Marine Debris and International Forums





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A threat with global dimension

The world's oceans are faced with an increasing number of anthropogenic induced threats, including underwater noise, overfishing, toxic contamination and the worrying rising sea-levels. Another such threat is that of marine plastic pollution, leading to significant stressors on the marine and coastal environments. As is the case with a number of other threats facing our generation, marine plastic pollution is a cross-border threat that is not limited to national coastal borders or a specific cardinal direction. Approximations indicate that an estimated 4.8-12.7 million tonnes of new plastic end up in the world's oceans every single year. Acknowledging the transnational dimension of marine debris, and marine plastic pollution in particular, as well as the alarmingly growing scope of new material entering our waterways annually, the international community has addressed the issue in a number of forums, albeit to varying degrees and effect.

A review of the available Resolutions adopted by regional and global multilateral environmental agreements (MEAs) and Conventions has allowed for a number of conclusions; **a. marine plastic pollution (and marine debris in general)** has received due attention in a number of forums, **b. Parties have thus acknowledged the urgency to develop sustainable solutions**, **c. there seems to be a general consensus on the urgency of immediate action**, and lastly **d. the private sector¹ plays an essential role in curbing the threat**.

The workings of the following forums were considered:

- 1. The Convention on Biological Diversity (CBD)
- 2. The Convention on the Conservation of Migratory Species of Wild Animals (CMS)
- 3. The Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic Area (ACCOBAMS)
- 4. Agreement on the Conservation of Small Cetaceans in the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS)
- 5. The United Nations Environment Assembly of the United Nations Environment Programme (UNEA/UNEP)
- 6. The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) and its Protocols
- 7. International Whaling Commission (IWC)

Finally, the overview below is not intended to shape your opinion. Rather, the aim is to get a better understanding of what forums have addressed marine plastic pollution, in what way they have done so, and more importantly the tools and instruments deployed in marine debris conservation efforts. Therefore, the authors have attempted to keep opinion to a minimum.

¹ The term private sector will be considered in its broadest scope and will include businesses and other non-governmental entities.

Table of Contents

1.	Convention on Biological Diversity (CBD)	4
	a. Decision VIII/17 Private-Sector engagement	4
	b. Decision X/21 Business engagement	4
	c. Decision XI/7 Business and biodiversity	5
	d. Decision XI/18 Marine and coastal biodiversity: sustainable fisheries and addressing adverse impacts	
	of human activities, voluntary guidelines for environmental assessment, and marine spatial planning	6
	e. Decision XII/10 Business engagement	6
	f. Decision XIII/10 Addressing the impacts of marine debris and anthropogenic underwater noise	
	on marine and coastal biodiversity	7
2.	Convention on the Conservation of Migratory Species of Wild Animals (CMS)	11
	a. UNEP/CMS/Resolution 10.4 Marine Debris	11
	b. UNEP/CMS/Resolution 11.30 Management of Marine Debris	12
3.	United Nations Environment Assembly of the United Nations Environment Programme (UNEA/UNEP)	13
	a. Resolution 1/6 Marine plastic debris and microplastics	13
	b. Resolution 2/11 Marine plastic debris and microplastics	14
4.	The Convention for the Protection of the Marine Environment and the Coastal Region	
	of the Mediterranean (Barcelona Convention) and its Protocols	15
	a. Decision IG. 21/7 Regional Plan on Marine Litter Management in the Mediterranean in the Framework of Article 15 of the Land Based Sources Protocol	15
		13
5.	Agreement on the Conservation of Cetaceans in the Black Sea Mediterranean Sea and Contigous Atlantic Area (ACCOBAMS)	16
	Atlantic Area (ACCODAMIS)	10
	a. Resolution 4.8 Contribution From ACCOBAMS To The Implementation Of The Marine Strategy Framework	
	Directive (MSFD)	16
6.	Agreement on the Conservation of Small Cetaceans in the Baltic, North Atlantic,	
	Irish and North Seas (ASCOBANS)	17
	a. Resolution No. 2 Activities of the ASCOBANS Advisory Committee and Work Plan	17
	b. Resolution No. 2 Work Plan for the ASCOBANS Advisory Committee and Secretariat 2017-2020 and	
	Strategic Plan for Migratory Species 2015-2023	18
	c. Resolution No. 9 Managing Cumulative Anthropogenic Impacts in the Marine Environment	18
7.	International Whaling Commission (IWC)	19
	a. Resolution 2014-2 on Highly Migratory Cetaceans	19
	b. Workshop held by IWC in 2013 and 2014	19
	nex I: Table summary of Resolutions and Decisions as relevant to marine debris/marine litter/	
ma	arine plastic pollution	21

1. Convention on Biological Diversity (CBD)

a. Decision VIII/17 Private-Sector engagement

Decision adopted at the 8th Meeting of the Parties in 2006

"(a) The private sector is arguably the least engaged of all stakeholders in the implementation of the Convention, yet the daily activities of business and industry have major impacts on biodiversity. Encouraging business and industry to adopt and promote good practice could make a significant contribution towards the 2010 target and the objectives of the Convention;

Noting that the following types of tools and mechanisms may be of use in facilitating contributions from business and industry towards the implementation of the Convention and its 2010 target:

- (a) Awareness-raising materials and training workshops on business and biodiversity issues;
- (k) Public-private partnerships,
- 1. *Urges* national focal points, working with relevant government departments, to communicate the importance of biodiversity to companies operating within the jurisdiction of Parties, including state-owned companies and small and medium enterprises, to engage such companies in the development of national biodiversity strategies and action plans, and to encourage such companies to adopt practices that support the implementation of national biodiversity strategies and action plans and the objectives of the Convention;
- 2. Encourages national focal points, where appropriate, to include private sector representatives on national delegations to meetings of the Subsidiary Body on Scientific, Technical and Technological Advice, the Conference of the Parties, and other intergovernmental meetings, and nominate them to participate in technical expert groups;
- 3. *Requests* the Executive Secretary to compile information on the business case for biodiversity and good biodiversity practice, and to make this information available through the clearing-house mechanism;
- 4. Further requests the Executive Secretary to include the private sector as a target audience for its outreach materials and in the Global Initiative on Communication, Education and Public Awareness (CEPA);
- 5. Invites businesses and relevant organizations and partnerships, such as the Finance Initiative of the United Nations Environment Programme, to develop and promote the business case for biodiversity, to develop and promote the wider use of good practice guidelines, benchmarks, certification schemes and reporting guidelines and standards, in particular performance standards in line with the 2010 indicators, to share information on biodiversity status and trends, and to prepare and communicate to the Conference of the Parties any voluntary commitments that will contribute to the 2010 target;"
- b. Decision X/21 Business engagement

Decision adopted at the 10th Meeting of the Parties in 2010

"Realizing the need to incorporate biodiversity concerns into existing and emerging private-sector initiatives and operations,

Emphasizing the interest and capacities of private enterprises, including small and medium-sized enterprises, in the conservation and sustainable use of biodiversity and ecosystem services as a source for future business operations, and as a condition for new business opportunities and markets,

Recognizing the importance of drawing on the capacities of business and private enterprise,

