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The 2nd AMSP Implementation Progress Report (Version 12 Feb)

The Arctic Council's Arctic Marine Strategic Plan 2015-2025 (AMSP) provides a framework to guide its actions to protect Arctic marine and coastal ecosystems and to promote conservation and sustainable development.

The 2nd AMSP implementation report, records status on relevant AMSP Strategic Actions for the period 2017-2019 and identifies follow-up activities, which are reflected in the PAME work plan 2019-2021 and other working groups work plans, as per their respective mandates. The AMSP Implementation Plan provides a mechanism to systematically track progress and status on the AMSP's 40 Strategic Actions. This 2nd report was developed in close collaboration with other Arctic Council working groups to ensure transparent and systematic cross-working group progress, provide a status reporting mechanism for all work plans, as relevant, and contribute to collaboration on cross-cutting marine-related issues.

PAME agreed to the following process/timeline to finalize the 2nd AMSP Implementation Report for submission to SAOs and Ministers for information.

- Feb 12: Revised draft version submitted to SAOs for information.
- March-April: Revised based on comments to include links to reports/activities (as relevant) and circulate final draft to PAME, including proposed layout.
- April-May: preparation for release of the document i.e. final layout and printing.

Action: Based on the above, SAOs are invited to welcome this report as an important contribution to coordination and collaboration on cross-cutting marine-related issues of the Arctic Council.

Arctic Marine Strategic Plan

IMPLEMENTATION PROGRESS REPORT

2017-2019

WORKING DOCUMENT, VERSION 12 FEBRUARY

PAME agreed to the following process/timeline to finalize the 2nd AMSP Implementation Report for submission to SAOs and Ministers for information.

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The Arctic Marine Strategic Plan

The Arctic Council's *Arctic Marine Strategic Plan 2015-2025 (AMSP)* was approved in April 2015 at the 9th ministerial meeting in Iqaluit, Canada. It provides a framework to guide its actions to protect Arctic marine and coastal ecosystems and to promote sustainable development.

This Strategic Plan addresses both short-term and long-term challenges and opportunities, through forty Strategic Actions comprised under four Strategic Goals:

- **Goal 1:** Improve knowledge of the Arctic marine environment, and continue to monitor and assess current and future impacts on Arctic marine ecosystems.
- **Goal 2:** Conserve and protect ecosystem function and marine biodiversity to enhance resilience and the provision of ecosystem services.
- **Goal 3:** Promote safe and sustainable use of the marine environment, taking into account cumulative environmental impacts.
- **Goal 4:** Enhance the economic, social and cultural well-being of Arctic inhabitants, including Arctic indigenous peoples and strengthen their capacity to adapt to changes in the Arctic marine environment.

AMSP Implementation plan

The aim is to provide a structured approach that tracks follow-up activities (new and ongoing) of its forty strategic actions over the next 10 years among the Arctic Council working groups with overall guidance from the SAOs. This progress report enlists progress of the Arctic Council Working Groups. It is intended to be a living document, updated regularly for an overview of work by the Arctic Council.

TRACKING PROGRESS OF STRATEGIC ACTIONS – matrix

No	Strategic Actions	Arctic Council Activities Follow up/Implementation Status				
		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
7.1.1	Strengthen scientific cooperation and joint monitoring among the Arctic states, and with other states, organizations and stakeholders involved in Arctic research or traditional and local knowledge, with a focus on prioritizing research issues, filling knowledge gaps, and developing mechanisms to share and exchange observational data.	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Ship Traffic Data project (ASTD): A proposed system for maritime traffic analysis which will allow the Arctic Council to be on the forefront of monitoring trends in Arctic shipping. ✓ Marine Litter in the Arctic - Desktop study ✓ Resource Exploration and Development Expert Group - Information gathering. ✓ Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO. <p>SDWG</p> <ul style="list-style-type: none"> ✓ SDWG's SECEG participation in MEMA ✓ Arctic Adaptation Exchange Portal ✓ Arctic EIA <p>AMAP</p> <ul style="list-style-type: none"> ✓ Through the AMAP monitoring programme and SAON <p>EPPR</p> <ul style="list-style-type: none"> ✓ Arctic Oil Spill Response Technology Workshop <p>CAFF</p> <p>Implementing the recommendations of the Arctic Biodiversity Assessment (ABA) contains a range of actions which respond to many of the</p>	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Ship Traffic Data project (ASTD) ✓ Arctic Marine Shipping Best Practice Information Forum ✓ Marine Litter in the Arctic - Desktop study ✓ The MEMA Database (www.memadatabase.is): a compilation of over 750 documents that relate to engagement of Indigenous Peoples and local communities and formed the basis for the MEMA Reports I & II. ✓ Compendium of Arctic Shipping Accidents, (joint project with EPPR) ✓ Collect and summarize information on Arctic State safe and low-impact marine corridor initiatives ✓ Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO <p>CAFF</p> <p>Implementing the recommendations of the Arctic Biodiversity Assessment (ABA) contains a range of actions which respond to many of the AMSP strategic actions, including but not limited to:</p> <ul style="list-style-type: none"> ✓ Implementation of the Circumpolar Marine Biodiversity Monitoring Plan 	IMO: Polar Code entered into force (1. January 2017)		

