

***European Union and its Member States contribution
to the seventeenth meeting of the United Nations Open-ended Informal
Consultative Process on Oceans and the Law of the Sea***

EUROPEAN UNION

Marine debris, plastics and microplastics

(i) Challenges posed by marine debris, plastics and microplastics

The European Environment Agency report, "State of European Seas, 2015" describes that marine litter – and plastic in particular – continues to accumulate in the world's oceans and that European seas are also experiencing this problem. Although the present knowledge base on marine litter in European seas is growing, it is still insufficient to allow for a coherent assessment at a European level. All EU Member States have recognised marine litter as a problem in their waters and 19 EU countries reported on the establishment of monitoring programmes for marine litter in 2014. Litter is also found on the seafloor and in the deepest areas of Europe's seas. A recent large-scale seafloor survey off several European coasts has found widespread presence of bottles, plastic bags, fishing nets, and other types of human litter at all sample locations. These ranged from depths between 35m and 4 500m, covering coastal areas to the Mid-Atlantic Ridge, 2 000 km out in the ocean.

Marine litter has many impacts on marine life and human well-being. Although it is difficult to assess these impacts at EU level, a recent study in the Mediterranean showed that 66 % of 171 seabirds studied were found to have plastic fragments in their stomachs. The critically endangered Balearic shearwater was among the worst affected. The analysis of stomachs of beached fulmars in the southern North Sea showed that 95 % of these seabirds contained plastics, with the average fulmar stomach containing 35 pieces.

Given their size, micro-plastics can be absorbed by organisms throughout the food-web; recent evidence from the Mediterranean has shown that harmful chemicals resulting from the ingestion of micro-plastics can accumulate in the tissues of large plankton-feeding animals, such as baleen whales and some sharks. The high abundance of micro-plastics in the water can also confuse smaller filter-feeders, which feed on plankton and are the base of marine food webs. These smaller filter-feeders often cannot differentiate between micro-plastic and plankton given the plastic concentrations in the water; in the north-western Mediterranean, the ratio between micro-plastics and zooplankton weights in the water samples was found to be 1:2 in offshore waters. The consequences of micro-plastic build-up in the food chain are still largely unknown but since many fish and shellfish are consumed by humans, this is creating potential risks for human health.

The costs caused by marine litter pollution can be quite substantial¹: the potential cost across EU for coastal and beach cleaning was estimated at up to €630 million per year, while the cost to the fishing industry could amount to almost €60 million, which would represent approximately 1% of total revenues of the EU fishing fleet (in 2010). In addition, marine and coastal ecosystem services and biodiversity are resources greatly impaired by marine litter although the quantification of costs of non-action is difficult to estimate.

Land-based activities seem to generate most of the marine litter in the Mediterranean, Baltic and Black Sea. In the North-East Atlantic Ocean, sea-based activities are as important as the land-based sources of marine litter. In the North-East Atlantic, the main sources of marine litter are tourism and recreational activities (mostly on the beach/coast) together with diverse maritime activities, in particular fishing and shipping. In the Mediterranean and Baltic Sea, household related waste is an important fraction of marine litter, mostly coming from solid waste disposal and urban waste water discharges. This type of litter is relatively less important in the North-East Atlantic. In the Black Sea, tourism and recreational activities together with household related waste are the main sources of litter.² Although sources of marine litter have been identified in a broad sense, more knowledge is still needed in terms of quantities.

Plastic marine litter is above all a global problem and therefore effective solutions can only be sought on global level. Since on average plastic marine debris comes predominantly from land based sources, an effective solution must include improved waste prevention and management on land globally. This is a particular challenge because waste management in most regions of our planet has not kept pace with industrial development and evolution of consumption, resulting in ever increasing worldwide quantities of waste and related environmental pollution. As illustrated by the UNEP Global Waste Management Outlook 2015, with 2 billion tonnes per year of municipal solid waste generated, lower income cities in Africa and Asia are predicted to double their municipal solid waste generation within 15-20 years. While progress has been made, 2 billion people are without access to solid waste collection, and 3 billion people lacking access to controlled waste disposal facilities.