- 1. Invites Parties:
- (a) To promote a public-policy environment that enables private-sector engagement and the mainstreaming of biodiversity into corporate strategies and decision-making in a manner that contributes to the achievement of the three objectives of the Convention;

- (b) To create conditions that facilitate private-sector engagement, *inter alia* and as appropriate, for: transparent reporting against which to assess implementation; independent assessments; and terms and conditions for partnership initiation and termination;
- (c) To identify a range of options for incorporating biodiversity into business practices that take into account existing developments under various forums, including relevant institutions and non-governmental organizations, such as the Business and Biodiversity Offsets Programme, the International Union for Conservation of Nature, the United Nations Environment Programme, the Biotrade Initiative of the United Nations Conference on Trade and Development, the World Business Council for Sustainable Development, the Organisation for Economic Cooperation and Development, Nippon Keidanren, the Business and Biodiversity Initiative initiated at the ninth meeting of the Conference of the Parties;
- (d) To support the establishment of national and regional business and biodiversity initiatives and to strive towards a global partnership on business and biodiversity by inviting ongoing initiatives and other interested stakeholders to be part of the business and biodiversity initiative, and to take note of the Jakarta Charter;
- (f) To develop ongoing dialogue with the business community in relation to biodiversity considerations and activities;"
- 2. Encourages businesses and the private sector:
- (a) To contribute to the implementation of the Convention as well as its Strategic Plan for Biodiversity 2011-2020 and its targets, and refer to them, as appropriate, for defining concrete and measurable biodiversity targets for their operations;
- 3. Requests the Executive Secretary, subject to the availability of resources and in collaboration with relevant organizations and initiatives, such as those mentioned in paragraph 1 (c) above:
- (a) To encourage establishment of the national and regional business and biodiversity initiatives by facilitating a forum of dialogue among Parties and other Governments, business, and other stakeholders, with a particular focus on the global level;
- (f) To encourage businesses that endorse the objectives of the Convention and its Strategic Plan for Biodiversity 2011-2020 in communicating their biodiversity-relevant activities to their consumers, customers, and other stakeholders.
- c. Decision XI/7 Business and biodiversity

Decision adopted at the 11th Meeting of the Parties in 2012

- "1. Calls upon businesses to continue liaising with national governments, civil society organizations, academia and other stakeholders to formulate relevant actions for biodiversity conservation and for the sustainable use of its components and ecosystem services and for the fair and equitable sharing of benefits arising from the utilization of genetic resources that are aligned with the Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets, in accordance with nationally defined priorities and national conditions;
- 3. Invites Parties to:
- (a) Consider promoting the integration of biodiversity and ecosystem services values into private sector activities, including large and publically listed companies, taking into account the findings and recommendations of the TEEB for Business Report and the work undertaken within the framework of national ecosystem assessments, and taking into consideration the needs and circumstances of small and medium-sized enterprises, in particular in developing countries and countries with economies in transition;
- (c) Consider, according to priorities and national circumstances, policies and legislation that halt biodiversity loss and reduce incentives, including subsidies, that are harmful to biodiversity or have biodiversity impacts, taking into account the needs and circumstances of developing countries and those with economies in transition;
- 5. Requests the Executive Secretary, subject to the availability of resources and in collaboration with relevant organizations, to:

- (a) Continue to facilitate dialogue among business, government and other stakeholders through ongoing support for national, regional and international business and biodiversity initiatives, using the Global Partnership as a framework;
- (b) Compile information on best practices that incorporates all three objectives of the Convention and those of its two Protocols, and facilitate the engagement of businesses, governments and other stakeholders in adopting such practices through various means, including the Global Platform on Business and Biodiversity website, newsletters and specific, targeted workshops;
- (c) Continue to work with partners to further refine the analysis of the various tools and mechanisms, and thereby help businesses (including small and medium-sized enterprises) understand, assess and adopt solutions for managing biodiversity risk that are cost-effective, credible and effective;
- (d) Help raise awareness about the conservation of biodiversity and sustainable use of its components and the drivers of biodiversity loss by collaborating with appropriate national, regional and international partners, thereby assisting businesses (including small and medium-sized enterprises) to build capacity related to biodiversity and ecosystem services in accordance with nationally defined priorities and national circumstances, taking into account the needs of developing countries and countries with economies in transition."
- d. Decision XI/18 Marine and coastal biodiversity: sustainable fisheries and addressing adverse impacts of human activities, voluntary guidelines for environmental assessment, and marine spatial planning

Decision adopted at the 11th Meeting of the Parties in 2012

"Addressing impacts of marine debris on marine and coastal biodiversity

- 25. Welcomes the preparation by the Scientific and Technical Advisory Panel of the Global Environment Facility of a report on the impacts of marine debris on marine and coastal biodiversity (UNEP/CBD/SBSTTA/16/INF/15) and takes note of the key messages of that report, as set out in annex IV to document UNEP/CBD/SBSTTA/16/6;
- 26. Requests the Executive Secretary, in collaboration with Parties, other Governments, relevant organizations and indigenous and local communities, subject to the availability of financial resources, to:
 - (a) Invite Parties, other Governments and relevant organizations, including the Convention on Migratory Species, to submit information on the impacts of marine debris on marine and coastal biodiversity and habitats;
 - (b) Compile and synthesize submissions by Parties, other Governments and relevant organizations, along with additional scientific and technical information, as input to an expert workshop;
 - (c) Organize an expert workshop to prepare practical guidance on preventing and mitigating the significant adverse impacts of marine debris on marine and coastal biodiversity and habitats that can be applied by Parties and other Governments in their implementation of the programme of work on marine and coastal biodiversity;
 - (d) Submit the compilation/synthesis referred to in subparagraph 26(b) above, and the practical guidance referred to in subparagraph 26(c) above, for consideration by a meeting of the Subsidiary Body prior to the twelfth meeting of the Conference of the Parties;
- 27. Also requests the Executive Secretary, subject to availability of financial resources, to include the issue of marine debris in regional capacity-building workshops in order to discuss ways to prevent and reduce the impact of marine debris on biodiversity and strengthen research on the reduction and management of marine debris, with a focus on addressing sources."
- e. Decision XII/10 Business engagement