No	Strategic Actions	Arctic Council Activities Follow up/Implementation Status				
		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
		<p>AMSP strategic actions, including but not limited to:</p> <ul style="list-style-type: none"> ✓ Implementation of the Circumpolar Marine Biodiversity Monitoring Plan ✓ Development of the Coastal Biodiversity Monitoring Plan ✓ The State of the Arctic Marine Biodiversity Report (SAMBR) ✓ Arctic Biodiversity Data Service (ABDS) ✓ CAFFs cooperation with the Arctic Spatial Data Infrastructure (SDI) ✓ A report on Traditional Knowledge and Wisdom: Changes in the North American Arctic and the involvement of northern communities ✓ TK holders in the development of the CBMP Arctic Coastal Biodiversity Monitoring Plan. 	<ul style="list-style-type: none"> ✓ Completion of the Coastal Biodiversity Monitoring Plan ✓ Follow-up on the State of the Arctic Marine Biodiversity Report (SAMBR) ✓ Arctic Biodiversity Data Service (ABDS) ✓ CAFFs cooperation with the Arctic Spatial Data Infrastructure (SDI) ✓ TK holders in the development of the CBMP Arctic Coastal Biodiversity Monitoring Plan. ✓ Holding of several relevant sessions at the Arctic Biodiversity Congress to support stakeholder engagement and cooperation <p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic EIA ✓ Operationalizing a One Health approach in the Arctic, Part 2 (One Health) <p>AMAP</p> <ul style="list-style-type: none"> ✓ Through the AMAP monitoring programme and SAON <p>Arctic Council:</p> <ul style="list-style-type: none"> ✓ Task force of Arctic Marine Cooperation (continued work 2017-2019) ✓ Task force on Improved Connectivity in the Arctic (active from 2017-2019) ✓ Expert Group in support of implementation of 			

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
			the framework for action on Black Carbon and Methane (active 2017-2019)			
7.1.2	Improve, synthesize, and respond to emerging knowledge across all disciplines and sectors to include government, academic and industry information, and traditional and local knowledge.	<p>PAME</p> <ul style="list-style-type: none"> ✓ Resource Exploration and Development Expert Group - Information gathering. ✓ Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO. <p>SDWG</p> <ul style="list-style-type: none"> ✓ ECONOR III ✓ Arctic Renewable Energy Atlas (AREA) <p>AMAP</p> <p>Through the AMAP Monitoring Programme. This is the ambition of AACA.</p> <p>EPPR</p> <p>Conditions on Oil Spill Circumpolar Response Viability Analysis</p> <p>CAFF</p> <p>Numerous recommendations and actions from the Arctic Biodiversity Assessment. To promote the conservation and sustainable use of Arctic biodiversity through dialogue among scientists, policy-makers, government officials, industry, civil society and indigenous peoples. The second Congress is scheduled for 2018,</p>	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Shipping Best Practice Information Forum. ✓ Systematic engagement with Observer States on shipping-related work ✓ Update of PAME's shipping priorities and recommendations <p>CAFF</p> <p>Numerous recommendations and actions from the Arctic Biodiversity Assessment. To promote the conservation and sustainable use of Arctic biodiversity through dialogue among scientists, policy-makers, government officials, industry, civil society and indigenous peoples. The second Congress was held on Oct 2018 in Finland. Also see points under 7.1.1</p> <p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic Remote Energy Networks Academy (ARENA) ✓ Arctic Renewable Energy Atlas (AREA) ✓ Arctic Sustainable Energy Futures Toolkit ✓ Arctic Energy Summit 2017 ✓ Assessing the Use of Heavy Fuel Oil (HFO) in 	IMO: Polar Code entered into force (1. January 2017)		