- (ii) **Actions and activities that have been undertaken at the national and regional levels** with regard to the provisions of General Assembly resolutions on oceans and the law of the sea and resolutions on sustainable fisheries that relate to marine debris, plastics and microplastics (including with regard to lost, abandoned or discarded fishing gear)

The 7th EU Environment Action Programme³ requires that a headline Union-wide quantitative reduction target for marine litter be established, supported by source based measures and that it

¹ Impact Assessment accompanying the Circular economy Communication issued by the European Commission in July 2014, in http://ec.europa.eu/environment/circular-economy/index_en.htm, "Previous proposal on circular economy", "Impact assessment", "IA target review final", p.115-123

² Information from State of European Seas, 2015

³ Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 'Living well, within the limits of our planet'

takes into account the regional marine strategies. The Marine Strategy Framework Directive⁴ (MSFD) is the dedicated legally-binding instrument for assessing, monitoring, setting targets including for marine litter and on order to reach good environmental status by 2020. The EU has extensive waste management legislation, including prevention measures and recycling targets for plastics, which contributes substantially to the reduction of marine litter and is expected to do even more so when subsequent phases are fully implemented; EU-wide measures were adopted in April 2015 for the reduction of consumption of plastic bags⁵. The Port Reception Facility Directive⁶ (PRF) has contributed to the delivery of higher volumes of ship-generated waste and cargo residues to EU ports and the improvement of management of this waste in port reception facilities. In the Circular Economy Package it put forward in December 2015 the EU Commission, announced that it will also take action to fulfil the objective of significantly reducing marine litter, implementing the 2030 Sustainable Development Goals. The package also refers to the upcoming revision of the PRF Directive to further address the sea-based sources of marine litter.

Within the Regional Seas Conventions around Europe, action plans on marine litter are finalized and under implementation (Mediterranean and Northeast Atlantic, Baltic) or starting (Black Sea). They focus on prevention or reduction of marine litter, address both land- and sea-based sources of marine litter through a range of actions at national or regional level such as improved waste and waste water management, port reception facilities, targeted fishing for litter, education, awareness raising and outreach activities.

The EU Ecolabel on rinse-off cosmetics⁷, such as shampoos and shower gels, already excludes products containing microplastics; detergents and cleaning products are currently under investigation in this respect. A major study as regards options to reduce litter from sea-based sources and micro plastics from cosmetic products is to be published shortly this year.

The knowledge gap concerning sources, pathways and impacts of marine litter is further being filled through a variety of dedicated, more policy-focused projects. The next phase of the European Marine Observation and Data Network (EMODnet), starting this year, will begin to make information on concentrations and inputs of marine litter publicly available in order to guide remediation efforts. From 2017 EMODnet will begin to assemble and harmonise fragmented information on the quantity and nature of litter in Europe's rivers, beaches and seas with a view to making the data available through a common gateway by the end of 2017.

⁴ Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)

⁵ Directive (EU) 2015/720 of the European Parliament and of the Council of 29 April 2015 amending Directive 94/62/EC as regards reducing the consumption of lightweight plastic carrier bags; annual consumption level should not exceed 90 lightweight plastic carrier bags per person by 31 December 2019 and 40 lightweight plastic carrier bags per person by 31 December 2025 in EU Member States, or, by 31 December 2018 Member States shall ensure that in their territory lightweight plastic carrier bags are not provided free of charge at the point of sale of goods or products, unless equally effective instruments are implemented

⁶ Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues

⁷ Commission Decision 2014/893/EU of 9 December 2014 establishing the ecological criteria for the award of the EU Ecolabel for rinse-off cosmetic products

A variety of activities for reduction/prevention/removal of marine litter activities are supported under regional, enlargement and neighbourhood funding initiatives. In order to protect and restore marine biodiversity and ecosystems in the framework of sustainable fishing activities, following on from practical experience in the 2007-2013 European Fisheries Fund, under the European Maritime and Fisheries Fund⁸ (EMFF) the costs of the collection, storage and disposal of waste collected by fishermen in nets during fishing operations including lost fishing gear are eligible for support. The following actions can be financed through the EMFF:

- The removal of lost fishing gear from the sea, in particular in order to combat ghost fishing.
- The purchase and installation of equipment on board for the collection and storage of litter
- The creation of schemes of waste collection for participating fishermen, including financial incentives
- The purchase and, if applicable, the installation of equipment based in fishing port facilities for the storage and recycling of litter
- Communication, information, awareness raising campaigns, to encourage fishermen and other stakeholders to participate in projects to remove lost fishing gear
- Training for fishermen and port agents.

A number of research and innovation projects to better understand the issues and to prevent and reduce marine litter, including via outreach activities, are being funded by the EU⁹.

Beach clean-up initiatives remain important as they raise awareness and engage local communities in this issue. Engagement is important since people's behaviour and perceptions play a key role in littering, together with context specific factors (such as cleanliness of the area or administrative capacity to handle litter) and available waste infrastructure and facilities (RPA, 2013; ARCADIS, 2013). The EEA has developed Marine LitterWatch¹⁰, a citizen science based tool (a mobile app) that can help fill data gaps relevant for policy and thus provide support to European policy making, while raising awareness about the problem of litter and the policy response to it; it is already being used in European-wide campaigns, such as the Ocean Initiatives.