Decision adopted at the 12th Meeting of the Parties in 2014

1. Invites Parties, taking into account their national policies, needs and priorities:

- (a) To work with stakeholders and relevant organizations to develop innovative mechanisms to support the Global Partnership for Business and Biodiversity and its associated national and regional initiatives;
- (c) To seek to foster public and private partnerships, in consultation with civil society, to promote the development and implementation of biodiversity strategies within the business sector, including on resource mobilization, and to strengthen related capacity-building;
- (d) To continue work to create an enabling environment, taking into account existing decisions of the Conference of the Parties, such that businesses, including publicly funded and local community businesses, which could include a range of actors, can effectively implement the objectives of the Convention and its Protocols, as well as the Strategic Plan for Biodiversity 2011-2020, taking into account the needs of small and medium enterprises, and designing appropriate frameworks to address these needs with respect to social and environmental responsibility;
- 2. Encourages businesses:
- (d) To integrate biodiversity considerations into procurement policies;
- 3. Requests the Executive Secretary, subject to the availability of resources, and in addition to the work specified in relevant decisions of the Conference of the Parties:
 - (a) To support Parties, in particular developing countries, in their efforts to promote the integration of biodiversity considerations into the business sector;
 - (b) To support, and collaborate with, the Global Partnership for Business and Biodiversity and its associated national and regional initiatives, as appropriate and in conjunction with other programmes, in developing reports on the progress of biodiversity mainstreaming by businesses, including by establishing a typology of possible actions, through, among other means, the convening of a technical workshop on reporting frameworks in this area for consideration by the Subsidiary Body on Implementation prior to the thirteenth meeting of the Conference of the Parties;
 - (c) To collaborate with the Global Partnership for Business and Biodiversity and its associated national and regional initiatives in order to support capacity-building for businesses with a view to mainstreaming biodiversity into business decisions;
 - (d) To enhance, in collaboration with the Global Partnership for Business and Biodiversity and its associated national and regional initiatives, the contribution of the business sector to the achievement of the Aichi Biodiversity Targets, for example, through the identification of key milestones and the development of guidance for business to support the implementation of the Strategic Plan for Biodiversity 2011-2020;
 - (e) To promote cooperation and synergies with other forums regarding issues that are relevant for biodiversity and business engagement with respect to, inter alia, commodity indicators and sustainable production and consumption;
- f. Decision XIII/10 Addressing the impacts of marine debris and anthropogenic underwater noise on marine and coastal biodiversity

Decision adopted at the 13th Meeting of the Parties in 2016

Addressing the impacts of marine debris on marine and coastal biodiversity

- "6. Urges Parties and encourages other Governments, relevant organizations, industries, other relevant stakeholders, and indigenous peoples and local communities, to take appropriate measures, in accordance with national and international law and within their competencies, to prevent and mitigate the potential adverse impacts of marine debris on marine and coastal biodiversity and habitats, taking into account the voluntary practical guidance contained in the annex to the present decision, and incorporate issues related to marine debris in the mainstreaming of biodiversity into different sectors;
- 7. *Invites* Parties and other Governments to consider, where appropriate, extended producer responsibility for providing response measures where there is damage or sufficient likelihood of damage to marine and coastal biodiversity and habitats from marine debris;

- 8. *Urges* Parties, and *encourages* other Governments and relevant international organizations to develop and implement measures, policies and instruments to prevent the discard, disposal, loss or abandonment of any persistent, manufactured or processed solid material in the marine and coastal environment;
- 9. Invites competent intergovernmental organizations, including the International Maritime Organization, the Food and Agriculture Organization of the United Nations, the United Nations Environment Programme regional seas conventions and action plans and other competent bodies, within their mandates, to take appropriate measures, and to assist Parties and other Governments in taking appropriate measures to prevent and mitigate the potential adverse impacts of marine debris on marine and coastal biodiversity and habitats, taking into account the voluntary practical guidance contained in the annex to the present decision;"

Listed within the Annex of Decision XIII/10 Addressing the impacts of marine debris and anthropogenic underwater noise on marine and coastal biodiversity:

"Approaches for preventing and mitigating the impacts of marine debris on marine and coastal biodiversity and habitats

- 7. The following general approaches are suggested for preventing and mitigating the impacts of marine debris on marine and coastal biodiversity and habitats:
- (a) There should be a focus on preventing the discard, disposal, loss or abandonment of any persistent, manufactured or processed solid material in the upstream and marine and coastal environment;
- (b) Measures to prevent and mitigate the significant adverse impacts of marine debris, should, as appropriate, use existing platforms and tools for cooperation, which will enhance synergies and capitalize on the progress made in these forums (such as the Global Programme of Action for the Protection of the Marine Environment from Landbased Activities, the Global Partnership on Marine Litter and the regional seas conventions and action plans);
- (c) A broad range of available instruments and policy responses, including economic incentives, market-based instruments and public-private partnerships, can be used to support action aimed at preventing and mitigating the impacts of marine debris.

Priority actions for mitigating and preventing the impacts of marine debris on marine and coastal biodiversity and habitats

- 8. For land-based sources of marine debris, the following actions are suggested:
- (a) Identify baseline data on the main land-based sources, quantities and impacts of marine debris;
- (b) Promote structural economic changes that would reduce the production and consumption of plastics, increase production of environmentally friendlier materials, and support the development of alternative materials, increase recycling and reuse and support an enabling environment for these changes through capacity-building, regulations and standards and cooperation among industry, governments and consumers;
- (c) Support research aimed at developing, and encourage the transfer of, technology to better understand and reduce the environmental impacts of plastics on the marine environment, to design new or improved biodegradable products and to assess cost-effective production on a commercial scale;
- (d) Promote and disseminate best practices in resource-efficient and closed product-to-waste cycles, taking into account the following:
 - (i) Supporting the design of products that are long-lasting and reusable, reparable, re-manufacturable and recyclable with the most effective use of resources;
 - (ii) Limiting superfluous consumption by enabling consumers to make responsible, well-informed decisions and discouraging inappropriate disposal behaviour;
 - (iii) Promoting adequate collection and separation of different types of waste to maximize return rates of high-quality materials;

- (iv) Promoting reusing and recycling over incineration and landfilling;
- (e) Promote best practices along the whole plastics manufacturing and value chain from production to transport, such as aiming for zero loss;
- (f) Assess whether different sources of microplastics and different products and processes that include both primary and secondary microplastics are covered by legislation, and strengthen, as appropriate, the existing legal framework so that the necessary measures are applied, including through regulatory and/or incentive measures to eliminate the production of microplastics that have adverse impacts on marine biodiversity;
- (g) Improve the waste management systems of countries through the sharing of best practices as well as identifying and addressing loopholes that contribute to the generation of marine debris, such as the introduction of marine debris into coastal areas from upstream sources.
- 9. For sea-based sources of pollution, the following actions are suggested, within the respective jurisdictions of Parties and other Governments and the mandates of intergovernmental organizations:
- (a) Develop approaches, in collaboration with the International Maritime Organization, to optimize proper handling of waste on ships and waste delivery to port reception facilities and to ensure that waste is disposed of properly;
- (b) Identify options to address key waste items from the fishing industry and aquaculture that could contribute to marine debris, and implement activities, including pilot projects, as appropriate, and good practices, such as deposit schemes, voluntary agreements and end-of-life recovery, in collaboration with the Food and Agriculture Organization of the United Nations and the United Nations Environment Programme;
- (c) Promote and disseminate, in collaboration with Food and Agriculture Organization of the United Nations and the International Maritime Organization, best practices in relation to all relevant aspects of waste management within the fishing sector (including waste management on board, waste management at harbours, operational losses/net cuttings, deposit schemes and extended producer responsibility) and other relevant sectors;
- (d) Apply guidelines on best practices, such as, inter alia, the 1995 FAO Code of Conduct for Responsible Fisheries the 2011 FAO International Guidelines for Bycatch Management and Reduction of Discards and the 2016 FAO Draft Guidelines for the Application of a System on the Marking of Fishing Gear, to reduce the input and impacts of abandoned, lost or discarded fishing gear from commercial and recreational fishing, as appropriate;
- (e) Foster partnerships with international and regional organizations, port authorities and non-governmental organizations, to encourage the implementation of initiatives for containing, utilizing and/or processing marine litter, such as passive "fishing for litter" schemes, to collect litter caught in fishing nets during normal fishing activities;
- 10. With regard to information exchange, knowledge-sharing, awareness-raising, capacity-building, and socioeconomic incentives, the following actions are suggested:
- (a) Promote and undertake education activities on marine debris in partnership with civil society groups, including activities related to prevention and promotion of sustainable consumption and production;
- (b) Promote outreach and education activities leading to individual behaviour change that can reduce the generated amount of debris entering the environment;
- (c) Establish a collaborative platform for sharing experiences and exchange of information on good clean-up practice in beaches, coastal and marine environments, and, in cooperation with relevant local stakeholders, develop best practices on environmentally friendly clean-up technologies and methods, carry out capacity-building activities and promote the "adopt a beach" system;
- (d) Identify and promote curricula for marine-related education, including both professional seafarers and the recreational sector (for example, diving and sailing schools), in order to increase awareness, understanding and respect for the marine environment and secure commitment to responsible behaviour at the personal, local, national and global levels;

