production⁴: the use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle;
 - Best available knowledge and socioeconomic effectiveness: actions and operational targets should be based on available knowledge of the predominant amounts, materials, items and sources of marine litter found in the North-East Atlantic and take into account the social and economic costs of degradation compared to the cost and benefits of proposed measures.

D. Cooperation with other organisations and competent authorities

- 21. Cross-sectorial cooperation is very important in order to reduce marine litter in the OSPAR maritime area. The Regional Action Plan on Marine Litter should therefore be implemented in close cooperation with other relevant regional and global organisations and initiatives, including UNEP and other Regional Seas Conventions, the International Maritime Organisation, the Convention on Biological Diversity, the European Union, Fisheries Regional Advisory Councils, North East Atlantic Fisheries Commission and River and River Basin Commissions. Partnerships with the private sector and with non-governmental organisations should also be part of the working approach.
- 22. Appropriate arrangements should be developed to exchange relevant information and to address significant transboundary marine litter issues. Contracting Parties should cooperate directly to address transboundary marine litter issues, with the assistance of the OSPAR Secretariat or the competent international or regional organisation. Where countries are Contracting Parties of more than one relevant organisation they should endeavour to coordinate internally to raise the appropriate issues in those fora.

SECTION II – Actions

23. This section identifies a number of actions in conformity with the objectives and principles of the RAP, informed by the findings on main items, materials, amounts and sources of marine litter. Section II is divided into four themes: A) actions to combat sea-based and B) combat land-based sources of marine

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⁴ Norwegian Ministry of Enviroment Symposium: Sustainable Consumption. Oslo, Norway; 19-20 January 1994

litter; C) actions for the removal of existing litter from the marine environment and D) actions for education and outreach on the topic of marine litter. Smarter production is treated as an integral theme.

- 24. The majority of the actions, as outlined in section II are those actions at a regional level with a large-scale, widespread and transboundary character. Coordination on these kinds of actions is the key aim of the OSPAR RAP. Additionally some of the actions aim for information exchange and coordination of measures that are primarily of national concern and responsibility of Contracting Parties. In other cases where it is considered that appropriate action might be taken by the EU or other international organisations (such as Fisheries organisations), actions are formulated to approach those bodies/authorities through OSPAR. Annex I includes an Implementation Plan with timelines and lead countries for the development of OSPAR measures.
- 25. OSPAR Contracting Parties which are also EU Member States should consider including the actions set out in the RAP ML in their EU Marine Strategy Framework Directive programmes of measures. OSPAR in this respect will serve as an exchange platform for gaining and sharing information on technical, economic and policy aspects of such measures and the effects they have on the marine environment.
- 26. The following actions are expressed in a way to differentiate between those which require a cross-regional joint action through OSPAR, including some which require OSPAR to address other international organisations, and others which are primarily within the remit of Contracting Parties.
- 27. This RAP does not pre-determine which of the "OSPAR actions" should ultimately take the form of OSPAR measures (Recommendations, Decisions) or other agreements, including guidelines, adopted within the framework of the Convention. However the Implementation Plan presented in Annex I will be updated on a regular basis to show where Contracting Parties have agreed to develop OSPAR measures. Development of regional measures will follow the accepted OSPAR procedure, including lead country responsibility and production of background document(s) outlining the rationale for OSPAR action, costs and benefits, best practices, cooperation etc.

OSPAR Collective Actions

- 28. The following actions have been identified, on the basis of the evidence gathered in the development of this plan, which will be updated through the Joint Assessment and Monitoring Programme (JAMP) (See Section III), as those that require joint regional effort. Therefore Contracting Parties, acting collectively within the framework of the OSPAR Commission, as set out in the Implementation Plan in Annex I, will develop and implement the actions outlined below:
- 29. In order to fulfil the commitments made in the North-East Atlantic Environment Strategy and at OSPAR 2013 an action of this RAP will be to develop and agree regionally coordinated SMART reduction/operational targets linked to relevant actions as listed in the implementation plan, starting from 2015, including those linked to sources. OSPAR targets will take into account the Marine Strategy Framework Directive targets submitted by EU Member States and the 7th EU Environmental Action Programme marine litter target. Likewise OSPAR targets will also inform MSFD Targets and will contribute to the further implementation of the Directive.