At the international level, the EU is also supportive of measures to address the issue of discarded, lost or abandoned fishing gear including those adopted by different regional fisheries management bodies such as those by the North Atlantic Fisheries Organisation. The EU is also committed to reducing marine litter, domestically and at the global level, including as an important component of its priority for better ocean governance.

⁸ Regulation (EU) N° 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund

⁹ Examples include the microplastics in the two seas area (Northsea and Channel area) with a total budget of €3 million and the CleanSea project, involving 17 partners from all EU marine regions with budget of €3,8 million) The "Guardians of the Sea" project promotes a reduction of the EU fishing fleet whilst preserving jobs in coastal communities; vessels and crew are re-assigned to environmentally sustainable activities, in particular the collection of marine litter such as abandoned nets (€1.8 million)

¹⁰ http://www.eea.europa.eu/themes/coast_sea/marine-litterwatch

(iii) **Suggestions for further action to prevent and significantly reduce marine debris, plastics and microplastics**

In this regard, the commitments of States in “The Future We Want” and in Goal 14 of “Transforming Our World: the 2030 Agenda for Sustainable Development” are pertinent. Measures which could be undertaken to support these commitments include:

- Collection and consolidation of data with a view to creating a broadly acceptable reference basis/baseline which would be necessary for supporting assessment and for monitoring progress in reduction of marine litter and its impacts; such baseline will support fulfilment of the Rio+20 commitment for a significant reduction of marine litter and of SDG 14;
- Identification of hot-spots for coordinated removal actions, after risk assessment and adequate evaluation of environmental impacts and socioeconomic feasibility of removal options;
- Promotion of action at regional level, including through enhancing exchange of best practices among regional seas organisations;
- Support of coordination at international level of monitoring and assessment methodologies for marine litter and its impacts;
- Development of guidelines by the Food and Agriculture Organisation of the United Nations with regard to discarded, lost or abandoned gear;
- Advance in assessment of cost of ecosystem benefits' and services' degradation due to marine litter, with a view to better promoting marine litter relevant investments, such as in waste and waste water collection and treatment;
- Supporting efforts by developing countries to tackle waste management;
- Need for compliance with related Multilateral Environmental Agreements, in particular the Basel Convention for the transboundary Movements of Hazardous Wastes and Their Disposal and further development and implementation of instruments on environmentally sound management of waste.

Executive summary:

Marine litter – and plastic in particular – is accumulating in the world’s oceans; European seas are also experiencing this problem. All EU Member States have recognised marine litter as a problem in their waters and 19 EU countries have reported in 2014 the establishment of monitoring programmes for marine litter. The financial costs caused by marine litter pollution are substantial; marine and coastal ecosystem services and biodiversity are resources greatly impaired by marine litter and their degradation reduces their economic value.

The problem of plastic marine litter is global and collective and coordinated efforts to address it are required. In many regions of our planet waste management practices have not kept pace with industrial development and increased consumption; pollution from waste, including in the marine environment, has aggravated.

Several EU policies and pieces of legislation are directly or indirectly related to marine litter. The Marine Strategy Framework Directive (MSFD) is the dedicated instrument for assessing, monitoring, setting targets and reaching good environmental status by 2020, including marine litter; extensive waste management legislation, including prevention measures and recycling targets for plastics, contributes substantially to the reduction of marine litter; EU-wide measures for the reduction of consumption of plastic bags are also in place. The Port Reception Facility (PRF) Directive has contributed to the delivery of higher volumes of ship-generated waste and cargo residues to port reception facilities in EU ports, as well as the management of the waste from ships in these facilities. In the Circular Economy Package it put forward in December 2015 the EU Commission, announced that it will take action to fulfil the objective of significantly reducing marine litter, thus also implementing relevant targets under the 2030 Sustainable Development Goals; the upcoming revision of the PRF Directive will further address the sea-based sources of marine litter.

A variety of activities for reduction/prevention/removal of marine litter activities are supported under regional, enlargement and neighbourhood funding initiatives. In order to protect and restore marine biodiversity and ecosystems in the framework of sustainable fishing activities, the European Maritime and Fisheries Fund (EMFF) supports the collection of waste by fishermen from the sea such as lost fishing gear. Measures adopted by Regional Management Fisheries Bodies with regard to abandoned, lost or discarded gear are also implemented. Marine LitterWatch is a citizen science based tool that can help fill data gaps relevant for policy, while raising awareness about the problem of litter. A number of research and innovation projects to better understand the issues and to prevent and reduce marine litter, including via outreach activities, are being funded by the EU.