- (e) Develop and implement socioeconomic incentives to prevent the introduction of waste into the environment, such as levies for the sale of plastic bags and/or banning single-use plastic bags, in particular for coastal communities and coastal tourist resorts;
- (f) Exchange information with international environmental certification schemes, including on eco-labelling as appropriate, for the prevention and reduction of marine debris, in accordance with the rules of the multilateral trading system;
- 11. For integrated management and coordination, the following actions are suggested, within the respective jurisdictions of Parties and other Governments and the mandates of intergovernmental organizations:
- (a) Support the development and implementation of national or regional action plans to prevent or mitigate the impacts of marine debris on coastal and marine biodiversity and habitats, also by drawing upon existing action plans and guidance in certain regions (such as the Caribbean, North-East Atlantic, Mediterranean and Baltic Sea regions) taking into account existing regional action plans of the regional seas conventions and the Honolulu Strategy: A Global Framework for Prevention and Management of Marine Debris;
- (b) Mainstream marine debris considerations into regulatory frameworks and develop necessary legislative and institutional frameworks that will put sustainable waste management into practices, including through the promotion of extended producer responsibility and waste management infrastructure;
- (c) Mainstream legislation to integrate marine debris issues and targets, in line with existing packaging and waste regulations as well as legislation pertaining to maritime transport;
- (d) Set in place quantifiable and operational targets for avoiding or minimizing marine debris and for preventing and mitigating their impacts on marine and coastal biodiversity and habitats;
- (e) Define the role of marine debris prevention strategies within the context of cross-sectoral and area-based management tools, based on the ecosystem approach.
- 12. For addressing knowledge gaps and research needs, the following actions are suggested:
- (a) Support and promote, as appropriate, harmonized approaches to monitoring, analysis and reporting based on standardized methodologies, taking into account existing monitoring guidance for marine litter, such as the European Union Monitoring Guidance for Marine Litter in European Seas;
- (b) Ensure access to, sharing and utilization of technology to support marine debris management and monitoring, particularly in developing countries, in particular the least developed countries and small island developing States and the most environmentally vulnerable countries, as well as countries with economies in transition;
- (c) Develop and promote means to identify sources, pathways and distribution of marine debris to understand individual and population-level effects of marine debris on marine species;
- (d) Investigate and promote the best available techniques as well as research and develop additional techniques in wastewater treatment plants to prevent microparticles entering the marine environment;
- (e) Promote research on the potential trophic transfer of marine microdebris in food webs to determine whether there is a bioaccumulation effect for plastics and harmful chemicals;
- (f) Develop and strengthen the use of citizen science schemes that address the monitoring and enforcement of environmental standards on marine debris;
- (g) Undertake socioeconomic research to better understand the social factors which may contribute to the production of marine debris, the impacts of marine debris on various coastal and maritime sectors and communities, and consumer preferences, perceptions and attitudes that can help to inform targeted outreach programmes designed according to local/cultural context;
- (h) Develop a risk assessment of impact and implement a management plan for debris on marine and coastal species and ecosystems, and identify hotspots of gear loss and their associated biodiversity impacts;

- (i) Develop monitoring and follow-up strategies, taking account the following needs:
- (i) To evaluate population-level impacts that consider, in a coordinated way, the migration routes and the distribution of species and populations;
- (ii) To include species' life stages and their specific vulnerability to marine debris (for example, monitoring of juveniles to quantify the burden on adults);
- (iii) To address sublethal effects while taking into account that a broad range of interacting natural and human factors determines the survival and reproductive success of individual animals;
- (iv) To take into account that, in the case of highly endangered species, direct harm caused by marine debris on one individual can easily have an effect on the entire population;
- (j) Apply modelling as a useful tool for marine debris management and mitigation, which can be used with spatial mapping to estimate debris distribution, encounter rates between debris and species and support the production of global risk assessments, especially for threatened species.²"

2. Convention on the Conservation of Migratory Species of Wild Animals (CMS)

a. NEP/CMS/Resolution 10.4 Marine Debris

Adopted by the Conference of the Parties at its 10th Meeting 2011

"The Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals

- 1. Considers marine debris to include any anthropogenic, manufactured or processed solid material, irrespective of its size, discarded, disposed of or abandoned in the environment, including all materials discarded into the sea, on the shore, or brought indirectly to the sea by rivers, sewage, storm water or winds;
- 2. *Encourages* Parties to identify coastal and oceanic locations where marine debris aggregates to identify any potential areas of concern;
- 3. Further encourages Parties to work collaboratively with regional neighbours to identify and address the sources and impacts of marine debris, acknowledging that marine debris is not constrained by sovereign borders;
- 4. Requests the CMS Secretariat to ask related agreements that may have access to data on the potential or actual impacts of marine debris on marine species to provide this information to the Scientific Council before the 11th or subsequent Conference of the Parties;
- 5. Recommends that Parties develop and implement their own national plans of action which should address the negative impacts of marine debris in waters within their jurisdiction, and which could also elaborate the benefits of establishing domestic programmes for the management of marine debris, particularly in relation to lost, abandoned, and otherwise discarded fishing gear and the problems of ghost fishing that arise from these;
- 6. Requests that Parties provide available information on the amounts, impacts and sources of marine debris in waters within their jurisdiction on marine species listed on Appendix I and II of the Convention in their National Reports;

² Already in 2006, CBD acknowledged the importance of the private sector in conservation efforts. In subsequent years, CBD reiterated the importance of the private sector in biodiversity and called on the Parties to the Convention to facilitate the incorporation of conservation measures into company procurement policies. The Resolutions noted above furthermore emphasize the importance of engaging in dialogue between the Convention, its Parties and business and civil communities. With specific reference to marine debris, in its Decisions XI/18 and XIII/10 adopted in 2012 and 2016, respectively, the Parties acknowledged that in order to successfully reduce debris pollution, and prevent the discard of solid materials in the marine environment, the cooperation of the private sector is essential. We would therefore stipulate, that while the provisions mentioned above should outline more precise and detailed actions, the adopted Resolutions should already be understood as a call on the Parties, the Secretariat and the private sector to engage in collaborative efforts in reducing and preventing marine litter.