Theme A: Actions to combat sea-based sources of marine litter

Port reception facilities

- 30. Ensure regional coordination on the implementation of EU Directive 2000/59/EC in relation to MARPOL Annex V ship generated waste. Such coordination could:
 - a) deliver a cost recovery system, ensuring the maximum amount of MARPOL Annex V ship generated waste is delivered to port reception facilities;

- b) not solely focus on reception facilities, but also other relevant differences;
- c) analyse the implementation of compulsory discharge of waste in each port for all ships leaving the OSPAR maritime area for non-EU ports, in line with EU Directive 2000/59/EC.
- 31. OSPAR will inform the ongoing revision of EU Directive 2000/59/EC.

Effective Implementation/Enforcement of international legislation/regulation

- 32. Identify best practice in relation to inspections for MARPOL Annex V ship generated waste, including better management of reporting data, taking into consideration the Paris MOU⁵ on port state control.
- 33. Seek the dialogue with the Paris MOU to take the risk of illegal waste discharges into consideration for the prioritisation of port state control inspections.

Incentives for responsible behaviour/disincentives for littering

- 34. Improve implementation of the ISO standard 201070:2013⁶ in relation to port reception facilities.
- 35. Identify the options to address key waste items from the fishing industry and aquaculture, which could contribute to marine litter, including deposit schemes, voluntary agreements and extended producer responsibility.

Develop best practice in relation to fishing industry

- 36. Through a multinational project, together with the fishing industry and competent authorities develop and promote best practice in relation to marine litter. All relevant aspects (including e.g. dolly rope⁷, waste management on board, waste management at harbours and operational losses/net cuttings) should be included.
- 37. Investigate the prevalence and impact of dolly rope (synthetic fibre). Engage with competent authorities (such as National Authorities, EU, North East Atlantic Fisheries Commission, etc.) and the fishing industry in order to work together to reduce the waste generated by dolly rope on a (sub) regional basis.

Fines for waste disposal offences at sea

38. Analyse penalties and fines issued by Contracting Parties for waste disposal offences at sea to highlight the differences, trends, problem areas and issues to relevant organisations, such as the North Sea Network of Investigators and Prosecutors.

Theme B: Actions to combat land-based sources of Marine Litter

Improved waste prevention and management

- 39. Highlight those waste prevention and management practices that impact significantly on marine litter. Engage with the industry and other authorities, at the appropriate level, in order for them to be able to develop best environmental practice, including identification of circumstances where litter "escapes" into the marine environment. Encourage the recyclability of plastic products (e.g. through reduction of additives).
- 40. Share best practice on waste management, e.g. on landfill bans of high caloric wastes (especially for plastics).

⁶ ISO 201070:2013, Arrangement and management of port waste reception facilities

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⁵ Paris Memoradnum of Understanding on Port State Control

⁷ Bunches of polyethylene threads used to protect the codend of demersal trawlnet from abrasions

41. Exchange experience on best practice to prevent litter entering into water systems and highlight these to River or River Basin Commissions.

Reduction of sewage and storm water related waste

42. Investigate and promote with appropriate industries the use of Best Available Techniques (BAT) and Best Environmental Practice (BEP) to develop sustainable and cost-effective solutions to reduce and prevent sewage and storm water related waste entering the marine environment, including micro particles.

Incentives for responsible behaviour/ Disincentives for littering

- 43. Assess relevant instruments and incentives to reduce the use of single-use and other items, which impact the marine environment, including the illustration of the associated costs and environmental impacts.
- 44. Reduce the consumption of single use plastic bags and their presence in the marine environment, supported by the development of quantifiable (sub) regional targets, where appropriate, and assist in the development of relevant EU initiatives.
- 45. Encourage international environmental certification schemes to include the management and prevention of marine litter in their lists of criteria.