Among suggestions for further action, the EU and its Member States would highlight creating a reference basis/baseline for supporting assessment and monitoring progress, facilitating fulfilment of the Rio+20 commitment for a significant reduction of marine litter and of SDG 14, assessing the effectiveness of removal measures and methodology for prioritisation of hot-spots for coordinated removal actions; promotion of action at regional level, coordination of monitoring and assessment methodologies; development of guidelines by the Food and Agriculture Organisation of the United Nations with regard to discarded, lost or abandoned gear; advance in assessment of costs resulting from degradation or loss of ecosystem benefits and services; supporting efforts in developing countries to tackle waste management; and better compliance with related Multilateral Environmental Agreements, in particular the Basel Convention for the transboundary Movements of Hazardous Wastes and Their Disposal and further development and implementation of instruments on environmentally sound management of waste.

BELGIUM

Marine Litter and Microplastics

Belgian contribution

- **Governmental Organizations working around marine litter in Belgium**

Federal Public Service of Health, Food Chain Safety and Environment, DG Environment

www.health.belgium.be

The Royal Belgian Institute of Natural Sciences (MUMM)

<http://www.mumm.ac.be/EN/>

Public Waste Agency of Flanders (OVAM)

www.ovamenglish.be

Flanders marine Institute (VLIZ)

<http://www.vliz.be/>

Institute for Agriculture and Fisheries Research (ILVO)

www.ilvo.vlaanderen.be

- **National Legislation and control**

Belgium has adopted the “MMM act” (act of 20 January 1999 on the protection of the marine environment in sea areas under Belgian jurisdiction) that establishes the legal basis for the protection of the Belgian part of the North Sea against sea-related pollution and for the conservation, restoration and development of nature. Article 17 of this act contains restrictions concerning discharging or illegal dumping of waste in the marine environment. This legislation is enforced by patrols by airplane and boat. The enforcement is a collaboration between several federal competent authorities such as the Belgian Waterway Police, the Belgian Navy, the MUMM and the Federal Public Service of Health, Food Chain Safety and Environment.

- **European and Regional action plans**

MSFD

Belgium has taken marine litter into account in its Programme of Measures of the MSFD (the public consultation ran from 13 May to 15 July 2015). On top of the existing measures related to descriptor 10 (Properties and quantities of marine litter do not cause harm to the coastal and marine environment) such as awareness raising campaigns, Clean Beach Actions, waste management plans, monitoring activities and Fishing for Litter, Belgium has included some extra measures such as awareness raising campaigns on waste management in recreational ports/ for recreational boating, improving waste deposit system for fishing vessels, investigating the prevalence and impact of dolly rope, promoting alternative fishing lead, etc.

OSPAR

Belgium participates in the OSPAR Regional Action Plan on Marine Litter, as well as in the OSPAR Monitoring Marine Beach Litter Programme. Belgium takes also part in the Intersessional Correspondence Group on Marine Litter.

In the OSPAR Regional Action Plan on Marine Litter (RAP ML), Belgium takes up an active role in the following actions :

Action 30

Ensure regional coordination on the implementation of EU Directive 2000/59/EC in relation to MARPOL Annex V ship-generated waste.

Action 34

Improve implementation of the ISO standard 21070 in relation to port reception facilities

Action 46

Evaluate all products and processes that include primary micro plastics and act, if appropriate, to reduce their impact on the marine environment.

Action 47

Engage with all appropriate sectors (manufacturing, retail etc.) to explore the possibility on a voluntary agreement to phase out the use of microplastics 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 microplastics in personal care and cosmetic products.

- **Projects, Campaigns and Awareness raising**

Belgian participation in the yearly worldwide beach cleaning event 'Eneco clean beach cup'

<http://www.enecocleanbeachcup.be>

Belgian documentary on plastic in the North Sea (in Dutch).

<http://www.een.be/programmas/koppen/noordzee-vol-plastic>

The Federal Public Service of Health, Food Chain Safety and Environment of Belgium launched a research project for the development of a tool that will help companies prevent the emission of primary microplastics in the environment.

http://www.health.belgium.be/eportal/Environment/19103821_EN?backNode=83#.Vpyg-nFViko

Belgian participation to the Fishing For Litter programme since 2009. The programme has two aims: to remove marine litter from the marine environment and to raise awareness of marine litter issues within the fishing industry.

Aiming at awareness raising, the Federal Public Service of Health, Food Chain Safety and Environment created bookmarks with tips to protect our marine environment, among which how to prevent marine litter, that can be distributed during a variety of events.