- 7. Encourages Parties and organizations to support the efforts of Parties with limited resources in the development and implementation of their national plans of action for marine debris;
- 8. Instructs the Scientific Council to:
 - (a) identify knowledge gaps in the management of marine debris and its impacts on migratory species;
 - (b) identify best practice strategies for waste management used on board commercial marine vessels, taking into account the extensive work being undertaken by the International Maritime Organization, FAO and the International Standards Organization to avoid duplication, identify existing codes of conduct and determine the need for the improvement and/or development of new codes of conduct;
 - (c) facilitate an analysis of the effectiveness of current public awareness and education campaigns to identify gaps and areas for improvement; and
 - (d) report progress and developments to the Conference of Parties as appropriate; and
- 9. Further requests the Secretariat, subject to availability of resources, to foster linkages with relevant regional and other international instruments, such as IMO, FAO, UNEP regional seas conventions and other fora, to promote synergies, to avoid duplication, and to maximize efforts to reduce the impact of marine debris on migratory species."
- b. UNEP/CMS/Resolution 11.30 Management of Marine Debris

Adopted by the Conference of the Parties at its 11th Meeting 2014

Included within the preamble:

"Recalling CMS Resolution 10.4 on Marine Debris and reiterating the concern that marine debris has negative impacts on many species of migratory marine wildlife and their habitats;

Welcoming the Resolution 1/6 on Marine Plastic Debris and Micro Plastics adopted by more than 150 countries at the first United Nations Environment Assembly (UNEA), concluded on 27 June 2014;

Recognizing that information on marine debris remains incomplete, especially regarding the quantity present in the ocean and entering the ocean annually, as well as its sources, pathways, prevalence in different sea compartments, and fate in terms of fragmentation, decomposition, distribution and accumulation;

Concerned that currently available information is not sufficient in order to generally understand which populations and species are the most affected by marine debris, especially the specific effects of marine debris on migratory as opposed to resident species, and that population level effects of marine debris are unknown in many cases;

Emphasizing that preventing waste from reaching the marine environment is the most effective way to address this problem;

Further emphasizing that despite the knowledge gaps relating to marine debris and its impacts on migratory marine wildlife, immediate action should be taken to prevent debris reaching the marine environment;"

"The Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals

3. Further encourages the Parties to engage, as appropriate, with other global marine initiatives such as the UNEP's Global Programme of Action for the Protection of the Marine Environment from Land Based Activities (GPA-Marine), the Regional Seas Programmes, the Global Partnership on Marine Litter (GPML), the Global Partnership on Waste Management (GPWM);"

"Knowledge Gaps in Management of Marine Debris

7. Encourages Parties to establish public awareness campaigns in order to assist in preventing waste from reaching the marine environment and set up management initiatives for the removal of debris, including public beach and underwater clean-ups;

- 8. Calls upon Parties to incorporate marine debris targets when developing marine debris management strategies, including targets relating directly to impacts on migratory species, and to ensure that any marine debris management strategies plan for and carry out evaluation;
- 9. Encourages the Scientific Council, with support from the Secretariat, to promote the prioritization of research into the effects of microplastics on the species ingesting them, and support research on the significance of colour, shape or plastic type on the likelihood of causing harm, in order to be able to focus management strategies in future;
- 12. Further requests that working groups established under the Scientific Council incorporate the issue of marine debris where relevant, drawing on the work already undertaken by the Convention;"

"Public Awareness and Education Campaigns

- 19. Recommends that Parties planning to implement regulatory measures or economic instruments in order to reduce the amount of waste entering the environment to accompany these with behavioural change campaigns aiding their introduction by communicating the rationale for introducing the measure, and therefore increasing the likelihood of support;
- 20. *Encourages* Parties and the Secretariat to cooperate with organizations currently campaigning on marine debris, and seek to engage organizations dealing with migratory species to promote campaigns and raise awareness of marine debris amongst their members;"
- 21. Further encourages Parties, the Secretariat and stakeholders to develop marine debris campaigns of specific relevance to migratory species;
- 22. Invites industry bodies to promote debris prevention measures across their industries; and
- 23. Calls on campaign organizations to survey the campaign reach, message recognition and impact upon the target behaviour or levels of marine debris in order to evaluate the success of a campaign and readily share that information to enable future campaigns to be effective."

3. United Nations Environment Assembly of the United Nations Environment Programme (UNEA/UNEP)

a. Resolution 1/6 Marine plastic debris and microplastics

Adopted at its first session meeting in Nairobi in 2014

"Noting with concern the serious impact which marine litter, including plastics stemming from land and sea-based sources, can have on the marine environment, marine ecosystem services, marine natural resources, fisheries, tourism and the economy, as well as the potential risks to human health,

- 1. Stresses the importance of the **precautionary approach** according to which lack of full scientific certainty should not be used for postponing cost-effective measures to prevent environmental degradation, where there are threats of serious or irreversible damage;
- 2. *Recognizes* the significant risks arising from the inadequate management and disposal of plastic and the need to take action;
- 3. Encourages Governments, intergovernmental organizations, non-governmental organizations, industry and other relevant actors to cooperate with the Global Partnership on Marine Litter in its implementation of the Honolulu Strategy and to facilitate information exchange through the online marine litter network;
- 4. Recognizes that plastics, including microplastics, in the marine environment are a rapidly increasing problem due to their large and still increasing use combined with the inadequate management and disposal of plastic waste, and because plastic debris in the marine environment is steadily fragmenting into secondary microplastics;

- 5. Also recognizes the need for more knowledge and research on the source and fate of microplastics and their impact on biodiversity, marine ecosystems and human health, noting recent knowledge that such particles can be ingested by biota and could be transferred to higher levels in the marine food chain, causing adverse effects;
- 16. *Encourages* Governments and the private sector to promote the more resource-efficient use and sound management of plastics and microplastics;"
- b. Resolution 2/11 Marine plastic debris and microplastics

Adopted at its second session meeting in Nairobi in 2016

"Noting the increased knowledge regarding the levels, sources, negative effects of and possible measures to reduce marine plastic debris and microplastics in the marine environment, as summarized in, among other sources, the 2016 study "Marine plastic debris and microplastics: global lessons and research to inspire action and guide policy change", on marine plastic debris and microplastics, the preparation of which was mandated by the Environment Assembly in its resolution 1/6,