Elimination, change or adaptation of products for environmental benefits

- 46. Evaluate all products and processes that include primary micro plastics and act, if appropriate, to reduce their impact on the marine environment.
- 47. Engage with all appropriate sectors (manufacturing, retail etc.) to explore the possibility of a voluntary agreement to phase out the use of micro plastics as a component in personal care and cosmetic products. Should a voluntary agreement prove not to be sufficient, prepare a proposal for OSPAR to call on the EU to introduce appropriate measures to achieve a 100% phasing out of micro plastics in personal care and cosmetic products.
- 48. Evaluate the potential harm caused to the marine environment by items such as cigarette filters/butts, balloons, shotgun wads, cotton buds and bio-film support media used in sewage plants. Based on this evaluation, proposals can be made on the elimination, change or adaptation requirements for these other potentially problematic items.
- 49. Investigate the prevalence and impact of expanded polystyrene (EPS) in the marine environment, and engage with industry to make proposals for alternative materials and/or how to reduce its impacts.

Development of sustainable packaging

- 50. Engage in a dialogue with industry aimed at highlighting the top marine litter problem items based on OSPAR beach monitoring surveys and/or other evidence on impacts.
- 51. Explore with industry the development of design improvements to assist in the reduction of negative impacts of products entering the marine environment in order to better inform industry on alternative solutions.

Zero pellet loss

52. Promote initiatives and exchange of best practice aiming at zero pellet loss⁸ along the whole plastics manufacturing chain from production to transport.

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⁸ For example Operation Clean Sweep http://www.opcleansweep.org/default.aspx

Theme C: Removal Action

Application of Fishing for Litter activities

53. Strengthen the existing OSPAR Recommendation 2010/19 on the reduction of marine litter through implementation of fishing for litter initiatives, including by reviewing the option that any vessel involved in the scheme can land non-operational waste at participating harbours in OSPAR countries.

Cleaning environmental compartments and keeping them clean

- 54. Establish an exchange platform on experiences on good cleaning practices in beaches, riverbanks, pelagic and surface sea areas, ports and inland waterways. Develop best practice on environmental friendly technologies and methods for cleaning.
- 55. Develop subregional or regional maps of hotspots of floating litter, based on mapping of circulation of floating masses of marine litter, and identification of hotspots of accumulation on coastal areas and the role of prevailing currents and winds.

Reduction of abandoned, lost and otherwise discarded fishing gear (ALDFG)

- 56. Identify hot spot areas through mapping of snagging sites or historic dumping grounds working with other initiatives, research programmes and with fishing organisations.
- 57. Develop a risk assessment for identifying where accumulations of ghost nets pose a threat to the environment and should be removed.

Theme D: Education and outreach

Education

58. Develop marine litter assessment sheets to assist Contracting Parties in developing material for education programmes, including those for professional seafarers and fishermen.

Outreach

- 59. Establish a database on good practice examples of marine litter measures and initiatives and share this database with other Regional Seas Conventions in order to make action more visible to the public.
- 60. Develop a communication strategy on the Regional Action Plan (RAP) linked in a coherent way with national initiatives/measures. This will include linking the OSPAR website to relevant projects and initiatives.

Contracting Party Actions

61. Contracting Parties should consider implementing the following actions:

Theme A: Actions to combat sea-based sources of marine litter

Enforcement of international legislation/regulation regarding all sectors

62. Ensuring effective implementation and enforcement of MARPOL Annex V in relation to both fishing and shipping waste by considering its implementation by port state control and other competent bodies.

Incentives for responsible behaviour/disincentives for littering

63. Investigating markets for plastic waste from the fishing and shipping industry (e.g. by bringing together producers of waste and recycling companies) by looking at specific items and differences in materials, including giving value to waste streams by financial incentives.

Theme B: Measures to combat land-based sources.