<http://www.health.belgium.be/eportal/Environment/MarineEnvironment/index.htm#.Vpy-L3FVikp>

Executive Summary:

In 1999, Belgium has adopted the “MMM act” (act of 20 January 1999 on the protection of the marine environment in sea areas under Belgian jurisdiction) that establishes the legal basis for the protection of the Belgian part of the North Sea against sea-related pollution and for the conservation, restoration and development of nature. Article 17 of this act contains restrictions concerning discharging or illegal dumping of waste in the marine environment. This legislation is enforced by daily patrols by airplane and boat. The enforcement is a collaboration between several federal competent authorities such as the Belgian Waterway Police, the Belgian Navy, the MUMM and the Federal Public Service of Health, Food Chain Safety and Environment.

On top of that, Belgium has taken marine litter into account in its Programme of Measures of the MSFD (the public consultation ran from 13 May to 15 July 2015). On top of the existing measures related to descriptor 10 (Properties and quantities of marine litter do not cause harm to the coastal and marine environment) such as awareness raising campaigns, Clean Beach Actions, waste management plans, monitoring activities and Fishing for Litter, Belgium has included some extra measures such as awareness raising campaigns on waste management in recreational ports/ recreational boating, improve waste deposit system for fishing vessels, investigate the prevalence and impact of dolly rope, promoting alternative fishing lead, etc.

Belgium also participates in the OSPAR Regional Action Plan on Marine Litter, in the OSPAR Monitoring Marine Beach Litter Programme, as well as in the Intersessional Correspondence Group on Marine Litter. In the OSPAR Regional Action Plan on Marine Litter (RAP ML), Belgium takes up an active role 4 different actions concerning the implementation of EU Directive 2000/59/EC in relation to MARPOL Annex V ship-generated waste, the implementation of the ISO standard 21070 in relation to port reception facilities, the evaluation of all products and processes that include primary micro plastics and its related actions to reduce their impact on the marine environment, and the engagement with all appropriate sectors (manufacturing, retail etc.) to explore the possibility on a voluntary agreement to phase out the use of microplastics as a component in personal care and cosmetic products.

FRANCE

Challenges posed by marine litter: actions and activities undertaken by France, and suggestions to prevent and significantly reduce marine debris, plastics and microplastics

French contribution

The presence of debris, plastics and microplastics in marine environment is an important issue of concern, causing many environmental impacts, especially on marine fauna (marine mammals, sea turtles, seabirds, but also plankton) that can ingest or become entangled in such litter. Moreover, it is the entire food chain that could be affected.

This growing matter makes it urgent to have a common and vigorous action against it. However, once litter is present in marine environment, it is often too late to act. As a result, pollution prevention at source is a key aspect for tackling the challenge of marine litter.

In France, water policy as well as prevention and waste management policy are main instruments, at both national and European levels, in order to reduce sea-related pollution.

Therefore, the governance and existing planning tools in these areas must be mobilized to create synergy effects. Nevertheless, the removal of cross-border and global pollution cannot succeed without coordinated efforts between countries sharing the same waters.

- **Actions and activities undertaken by France, at national and regional levels**

France has identified fighting against marine litter as a priority, at the national Environmental Conference of 2013, **adopting a road map with concrete measures** to reduce the flows of marine litter, such as the generalization of litter sorting by flow by companies and improving efficiency of individual sorting.

France has also adopted an ambitious **action plan for prevention of waste** for the period 2014-2020 and a **specific program of measures for marine environment** aimed at **implementing European directives** (Marine Strategy Framework Directive, Waste Framework Directive) and international regulation such as regional sea convention (OSPAR, Barcelona).

In addition, considering that the most part (about 80%) of marine pollution is caused by land-based activities, the French **River Basin Management Plans** have been revised late last year to incorporate provisions to organize the fight against aquatic waste in drainage basins (recommendations to reduce litter carried by rainwater and sewage waters, and by rivers and streams). This is an important improvement decided by France, to ensure a **better coordination between the two main water management policies**: one on freshwater management and the other on marine strategy.

This desire to reduce pollution at source was reflected for example by the adoption of the “**Energy Transition Law for a Green growth**” on 22 July 2015, which provides for:

- a ban on all "oxo-fragmentable" plastic packaging (18/08/2015),
- the end of single-use plastic bags available at cash-desks (01/01/2016),
- the end of the possibility for consumers to get other types of single-use plastic bags (for example those dedicated to fruits and vegetables) in shops, excepting biobased bags compostable in home composting (01/01/2017),
- a ban on non-biodegradable, non-compostable (in home composting) plastic packaging for press mailings and advertising (01/01/2017),
- and the end of disposable plastic plates and glasses availability, excepting biobased compostable in home composting (01/01/2020).