- 10. Also recognizes that education, capacity-building, knowledge transfer and awareness-raising regarding sources and negative effects of and measures to reduce and prevent marine plastic debris and microplastics, as well as environmentally sound waste management systems and clean-up actions, are crucial;
- 12. Recognizes the need to identify transport and distribution pathways and hotspots of marine litter, to cooperate regionally and internationally to clean up such hotspots where appropriate, and to develop environmentally sound systems and methods for removal and sound disposal of marine litter; stresses that removal is urgent in areas where it poses an immediate threat to sensitive marine and coastal ecosystems or marine-based livelihoods or local societies; and recognizes that removal actions should, as far as possible, be risk-based and cost-effective, following best available techniques and environmental practices and the polluter pays approach;
- 15. Underlines the need for the sharing of knowledge and experience on the **best available techniques** and environmental practices for reducing littering from the fishing industry and aquaculture, and for implementation of pilot projects where appropriate, including in respect of deposit schemes, voluntary agreements and recovery, in particular through prevention and, reduction, reuse and recycling (the "three Rs");
- 18. Encourages product manufacturers and others to consider the life cycle environmental impacts of products containing microbeads and compostable polymers, including possible downstream impacts that may compromise the recycling of plastic waste; to eliminate or reduce the use of primary microplastic particles in products, including, wherever possible, products such as personal care products, industrial abrasives and printing products; to ensure that any replacement products are environmentally sound; and to cooperate in the environmentally sound management of such plastic waste;
- 21. Requests the Executive Director, in close cooperation with other relevant bodies and organizations, to undertake an assessment of the effectiveness of relevant international, regional and subregional governance strategies and approaches to combat marine plastic litter and microplastics, taking into consideration the relevant international, regional and subregional regulatory frameworks and identifying possible gaps and options for addressing them, including through regional cooperation and coordination, and to present the assessment to the Environment Assembly at its next session, within available resources for this purpose;
- 22. Invites States, in cooperation with industry and other stakeholders, at the national, subregional, regional and international levels, to organize and/or participate in annual campaigns for awareness-raising, prevention and environmentally sound clean-up of marine litter, including in coastal areas and oceans, to support and supplement the civil-society-driven beach clean-up days;

4. The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) and its Protocols

a. Decision IG. 21/7 Regional Plan on Marine Litter Management in the Mediterranean in the Framework of Article 15 of the Land Based Sources Protocol

The Decision IG.21/7 was adopted at the Eighteenth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean in 2013. No further Decision/Resolution was adopted at its most recent Meeting in 2016.

"Noting that marine litter has become a global and regional issue affecting marine and coastal environment quality as well as the important knowledge gaps on marine litter sources and impacts in the Mediterranean marine and coastal environment.

Adopt the following Annexes to this Decision:

- (a) Annex 2 "Work Plan with timetable for the implementation of relevant Articles of Marine Litter Regional Plan" to guide and facilitate the work of the Secretariat and the Contracting Parties on priority measures with regards to the implementation of the Regional Plan and mobilize external resources for this purpose, as appropriate,
- (b) Annex 3 "Potential Research Topics" to promote and support scientific research by the Contracting Parties and scientific community to fill the knowledge gaps on marine litter sources and impacts as well as to support implementation of relevant measures; and,"

"Urge the Contracting Parties, intergovernmental organizations, donor agencies, industry, non-governmental organizations and academic institutions to support the implementation of the Regional Plan providing sufficient financial, technical and scientific contribution, including the implementation of country-based measures and projects, as well as by joining as appropriate to and taking advantage from the marine litter global partnership established in the framework of UNEP/Global Programme of Action;"

Annex II- Work Plan with Timetable and cost for the implementation of relevant Articles of the Marine Litter Regional Plan³.

Note: In 2015 UNEA published a survey on the implementation of the UNEA/MAP Regional Plan on Marine litter management in the Mediterranean. The survey highlighted the issue of fragemented and inconsistent information in respect to abandoned, lost or discarded fishing gear (ALDFG) in the Mediterranean Sea, as well as the considerable danger that this type of marine litter carries for the marine environment and human livelihoods. The report concluded, that those surveyed viewed ALDFG not only as a serious problem but a growing one. Additionally, the survey found that marine litter in general is perceived as a serious threat⁴.

This report has also considered the workings of ACCOBAMS, ASCOBANS and the IWC. While these forums have not adopted a resolution /decision which specifically deals with marine debris/marine litter, they have addressed the threat in other ways.

³ Please refer to Decision IG.21/7 for further information on the Regional Plan on Marine Litter Management in the Mediterranean in the Framework of Article 15 of the Land Based Sources Protocol.

⁴ A Regional Survey on abandoned, lost or discarded fishing gear and Ghost Nets in the Mediterranean Sea. A contribution to the implementation of the UNEA/MAP regional plan on Marine litter management in the Meditteranean. Link: https://wedocs.unep.org/bitstream/handle/20.500.11822/9920/unepmap_RegionalSurvey_FishingGear_2015_eng.pdf?sequence=3&isAllowed=y

5. Agreement on the Conservation of Cetaceans in the Black Sea Mediterranean Sea and Contigous Atlantic Area (ACCOBAMS)

The Work Programme 2014-2016 and 2017-2019 (see table 1 & 2 below) both contain provisions aimed at addressing marine debris, however, to the knowledge of the authors and at time of writing, there seems to be no Resolution adopted that specifically addresses the threat of marine debris/marine litter.

CA 2	REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO BYCATCH, HABITAT LOSS AND DEGRADATION (POLLUTION)					
CA 2 e	Marine debris					
Relevant Res	olutions: 4.8					
Action		To be coordinated by	With the cooperation of	Outputs	Timing	
1- Assess the impact of ghost nets on cetaceans in the ACCOBAMS area: undertake a joint project with MedPOL and GFCM		Secretariat	Parties, Scientific Committee, Partners GFCM, MedPOL, other experts,	Assessment of ghost nets impacts on cetaceans	2015	
2- Assess the impact of plastic bags, microplastic and other plastic materials ingestion on cetaceans in cooperation with existing initiatives, such as IWC: bibliographic synthesis and Scientific Committee recommendation		Scientific Committee	Secretariat, Partners IWC, MedPOL, other experts,	Assessment of plastic materials impacts on cetaceans by providing hibliographic synthes		

CA 2	REDUCE HUMAN PRESSURES ON CETACEANS, IN PARTICULARLY THOSE RELATED TO BYCATCH, HABITAT LOSS AND DEGRADATION (POLLUTION)					
CA 2 e	Marine debris					
Relevant Resolutions: 4.8						
Action	To be coordinated by	With the cooperation of	Outputs	Timing	Possible Source of funding	
1- Assess the impact of ghost nets on cetaceans in the ACCOBAMS area in collaboration with MedPOL and GFCM , with emphasis on the development of the removal methods	Secretariat	Parties, Non-Party Range States Scientific Committee, Partners GFCM, MedPOL, other experts,	Assessment of ghost nets impacts on cetaceans		AF, EF	
2- Assess the impact of plastic bags , microplastic and other plastic materials ingestion on	Scientific Committee	Secretariat, Partners	Assessment of plastic materials impacts on cetaceans by providing bibliographic synthesis	2017 (SC11)	AF, EF	
cetaceans in cooperation with existing initiatives, such as IWC : bibliographic synthesis and Scientific Committee recommendation		IWC, MedPOL, other experts,	Focus on secondary effects more than ingestion Suggested mitigation measures	2018 (SC12)	AF, EF	
3- Encourage cooperation with ongoing regional initiatives on marine litter.	Secretariat	Parties, Non-Party Range States Scientific Committee, Partners SRCUs	Joint programmes at the Agreement level Synergies with EU MSFD	ET	AF, EF	

a. Resolution 4.8 Contribution From ACCOBAMS To The Implementation Of The Marine Strategy Framework Directive (MSFD)