Improved waste prevention and management

- 64. Ensuring considerations related to marine litter and actions in this plan are integrated, as appropriate, into the implementation and any future revision of relevant EU Directives (e.g. Waste Framework Directive, Packaging and Packaging Waste Directive, Port Reception Facilities Directive, Landfill Directive, Water Framework Directive, Urban Wastewater Treatment Directive, Bathing Water Directive).
- 65. Seeking cooperation in the river and river basin authorities in order to include impacts of litter on the marine environment in river and river basin management plans.
- 66. Promoting and supporting, where appropriate, the inclusion of measures aimed at the prevention and reduction of marine litter in the 2014 revision of the EU's waste legislation.
- 67. Including a reference to marine litter, where applicable, in National Waste Prevention Plans and Waste Management Plans (including making links where relevant to EU legislation). There could be an element in the plans highlighting the impacts of marine litter.
- 68. Entering into dialogue with the waste industry, working towards highlighting waste management practices that impact on the marine environment.
- 69. Identifying illegal and historic coastal landfill or dumpsites, including where these might be at risk from coastal erosion, and take action if appropriate.
- 70. Promoting Extended Producer Responsibility Strategies requiring producers, manufacturers, brand owners and first importers to be responsible for the entire life-cycle of the product with a focus on items frequently found in the marine environment.
- 71. Encouraging the development and implementation of Sustainable Procurement Policies that contribute to the promotion of recycled products, in particular plastic, focusing on those products that impact upon the marine environment.
- 72. Promoting and enhancing national stakeholder alliances focusing on marine litter.

Theme C: Removal measures

Application of Fishing for Litter activities

- 73. Removing barriers to the processing or adequate disposal of marine litter collected in Fishing for Litter initiatives, including landfilling if relevant and in line with waste legislation.
- 74. Encouraging all fishing vessels to be involved in Fishing for Litter schemes, where they are available.
- 75. Ensuring that any vessel involved in the scheme can land non-operational waste collected at sea at any participating harbour.

Reduction of abandoned, lost and otherwise discarded fishing gear (ALDFG)

76. Undertaking an awareness-raising campaign to make fishermen aware of their obligations under EU Control Regulation (1224/2009) with regard to reporting, marking and retrieval of lost nets, including reviewing guidance to fishermen, and if required, proposing changes.

Theme D: Education and outreach

Education

- 77. Promoting education activities in synergy with existing initiatives in the field of sustainable development and in partnership with civil society (including activities related to prevention and promotion of sustainable consumption and production).
- 78. Promoting curricula for marine-related education, including the recreational sector (e.g. diving and sailing schools), which develop awareness, understanding, and respect for the marine environment and secure commitment to responsible behaviour at personal, local, national and global level.
- 79. Promoting or adopting environmental awareness courses for fishermen and the fishery sector.

Outreach

- 80. Encourage participation in International, EU and National Litter Cleanup Campaigns.
- 81. Promoting the "Adopt a beach" system.
- 82. Raising public awareness of the occurrence, impact and prevention of marine litter, including micro plastics.
- 83. Supporting/initiating community/business-based producer responsibility schemes or deposit systems, for example on recycling fishing nets.
- 84. Developing collective agreements between Contracting Parties, NGOs and industry to tackle particular problems of marine litter⁹.

SECTION III – Monitoring and Assessment

- 85. Article 6 and Annex IV of the OSPAR Convention outline the requirement to assess the quality of the marine environment. Contracting Parties are obliged to "undertake and publish at regular intervals joint assessments of the quality status of the marine environment and of its development, for the maritime area or for regions or sub-regions thereof". They are also required to "include in such assessments both an evaluation of the effectiveness of the measures taken and planned for the protection of the marine environment and the identification of priorities for action."
- 86. In order to obtain reliable and comparable monitoring data within the OSPAR area to assess the state of marine litter in the marine environment and the effectiveness of the actions taken, it is important to coordinate monitoring programmes trans-nationally and, whenever possible, to adopt consistent methodologies to collect, record and report data. A beach litter indicator is already in operation for the whole OSPAR area and the indicator for plastic particles in fulmar stomachs for the North Sea. They allow identification of different categories of litter, providing information on potential origin and an analysis of trends in individual items. In the case of the fulmar, an Ecological Quality Objective is applied encompassing

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⁹ For example the Chain Agreement on Recycling Plastic in the Netherlands

specific and measurable objectives: "There should be less than 10% of northern fulmars (*fulmarus glacialis*) having more than 0.1 g plastic particles in the stomachs in samples of 50-100 beach-washed fulmars found from each of 4 to 5 areas of the North Sea over a period of at least five years".