Among other objectives, several measures concerning marine litter have been set up by the French Ministry of Ecology, Sustainable development and Energy (most of them are taken from the French Marine Strategy for 2015-2021):

- to **encourage companies to develop new markets** and therefore to enhance innovation. As territorial collectivities are required to elaborate waste management and prevention plans, including professional waste, sharing best practices has been proposed, not only on waste management but also on waste prevention, which is a very important element to fight marine litter. The extended producer responsibility ("EPR"), **encouraging eco-design of products through eco-modulating contributions of companies that put products on the market** (bonus / malus system based on sustainability and recyclability of products and the presence or absence of disruptive elements for recycling), is an attractive means of implementing these actions. In France, eco-design is increasingly encouraged via EPR system.
- **To encourage ports** (fishing, boating...) **to ensure adequate waste management services** and their users to sort and bring their waste ashore. For example the association “Vacances Propres” (“Clean holidays”) launched a campaign intended for boaters, called “**I am sailing, I am sorting. Let’s stop littering!**” (distribution in Ports of recycling bags to be used on board by boaters for waste packaging). **Responsibility of professional sectors** has to be accompanied by both approaches for prevention and optimal management (recycling and recovery). Identifying flows and waste treatment sectors of fishing and shellfish farming, as part of local plans for prevention and waste management will also contribute to this process, according to action 35 of Marine Litter Regional plan “OSPAR” (identify the options to address key waste items from the fishing industry and aquaculture including deposit schemes, voluntary agreements and extended producer responsibility).
- **To limit the transfer of marine litter during dredging operations**, identifying and promoting the most relevant devices.

The Ministry of Ecology support also several **research or studies programs** to improve knowledge in this area, either on the marine litter situation, its impacts on environment, health or economy, or on waste treatment processes. For example, the project “MICROPLASTIC”, financed by an Interdepartmental Recovery Fund, aims to define and to draw up tools for microplastic pollution detection, risk management and recycling in the land-sea interface.

- **Challenges**

For France, in addressing marine litter issues, it is relevant to control litter production at the beginning of the chain, and to convince consumers to adopt more sustainable practices. As an example **the reduction of the use of plastic bags** should be a priority.

1. From this point of view, France is planning to work more specifically on the following topics :
 - general public information, awareness-raising and education
 - collection, treatment and recycling of end-of-life fishing gear
 - industrial plastic pellets (zero pellet loss)
 - microbeads in personal care or cosmetic products
 - identification of accumulation zones and priority issues
2. Moreover, **France wants to develop international cooperation initiatives**, concerning marine litter. Indeed, the Framework Act on Development and International Solidarity Policy (LOP-DSI) adopted by France in 2014, offers the possibility to local authorities in charge of household waste collection and treatment (those that receive the tax on the removal of household refuse), to conduct development cooperation or humanitarian aid projects in this areas.

- **Conclusion**

Marine debris, plastics and microplastics adversely damage the marine environment. The challenges posed by marine litter will only be solved in the long term with a global governance of oceans and coordinated actions by states and other relevant stakeholders. France looks forward to the 17th session of the open ended informal consultative process which reflects the increasing awareness of the international community on the need to tackle this critical issue.

Useful contacts

Ministry of Ecology, Sustainable Development and Energy

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Sub-Directorate of Coastal and Marine Environment

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GERMANY

Marine Litter and Microplastics

German contribution

Marine litter is widely recognized as a global problem that poses severe threats to the marine and coastal environment, wildlife and society. Currently, overall marine litter stems from land-based sources, with regional variations. Remaining portions are made up of sea-based remnants from fisheries (net fragments) and shipping (ropes). There are several aspects that make human beings vulnerable to marine litter. As a consequence the global perception of marine litter has changed. The issue has attracted media and political attention and has prompted governments, industries and civil society to take action. Given that marine litter is already being addressed in many different ways, creating a common understanding of what remains to be done, and making use of already existing regional action plans (e.g. OSPAR, NOWPAP) is key to successfully tackle this problem; as is the identification of concrete actions and measures in order to effectively reduce marine litter.

The German G7 presidency in 2015 has initiated a global movement and has drawn up the G7 Action Plan to combat Marine Litter. Following the decisions made at the Leaders' summit in Elmau, the G7 countries, in cooperation with stakeholders (NGOs, industry and science), have compiled a comprehensive set of measures that define more precisely the priority actions of the action plan agreed in Elmau. The focus now lies on concrete measures, both within the G7 countries as well as in partner countries under the priority fields 'Actions to address land based sources of marine litter', 'Removal Action', 'Actions to address sea-based sources of marine litter', 'Education, research and outreach' as well as regards timelines.