Adopted at the 4th Meeting of the Parties in 2010

"Considering the descriptors of good environmental status of the Marine Strategy Framework Directive 1 (biodiversity), 4 (food webs), 7 (hydrographical conditions), 8 (contaminants), 10 (marine litter) and 11 (energy) as particularly relevant to cetacean conservation,

- 3. *Requests* to the Contracting Parties that are EU Member States to support ACCOBAMS in the regional coordination of aspects of their marine strategies relevant to cetacean conservation;
- 5. Proposes that the Scientific Committee of ACCOBAMS starts a process for identifying environmental targets and measures for cetacean conservation that should be incorporated in the marine strategies in the ACCOBAMS area, including the identification of thresholds for pressures and impacts of certain human activities, as well as providing information for abundances and dynamic populations;"

6. Agreement on the Conservation of Small Cetaceans in the Baltic, North Atlantic, Irish and North Seas (ASCOBANS)

a. Resolution No. 2 Activities of the ASCOBANS Advisory Committee and Work Plan

Adopted at the 7th Meeting of the Parties in 2012

"Further recalling Resolution 10.4 on "Marine Debris", Resolution 10.14 on "Bycatch of CMS- Listed Species in Gillnet Fisheries", Resolution 10.15 on the "Global Programme of Work for Cetaceans" and Resolution 10.24 on "Further Steps to Abate Underwater Noise Pollution for the Protection of Cetaceans and Other Migratory Species" adopted by the 10th Meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (CMS) in November 2011.

The Meeting of the Parties to ASCOBANS

- 1. *Decides* that, subject to sufficient resources being provided, the Advisory Committee and Secretariat should carry out the Work Plan attached as Annex 1;" (see table 3 below).
- 6. Further encourages Parties to implement the relevant actions agreed in ASCOBANS Resolution 6.2 (2009) on "Adverse Effects of Underwater Noise on Marine Mammals during Offshore Construction Activities for Renewable Energy Production", as well as those contained in CMS Resolutions 10.4 on "Marine Debris", 10.14 on "Bycatch of CMS-listed Species in Gillnet Fisheries", 10.15 on the "Global Programme of Work for Cetaceans" and 10.24 on "Further Steps to Abate Underwater Noise Pollution for the Protection of Cetaceans and Other Migratory Species"."

Work Plan Activity	ACTION BY	TIMING	LINKS TO AGREEMENT, CONSERVATION AND MANAGEMENT PLAN			
Conservation Actions						
Review new information on bycatch and associated strandings, bycatch mitigation and monitoring measures, including local initiatives, and fisheries effort and make recommendations to Parties and other relevant authorities for further action, in particular advice concerning the EU Common Fisheries Policy reform and Regulation 812/2004	AC (incl. relevant Working Groups)	At each AC Meeting	Habitat Conservation and Management Surveys and Research			
Review new information on pollution, including marine debris, and its effects on small cetaceans that occur in the ASCOBANS area and make recommendations to Parties and other relevant authorities	AC (incl. relevant Working Groups)	At each AC Meeting	Habitat Conservation and Management Surveys and Research			
3. Review the extent of negative effects of sound, vessels and other forms of disturbance on small cetaceans and review relevant technological developments and best practices, working where possible with initiatives by other organizations	AC (incl. relevant Working Groups)	At each AC Meeting	Habitat Conservation and Management Surveys and Research			
Develop guidelines which Parties and stakeholders may use to reduce disturbance by noise, where possible in collaboration with ACCOBAMS and other partners	AC (incl. relevant Working Groups)	2013	Habitat Conservation and Management			
5. Review knowledge about and potential adverse effects of underwater unexploded ordnance as well as methods for its environmentally-friendly removal and make appropriate recommendations to Parties and other relevant authorities	AC (incl. relevant Working Groups	At each AC Meeting	Habitat Conservation and Management			

Table 3: Annex 1, to Resolution No. 2 Activities of the ASCOBANS Advisory Committee and Work Plan (Annex 1 pg. 3 in Resolution No. 2)

b. Resolution No. 2 Work Plan for the ASCOBANS Advisory Committee and Secretariat 2017-2020 and Strategic Plan for Migratory Species 2015-2023

Recalling Resolution 11.2 "Strategic Plan for Migratory Species 2015-2023", Resolution 11.11 "Enhancing the Relationship between the CMS Family and Civil Society", Resolution 11.22 "Live Captures of Cetaceans from the Wild for Commercial Purposes", Resolution 11.23 "Conservation Implications of Cetacean Culture", Resolution 11.26 "Programme of Work on Climate Change and Migratory Species", Resolution 11.27 "Renewable Energy and Migratory Species", Resolution 11.29 "Sustainable Boat-Based Marine Wildlife Watching" and Resolution 11.30 "Management of Marine Debris" adopted by the 11th Meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (CMS) in November 2014;

The Meeting of the Parties to ASCOBANS

1. *Decides* that, subject to sufficient resources being provided, the Advisory Committee and Secretariat should carry out the Work Plan attached as Annex 1;" (See table 4 below)

WORK PLAN ACTIVITY	LINK TO EXTANT RESOLUTIONS	ACTION BY	TIMING
9. Review new information on recreational sea use , impacts on small cetaceans, best practices and guidelines. Make recommendations to Parties and other relevant authorities for further action.	8.9 Cumulative Impacts	AC (incl. relevant Working Groups)	2019
10. Review new information on other sources of disturbance , impacts on small cetaceans, best practices and guidelines. Make recommendations to	8.9 Cumulative Impacts	AC (incl. relevant Working Groups)	2019
Parties and other relevant authorities for further action.	5.4 Adverse Effects	g . , ,	
Habitat Change and Degradation (incl. potential physical impacts)			
11. Review new information on underwater munitions , their impacts on small cetaceans and cetacean habitat, and methods for their environmentally-friendly removal. Make recommendations to Parties and other relevant authorities for further action.	8.8 Munitions 8.9 Cumulative Impacts	AC (incl. relevant Working Groups)	2017
12. Review new information on marine debris (ingestion and entanglement), including microplastics, and its impacts on small cetaceans. Make recommendations to Parties and other relevant authorities for further action.	8.9 Cumulative Impacts	AC (incl. relevant Working Groups)	2018
13. Review new information on other forms of pollution and hazardous	8.7 PCBs	AC (incl. relevant	2019
substances, and their impacts on small cetaceans and cetacean habitat. Make recommendations to Parties and other relevant authorities for further action.	8.9 Cumulative Impacts	Working Groups)	
	7.4 Chemical Pollution		
	5.7 Research		
14. Review new information on ship strikes and their impacts on small cetaceans. Make recommendations to Parties and other relevant authorities	8.9 Cumulative Impacts	AC (incl. relevant Working Groups)	2019
for further action.	5.4 Adverse Effects		
Table 4: Annex 1 to Resolution No. 2 Activities of the ASCOBANS Advisory Comm	ittee and Work Plan f	or 2017-2020.	

c. Resolution No. 9 Managing Cumulative Anthropogenic Impacts in the Marine Environment

"Aware that human activities introduce a great variety of threats and pressures into the marine environment, the impacts of which on marine mammals range from direct mortality, to injury, to fitness impairments, and to disturbance, as well as indirect effects on habitat quality and prey availability;

Concerned that cetaceans face multiple, cumulative and often synergistic threats with possible effects over vast areas⁵, jeopardizing their favourable conservation status, the achievement of which constitutes the principal aim of ASCOBANS, CMS and European Union legislation such as the Habitats Directive and the Marine Strategy Framework Directive;

Reaffirming that the objective of ASCOBANS is to restore and/or maintain biological or management units of small cetaceans to/at the level they would reach when there is the lowest possible anthropogenic influence, and that the general aim remains to minimize, i.e. to ultimately reduce to zero, anthropogenic removals;"

⁵ This may also apply to marine debris/marine litter.