- 87. OSPAR has developed common and candidate indicators, with a particular focus on MSFD requirements covering the following issues:
 - o beach litter
 - plastic particles in biota
 - seabed litter
 - o micro plastics
- 88. The objective is that the indicators are applied by Contracting Parties in coordinated monitoring programmes. The monitoring programmes should be linked, where relevant, to monitoring obligations under Article 11 of the MSFD. Further development of these and other indicators e.g. on ingestion of litter in other biota (e.g. fish and turtles) and for other relevant impacts (e.g. entanglement of biota in marine litter) will take place under OSPAR's Environmental Impact of Human Activities Committee (EIHA).
- 89. Marine litter will be considered by the Joint Assessment and Monitoring Programme (JAMP). The JAMP sets out the process for achieving OSPAR's major assessment products i.e. the intermediate Assessment in 2017 and the next Quality Status Report (QSR). Whereas the intermediate assessment will mainly consist of the results of assessment of agreed common indicators, the QSR will include more integrated assessment approaches. These should include cumulative assessment of pressures or advances of understanding on socio-economic issues, as well as to respond to the targets set out in the North-East Atlantic Environment Strategy. Reporting is envisaged for June 2016 and June 2020 to fit with the above assessments, with the objective to monitor levels of beach and seabed litter in the OSPAR maritime area, assess quantities, types, sources and trends of marine and beach litter as well as litter in biota. Assessment should include whether the introduction and levels of litter in the marine environment (including in marine organisms) and on beaches causes harm. This relates closely to MSFD Descriptor 10, under which achievement of Good Environmental Status by 2020 requires that: "properties and quantities of marine litter do not cause harm to the coastal and marine environment".
- 90. Any operational or reduction targets developed in relation to specific actions or measures produced under the framework of the RAP will be assessed through the JAMP and based upon the monitoring for the common indicators, where applicable. The next QSR should assess the effectiveness of the plan in achieving the aims of the North-East Atlantic Environment Strategy.
- 91. Relevant research and development programmes should also be coordinated in order to make best use of expertise and (EU) resources. Main and emerging R&D topics are related to the development of an indicator and monitoring for micro plastics, quantification of harm, relation between harm and risk and monitoring, assessing the relevance of riverine litter.

SECTION IV – Implementation and Reporting

- 92. The overall OSPAR Regional Action Plan on Marine litter is implemented through Agreement 2014-1. Contracting Parties will use the implementation reporting process to update OSPAR on their national progress in implementing the plan. However, individual actions recommended above, particularly those which have a regional focus, may also be implemented through guidelines, recommendations or decisions, depending upon their topic.
- 93. The OSPAR Regional Action Plan will be implemented during the period 2014-2021, after which time it shall be reviewed and updated in accordance with the outcomes of the Quality Status Report 2021, the new OSPAR Strategy, and assessments under the MSFD.

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- 94. The regional plan will be implemented by means of OSPAR's measures, guidelines and other agreements included in the Implementation Plan presented in Annex I as well as Contracting Parties' national programmes of measures, joint activities and partnerships with other organisations. Some milestones to support implementation have already been identified.
- 95. In order for OSPAR to be able to effectively monitor progress, Contracting Parties should report against their national implementation of the actions set out in this Regional Action Plan (Agreement 2014-1), using the format in Annex II, to EIHA every second year, starting in 2016.
- 96. Task leads should report against progress on the development of regional OSPAR actions as set out in the Regional Action Plan ('OSPAR Collective Actions') to EIHA.
- 97. Reporting against targets and an assessment of the effectiveness of the Regional Action Plan should be undertaken as part of the assessment and monitoring process outlined in the JAMP 2014-2021.