During their meeting on October 8.-9. 2015 in Berlin, the G7 science ministers agreed upon a common interdisciplinary research and education programme. Based on existing initiatives they will strengthen additional research efforts to better understand the extent and impacts of plastic waste. Explicitly, they decided to commonly explore options to reduce the intrusion of plastics in seas and oceans.

SWEDEN

Marine Litter and Microplastics

Swedish contribution

(i) Challenges posed by marine debris, plastics and microplastics

As a result of circulation currents in the North Sea, the Swedish West Coast is heavily affected by marine debris floating a shore. The problem with marine debris is therefore of concern for Sweden nationally, regionally and globally.

(ii) New national and regional measures for marine litter

National measures for marine litter

Sweden has developed a strategy for its marine waters in accordance with the EU marine strategy framework directive (2008/56/EC) with the purpose to achieve good environmental status (GES) by 2020. The strategy includes a programme of measures (PoM), which involves five new measures for marine debris¹¹: 1) promote efficient and sustainable collection and reception of lost fishing gears and prevent the losses of new ones, 2) develop a national information/awareness campaign for the public addressing commonly found marine litter items (including micro plastic), their negative impact on the environment and the link to consumer behaviour, 3) support initiatives which promote, organise and perform beach cleaning in particularly affected areas, 4) include marine litter in relevant waste management plans and waste preventing programs, where the significance of waste management for preventing marine litter is highlighted. Material flows of plastic need to be prioritised and policy instruments should be investigated with the aim of reducing the prevalence of plastic items in the marine environment, and 5) during revision of municipal waste plans, identify and highlight how waste management can contribute to reduce the occurrence of marine litter and establish objectives for their work.

Concerning the implementation of measures 4) and 5), The Swedish Environmental Protection Agency has been commissioned to identify significant sources in Sweden of plastic microparticles released into the marine environment and to act to reduce the origination and release of microplastics from these sources.

The Swedish EPA shall identify the sources in Sweden and prioritize these in order of those that should be addressed to reduce the microplastic releases. Sources that should be included in the assessment include packaging material, chemical products, plastic fibres and textiles, building materials, plastics in agriculture, tires, and artificial grass. The commission includes possible measures for reducing such releases at both the source of and in the disbursal pathways for these microplastics.

The Swedish EPA shall also track developments in this regard in the EU and internationally. If national measures are deemed appropriate or possible, then an overview assessment shall be conducted of the advantages and disadvantages related to various control instruments, both for Europe and the international community.

¹¹ <https://www.havochvatten.se/download/18.596b74d91518c04d181511cd/1450350932658/atgarder-atgardsprogram-for-havsmiljon-015-lista.pdf>

The commission also includes compiling current understanding in research as to the best available technology for wastewater systems, and to propose measures as necessary.

Authorities tasked to protect marine and water environments, and with regulatory authority for products and operations that may contribute to dispersal of microplastics will contribute to the immediate commission. And this will be conducted in collaboration with municipalities and county councils, industry associations within the business sector, waste treatment organisations, environmental organisations and other affected parties.

The commission shall be reported to the Ministry of the Environment and Energy on or before 15 June 2017.

The Swedish Chemicals Agency (KemI) has been commissioned to propose national measures to restrict the use of micro-plastics in cosmetic products. In its report to the government 15 January 2016, KemI proposes to ban the sale of cosmetic products that are rinsed and that contain plastic microbeads. Examples of products that would be covered by the ban are shower gels and products for peeling and face wash. The ban should enter into force 1 January 2018. In parallel, it is recommended that an EU-wide ban be introduced. The proposal is basically in line with the ban that was adopted in USA in December 2015.

Regional Action Plans on Marine Litter (RAP ML) within OSPAR and HELCOM

Sweden has actively been involved in order to get the RAP ML of OSPAR and HELCOM adopted. Sweden is partially responsible for two of the OSPAR actions¹². The purpose of the first action is to develop and promote best practice for the fishing industry in relation to marine debris, with focus on waste management on board, in harbours and operational losses. The purpose of the second action is to investigate and promote the use of best available techniques and best environmental practice in order to develop sustainable and cost-effective solutions to reduce and prevent sewage and storm water related waste entering the marine environment, including micro particles.

Sweden is responsible for two of the HELCOM actions¹³, which are similar to the OSPAR actions. The first is about compiling information and preparing a report on removal of micro particles in waste water treatment plants, taking into account similar action within OSPAR. The second action is, based on the OSPAR outcome, to promote and disseminate best practice for the fishing sector in relation to marine debris, with focus on waste management on board, in harbours and operational losses.