"The Meeting of the Parties to ASCOBANS

- 1. *Urges* Parties to continue to give their full support to the activities related to applying an ecosystem approach to the management of human activities⁶ under the frameworks of OSPAR, HELCOM, the European Union and the Convention in Biological Diversity;
- 2. Strongly encourages Parties to use their influence to ensure that issues pertinent to the conservation of cetaceans are fully taken into account in all relevant regional and international fora;
- 6. Further recommends that in order to improve the conservation outcomes of decisions on human activities in the marine environment and in application of the precautionary principle:
 - (a) potential impacts of all activities, including chronic, cumulative and synergistic impacts on cetaceans, be taken into account;
 - (b) uncertainty be integrated into management frameworks setting environmental limits and triggers, or recovery and conservation targets;
 - (c) the collection of data be required to determine the extent to which the ecosystem will be altered and the likely resulting impacts, and this data be made publicly accessible to facilitate management decisions and Environmental Impact Assessments in both the short- and the long-term;"

7. International Whaling Commission (IWC)

In search of whether the IWC addressed marine debris, and how it has done so, this report has considered Resolution 2014-2 and other relevant workings of the Commission, including its 2013 and 2014 held workshops.

a. Resolution 2014-2 on Highly Migratory Cetaceans

"**NOTING** further that for the majority of cetacean species the main conservation threats involved factors, such as entanglement, marine debris and traffic, that cannot be solved through IWC action alone, but require the cooperation of other relevant organisations"

Besides Resolution 2014-2, the IWC has further addressed marine debris within its framework in the following way:

b. Workshop held by IWC in 2013 and 2014

"The increasing amount of debris in the world's oceans has become a major cause for concern. There are many different types of marine debris. It travels freely and does not recognise national boundaries, which means international collaboration is essential to any attempts to address the issue effectively.

Marine debris ranges from glass, metal, plastics and wood to abandoned or lost fishing gear. Much is synthetic and estimated to endure for up to 600 years. Different materials can threaten cetaceans, and other marine life in different ways. The IWC is working through a number of programmes to understand and mitigate potential threats from a range of different types of debris.

Two marine debris workshops have taken place, bringing together experts from a range of relevant fields. The first, was scientifically focused, analysing the different threats, knowledge gaps and further research requirements. The second workshop was policy-led, agreeing practical, management actions that the IWC could take in order to contribute its expertise most effectively to the each of the range of global initiatives on marine debris.

Much work is still to do, but some progress has already been made, particularly in addressing the threat of large whale entanglement in fishing gear, including lost and abandoned gear. Since 2012, the IWC has managed an entanglement response capacity building programme. Experienced IWC member governments share experience and best practice with other countries looking to establish a safe and effective response capability. Training workshops

⁶ Marine debris is the result of human activities.

also teach consistent data collection techniques, and the data supplied from responders will be used to improve understanding of the types of fishing gear and debris that pose the greatest threat, in order to develop alternatives.

Ingestion of items of debris is another potential threat. Recent research suggested that examples of ingestion have been found for just over half of cetacean species although more work is required to understand better the nature of the threat, the numbers involved and the level of threat at a population level. Perhaps unsurprising given its endurance, plastic is the most commonly detected ingested material recorded.

Microplastics can be ingested directly and also potentially transferred from prey species (krill and copepods) to whales where their accumulation may pose a health threat. As part of its work on pollution, the Scientific Committee is studying the origin, fate and distribution of microplastics."

As mentioned, the first workshop in 2013 took a more scientific based approach- here is the report: https://archive.iwc.int/pages/view.php?ref=3695&search=%21collection120&order_by=relevance&sort=DESC&offset=0&archive=0&k=&curpos=5

The second workshop in 2014 took a policy oriented approach- here is the report: https://archive.iwc.int/pages/download_progress.php?ref=3497&size=&ext=pdf&k=&search=%21collection118&offset=0&archive=0&sort=DESC&order_by=relevance

Annex I: Table summary of Resolutions and Decisions as relevant to marine debris/marine litter/marine plastic pollution

MULTILATERAL ENVIRONMENTAL AGREEMENT (MEA)	Name of Resolutions	Соммент	
Convention on Biological Diversity (CBD)	 VIII/17 Private-Sector engagement X/21 Business engagement XI/7 Business and biodiversity XI/18 Marine and coastal biodiversity: sustainable fisheries and addressing adverse impacts of human activities, voluntary guidelines for environmental assessment, and marine spatial planning XII/10 Business engagement XIII/10 Addressing the impacts of marine debris and anthropogenic underwater noise on marine and coastal biodiversity 		
Convention on the Conservation of Migratory Species of Wild Animals (CMS)	 UNEP/CMS/Resolution 10.4 Marine Debris UNEP/CMS/Resolution 11.30 Management of Marine Debris 		
Agreement on the Conservation of Cetaceans in the Black Sea Mediterranean Sea and Contigous Atlantic Area (ACCOBAMS)	 Work Programme 2014-2016 Work Programme 2017-2017 Resolution 4.8 Contribution From ACCOBAMS To The Implementation Of The Marine Strategy Framework Directive (MSFD) No specific Resolution adopted. 	- Both WP are relevant as they clearly mandate ACCOBAMS focus on the matter of marine debris.	
Agreement on the Conservation of Small Cetaceans in the Baltic, North East Atlantic, Irish and North Seas (ASCOBANS)	 Resolution No.2 (2012-MOP 7) Activities of the ASCOBANS Advisory Committee and Work Plan Resolution No.2 (2016- MOP 8) Work Plan for the ASCOBANS Advisory Committee and Secretariat 2017-2020 and Strategic Plan for Migratory Species 2015-2023 Resolution No.9 Managing Cumulative Anthropogenic Impacts in the Marine Environment No Resolution specific to marine debris/plastic pollution adopted. 		

MULTILATERAL ENVIRONMENTAL AGREEMENT (MEA)	Name of Resolutions	Сомментѕ
United Nations Environment Assembly of the United Nations Environment Programme	 UNEP/EA.1/Res.6 Marine plastic debris and microplastic UNEP7EA.1/Res. 11 Marine plastic litter and microplastic 	
The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) and its Protocols	- Decision IG. 21/7 Regional Plan on Marine Litter Management in the Mediterranean in the Framework of Article 15 of the Land Based Sources Protocol	
International Whaling Commission (IWC)	 Workshop reports, no specific Resolution adopted. Resolution 2014-2 on Highly Migratory Cetaceans. 	

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