Annex I

Regional Action Plan for Prevention and Management of Marine Litter in the North-East Atlantic (RAP) Implementation Plan - OSPAR Actions

This table sets out the planned implementation for actions listed in the Regional Action Plan, adopted in 2014. Action numbers in the Regional Action Plan are transposed into this document.

Details include the expected OSPAR measure where known, but will not pre-empt the final decision being made on the best approach to implementation. The table also contains the expected target date for the implemented action and the lead countries for developing the work where this is known.

As an implementation plan this table is by definition an evolving document subject to annual review.

RAP § no.	ACTION The following Actions are listed in the Regional Action Plan. Numbers refer to paragraph numbers in the Action Plan.	Type of OSPAR Measure Expected measure, however final decisions will be made once the actions are further developed	Lead Party / Parties	Implementation Year The target year for developing the measure/ implementing action
29	Develop and agree regionally coordinated SMART reduction/operational targets linked to relevant actions as contained in this implementation plan, starting from 2015, including those linked to sources.	Not yet Decided	ICG-ML	From 2015
	Theme A: Actions to combat sea-based source			
	Harmonised system for port reception facilities			
30	Ensure regional coordination on the implementation of EU Directive 2000/59/EC in relation to MARPOL Annex V ship generated waste.	Not yet decided	Belgium, Germany, Netherlands, With assistance from Seas at Risk.	Background document in 2015 Draft proposal for a measure by 2016

31	OSPAR will assist the European Commission in the ongoing revision of EU Directive 2000/59/EC.		Sweden and Germany, with assistance from Seas at Risk and the Secretariat.	Letter to EU 2014 and participation in the public consultation
	Enforcement of international legislation/regulation regarding all sectors			
32	Identify best practice in relation to inspections for MARPOL Annex V ship generated waste, including better management of reporting data, taking into consideration the Paris MOU on port state control.	Not yet decided	Belgium with the participation of Sweden	[2016]
33	Seek dialogue with the Paris MOU to take the risk of illegal waste discharges into consideration for the prioritisation of port state control inspections.			2016
	Incentives for responsible behaviour/disincentives for littering			
34	Improve implementation of the ISO standard 201070:2013 in relation to port reception facilities.	Not yet decided	Belgium and Netherlands	Background document in 2015 Draft proposal for a measure by 2016
35	Identify the options to address key waste items from the fishing industry and aquaculture, which could contribute to marine litter, including deposit schemes, voluntary agreements and extended producer responsibility.	Not yet decided	France, Belgium and EU, with participation from Portugal	Background report 2015/6
	Develop best practice in relation to fishing industry			
36	Through a multinational project, together with the fishing industry and competent authorities develop and promote best practice in relation to marine litter. All relevant aspects (including e.g. dolly rope, waste	Guidelines	Sweden and the United Kingdom, with participation of	2016

	management on board, waste management at harbours and operational losses/net cuttings) should be included.		the Netherlands and Norway	
37	Investigate the prevalence and impact of dolly rope ¹⁰ (synthetic fibre). Engage with competent authorities (such as National Authorities, EU, NEAFC etc.) and the fishing industry in order to work together to reduce the waste generated by dolly rope on a (sub) regional basis.	Not yet decided	Netherlands	2016
	Fines for Littering at Sea			
38	Analyse penalties and fines issued by Contracting Parties for waste disposal offences at sea to highlight the differences, trends, problem areas and issues to relevant organisations, such as the North Sea Network of Investigators and Prosecutors.		Germany	2015
	Theme B: Actions to combat land-based sources			
	Improved waste prevention and management			
39	Highlight those waste management practices that impact significantly on marine litter. Engage with the industry and other authorities, at the appropriate level, in order for them to be able to develop best environmental practice, including identification of circumstances on where litter "escapes" into the marine environment and investigating how to close loops focusing on non-toxic material cycles.	Not yet decided	Germany, with participation of the Netherlands	2016
40	Share best practice on waste management, e.g. on landfill bans of high caloric wastes (esp. for plastics).		Germany, with participation of the Netherlands	[2016]

 $^{^{10}}$ Bunches of polyethylene threads used to protect the codend of demersal trawlnet from abrasions