Projects lead and co funded by Sweden

Sweden will act as a lead partner for two EU-projects that starts in 2016 and ends 2018. 1) MARELITT BALTIC takes a regional approach to address derelict fishing gears in the Baltic Sea. The project will develop a comprehensive methodology focused on: mapping and cleaning of sea areas, reception and recycling facilities in harbours and preventive measures to reduce losses in the future. 2) BLASTIC relates to Plastic waste pathways into the Baltic Sea. The project will demonstrate how plastic waste in urban areas finds its ways to the Baltic Sea in order to identify and prioritize measures on how to reduce litter streams from land to sea.

The results of these projects can be used to fulfil some of the actions within the HELCOM action plan.

Research projects co funded by Sweden

Sweden participate in the EU coordination platform JPI Oceans. Still a lot of knowledge about the potential risks of micro-plastics is unknown. Therefore four projects on micro plastics will work

¹² http://www.ospar.org/site/assets/files/2019/p00643_mlrap_brochure.pdf

¹³ <http://helcom.fi/Lists/Publications/Regional%20Action%20Plan%20for%20Marine%20Litter.pdf>

towards harmonising methods for monitoring, extracting and analysing microplastic particles with focus on the ecotoxicological effects of the particles on marine life¹⁴.

(iii) Suggestions for further action to prevent and significantly reduce marine debris, plastics and microplastics

On a global level, Sweden considers improvements of waste management infrastructure being crucial to solve the problem with plastic entering the oceans covering the whole chain from consumption, waste collection, waste disposal and treatment of effluents from urban areas. This also includes improving reception capacity in harbours of ship waste as well as incentives for the use of such facilities. There are also sources of microplastics from consumer products that should be phased out as well as improved handling of plastic pellets to reduce spillage.

Waste often includes a substantial fraction of substances that can be recycled and the possibilities to view waste as a resource should therefore not be underestimated.

Executive Summary:

The Swedish West Coast is heavily affected by marine debris floating a shore. The problem with marine debris is therefore of concern for Sweden nationally, regionally and globally.

Sweden has developed a strategy for its marine waters with the purpose to achieve good environmental status (GES) by 2020. The strategy includes measures for marine debris¹⁵: 1) promote efficient and sustainable collection and reception of lost fishing gears and prevent the losses of new ones, 2) develop a national public awareness campaign, 3) supportive initiatives for beach cleaning, and 4) reduction of marine litter in municipal waste management plans and waste preventing programs and investigate material flows of plastic and policy instruments.

The Swedish Environmental Protection Agency (EPA) has been commissioned to identify significant sources of plastic microparticles to the marine environment and to reduce the origination of microplastics from these sources. The commission includes possible measures for reduction both at the source and in the disbursal pathways, track developments in this regard in the EU and internationally and compile current research concerning BAT and finally propose measures. The commission shall report June 2017.

The Swedish Chemicals Agency (KemI) has been commissioned to propose national measures to restrict the use of microplastics in cosmetic products and proposes to ban the sale of cosmetic products in Sweden, that are rinsed and that contain plastic microbeads. The proposal is basically in line with the ban that was adopted in USA in December 2015.

Sweden has been actively in order to get the Regional Action Plans on Marine Litter of OSPAR and HELCOM adopted. Sweden is partially responsible OSPAR and Helcom actions related to¹⁶, 1) development and promotion of best practice for the fishing industry in relation to marine debris, 2) investigate and promote the use of BAT and best environmental practice in order to develop

¹⁴ <http://www.jpi-oceans.eu/news-events/news/results-%E2%82%AC75-million-call-microplastics-published>

¹⁵ <https://www.havochvatten.se/download/18.596b74d91518c04d181511cd/1450350932658/atgarder-atgardsprogram-for-havsmiljon-015-lista.pdf>

¹⁶ http://www.ospar.org/site/assets/files/2019/p00643_mlrap_brochure.pdf

sustainable and cost-effective solutions to reduce and prevent sewage and storm water related waste entering the marine environment, including micro particles.

Sweden is as a lead partner for two EU-projects that starts in 2016. 1) MARELITT BALTIC takes a regional approach to address derelict fishing gears in the Baltic Sea and preventive measures to reduce losses in the future. 2) BLASTIC relates to Plastic waste pathways into the Baltic Sea and in order to identify and prioritize measures on how to reduce litter streams from land to sea. Sweden also participate in the EU coordination platform JPI Oceans which includes four projects focusing on harmonising methods for monitoring, extracting and analysing microplastic particles with focus on the ecotoxicological effects of the particles on marine life¹⁷.

¹⁷ <http://www.jpi-oceans.eu/news-events/news/results-%E2%82%AC75-million-call-microplastics-published>