41	Exchange experience on best practice to prevent litter entering into water systems and highlight these to River or River basin Commissions.		Netherlands with the assistance of Germany	Report 2015
	Reduction of sewage and storm water related waste			
42	Investigate and promote with appropriate industries the use of Best Available Techniques (BAT) and Best Environmental Practice (BEP) to develop sustainable and cost effective solutions to reducing and preventing sewage and storm water related waste entering the marine environment, including micro particles.	Recommendation and/or guidelines	Ireland, Norway and Sweden.	Background document 2016 Proposal for a recommendation /guidelines by 2017
	Incentives for responsible behaviour/ Disincentives for littering			
43	Assess relevant instruments and incentives to reduce the use of single-use and other items, which impact the marine environment, including the illustration of the associated costs and environmental impacts.		Germany and Ireland	Report by 2016
44	Reduce the consumption of single use plastic bags and their presence in the marine environment, supported by the development of quantifiable (sub) regional targets, where appropriate, and assist in the development of relevant EU initiatives.	Not yet decided	Intersessional Correspondence Group on Marine Litter	Propose a specific target for presence of plastic bags in the marine environment, 2015
45	Encourage international environmental certification schemes to include the management and prevention of marine litter in their lists of criteria.		Netherlands	2016

RAP § no.	Elimination, change or adaptation of the products for environmental benefits			
46	Evaluate all products and processes that include primary micro plastics and act, if appropriate, to reduce their impact on the marine environment.		Belgium, Germany and Netherlands	Report 2015
47	Engage with all appropriate sectors (manufacturing, retail etc.) to explore the possibility of a voluntary agreement to phase out the use of micro plastics as a component in personal care and cosmetic products. Should a voluntary agreement prove not to be sufficient, prepare a proposal for OSPAR to call on the EU to introduce appropriate measures to achieve a 100% phasing out of micro plastics in personal care and cosmetic products.	Not yet decided	Germany and Netherlands with the participation of Belgium, UK and SAR	Voluntary Agreements ongoing Background document 2015 with review in 2017
48	Evaluate the potential harm caused to the marine environment by items such as cigarette filters/butts, balloons, shotgun wads, cotton buds and bio-film support media used in sewage plants. Based on this evaluation, proposals can be made on the elimination, change or adaptation requirements for these other potentially problematic items.	Not yet decided	Germany	Report from TG ML to be submitted 2015
49	Investigate the prevalence and impact of expanded polystyrene (EPS) in the marine environment, and engage with industry to make proposals for alternative materials and/or how to reduce its impacts.		Participation from Portugal	
	Development of sustainable packaging			
50	Engage in a dialogue with industry aimed at highlighting the top marine litter problem items based on OSPAR Beach monitoring surveys and/or other evidence on impacts.		Germany	Report from TG ML to be submitted 2015
51	Explore with industry the development of design improvements to assist in the reduction of negative impacts of products entering the marine environment in order to better inform industry on alternative solutions.			

	Zero pellet loss			
52	Promote initiatives and exchange of best practice aiming at zero pellet loss along the whole plastics manufacturing chain from production to transport.		France, with participation from Germany, Netherlands and Seas at Risk.	2016
	Theme C: Removal Actions			
	Application of Fishing for Litter activities			
53	Strengthen the existing OSPAR recommendation 2010/19 on the reduction of marine litter through implementation of fishing for litter initiatives, including by reviewing the option that any vessel involved in the scheme can land non-operational waste at participating harbours in OSPAR countries.	Recommendation	Netherlands, The United Kingdom and KIMO, with participation from Portugal	2016
	Cleaning environmental compartments and keeping them clean			
54	Establish an exchange platform on experiences on good cleaning practices in beaches, riverbanks, pelagic and surface sea areas, ports and inland waterways. Develop best practice on environmental friendly technologies and methods for cleaning.	Guidelines	ICG-ML with assistance from Germany and Seas at Risk	2016
55	Develop sub regional or regional maps of hotspots of floating litter, based on mapping of circulation of floating masses of marine litter, and identification of hotspots of accumulation on coastal areas and the role of prevailing currents and winds.		Portugal	2018
	Reduction of abandoned, lost and otherwise discarded fishing gear (ALDFG)			

56	Identify hot spot areas through mapping of snagging sites or historic dumping grounds working with other initiatives, research programmes and with fishing organisations.	[France] and Norway	
57	Develop a risk assessment for identifying where accumulations of ghost nets pose a threat to the environment and should be removed.	Germany	Review on going work in HELCOM
	Theme D: Education and outreach		
	Education		
58	Develop marine litter assessment sheets to assist Contracting Parties in developing material for education programmes, including those for professional seafarers and fishermen.	ICG-ML	2016
	Outreach		
59	Establish a database on good practice examples of marine litter measures and initiatives and share this database with other Regional Seas Conventions in order to make action more visible to the public.	Germany, ICG-ML and Secretariat	2016
60	Develop a communication strategy on the Regional Action Plan (RAP) linked in a coherent way with national initiatives/measures. This will include linking the OSPAR website to relevant projects and initiatives.	Secretariat	2015

Annex II

Format for biennial reporting of actions taken at the national level to implement OSPAR's Regional Action Plan for Prevention and Management of Marine Litter in the North-East Atlantic

RAP § no.	Action Summary	Measure taken/proposed	Timeline
	Theme A: Actions to combat sea-based sources of marine litter		
62	Ensuring effective implementation and enforcement of MARPOL Annex V in relation to both fishing and shipping waste.		
63	Investigating markets for plastic waste from the fishing and shipping industry		
	Theme B: Measures to combat land-based sources		
64	Ensuring considerations related to marine litter and actions in this plan are integrated, as appropriate, into the implementation and any future revision of relevant EU Directives.		
65	Seeking cooperation in the river and river basin authorities in order to include impacts of litter on the marine environment in river and river basin management plans.		
66	Promoting and supporting, where appropriate, the inclusion of measures aimed at the prevention and reduction of marine litter in the 2014 revision of the EU's waste legislation.		
67	Including a reference to marine litter, where applicable, in National Waste Prevention Plans and Waste Management Plans.		

OSPAR Agreement 2014-01

68	Entering into dialogue with the waste industry, working towards highlighting waste management practices that impact on the marine environment.	
69	Identifying illegal and historic coastal landfill or dumpsites, including where these might be at risk from coastal erosion, and take action if appropriate.	
70	Promoting Extended Producer Responsibility Strategies requiring producers, manufacturers, brand owners and first importers to be responsible for the entire life-cycle of the product with a focus on items frequently found in the marine environment.	
71	Encouraging the development and implementation of Sustainable Procurement Policies that contribute to the promotion of recycled products	
72	Promoting and enhancing national stakeholder alliances focusing on marine litter.	
	Theme C: Removal measures	
73	Removing barriers to the processing or adequate disposal of marine litter collected in Fishing for Litter initiatives, including landfilling if relevant and in line with waste legislation	
74	Encouraging all fishing vessels to be involved in Fishing for Litter schemes, where they are available.	
75	Ensuring that any vessel involved in the scheme can land non-operational waste collected at sea at any participating harbour.	
76	Undertaking an awareness-raising campaign to make fishermen aware of their obligations under	

	EU Control Regulation (1224/2009) with regard to reporting, marking and retrieval of lost nets	
	Theme D: Education and outreach	
77	Promoting education activities in synergy with existing initiatives in the field of sustainable development and in partnership with civil society.	
78	Promoting curricula for marine-related education, including the recreational sector.	
79	Promoting or adopting environmental awareness courses for fishermen and the fishery sector.	
80	Encourage participation in International, EU and National Litter Cleanup Campaigns.	
81	Promoting the "Adopt a beach" system.	
82	Raising public awareness of the occurrence, impact and prevention of marine litter, including micro plastics.	
83	Supporting/initiating community/business-based producer responsibility schemes or deposit systems, for example on recycling fishing nets.	
84	Developing collective agreements between Contracting Parties, NGOs and industry to tackle particular problems of marine litter.	