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
		Finland. Also see points under 7.1.1	Indigenous Communities ✓ Solid Waste Management in Small Arctic Communities ✓ Good Practice Recommendations for Environmental Impact Assessment (EIA) and Public Participation in EIA in the Arctic (Arctic EIA) ✓ Arctic Resilience Action Framework (ARAF) AMAP ✓ Through the AMAP monitoring programme and SAON. ✓ This is partly addressed in the three regional Adaptation Actions for a Changing Arctic (AACAs) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017)			
7.1.3	Improve the understanding of cumulative impacts on marine ecosystems from multiple human activity-induced stressors such as climate change, ocean acidification, local and long range transported pollution (land and sea-based), marine litter,	PAME ✓ Ecosystem approach to management - Status of Implementation Report (EA-EG) ✓ Arctic Invasive Alien Species Strategy and Action plan (ARIAS) in collaboration with CAFF ✓ Marine litter in the Arctic - Desktop study SDWG ✓ One Health ✓ Arctic EIA AMAP ✓ This is the ambition of AACAs. It is supported by the AMAP Monitoring	PAME ✓ Marine litter in the Arctic - Desktop study ✓ Guidelines for EA Implementation in the Arctic ✓ Integrated Ecosystem Assessment of the Central Arctic Ocean ✓ Implementation of the Arctic Invasive Alien Species Strategy and Action plan (ARIAS) CAFF ✓ Numerous recommendations and actions from the Arctic Biodiversity Assessment.	IMO: Ballast Water Convention entry into force (8 th of September 2017)		

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
	noise, eutrophication, biomass overharvesting, invasive alien species and other threats.	<p>Programme and assessment activities like AOA.</p> <p>ACAP</p> <ul style="list-style-type: none"> ✓ Phase out of ozone-depleting and fluorinated greenhouse gases at one of the fish and seafood processing factories of the Murmansk Oblast ✓ Pilot project for reducing CO2 and black carbon emissions on the rivers of the Arctic zone of the Russian Federation <p>CAFF</p> <ul style="list-style-type: none"> ✓ Numerous recommendations and actions from the Arctic Biodiversity Assessment. ✓ Arctic Invasive Alien Species Strategy and Action plan (ARIAS) ✓ The State of the Arctic Marine Biodiversity Report from CAFFs CBMP 	<ul style="list-style-type: none"> ✓ Implementation of the Arctic Invasive Alien Species Strategy and Action plan (ARIAS) ✓ Follow-up on the State of the Arctic Marine Biodiversity Report from CAFFs CBMP ✓ Initiating work to assess the impacts of plastics on Arctic seabirds <p>SDWG</p> <ul style="list-style-type: none"> ✓ One Health ✓ Arctic EIA ✓ Assessing the Use of Heavy Fuel Oil (HFO) in Indigenous Communities ✓ The Arctic as a Food-Producing Region <p>AMAP</p> <p>Assess the impact of:</p> <ul style="list-style-type: none"> ✓ Climate change: Snow, Water, Ice and Permafrost in the Arctic (SWIPA 2017) assessment report ✓ Ocean acidification: Arctic Ocean Acidification assessment report (AOA, 2018) ✓ Short-lived climate pollutants: An update of AMAP assessment of short-lived climate forcers (ongoing). Reference to <i>UN ECE Convention on Long-range Transboundary Air Pollution</i> ✓ Contaminants: Biological Effects of Contaminants on Arctic Wildlife and Fish (2018). Reference to the <i>Stockholm Convention</i> and the <i>Minamata Convention</i> <p>This is also addressed in the three regional Adaptation</p>			

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
			<p>Actions for a Changing Arctic (AACA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017).</p> <p>The mentioned activities are supported by the AMAP monitoring and assessment programme.</p>			
7.1.4	Improve the predictive capacity and develop a common understanding of the likely future impacts of climate change and other emerging threats, such as ocean acidification.	<p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic EIA <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is the ambition of AACA. It is supported by the AMAP Monitoring Programme and assessment activities like AOA <p>CAFF</p> <ul style="list-style-type: none"> ✓ Numerous recommendations and actions from the Arctic Biodiversity Assessment. ✓ CAFFs cooperation with the Arctic Spatial Data Infrastructure (SDI) 	<p>CAFF</p> <ul style="list-style-type: none"> ✓ Numerous recommendations and actions from the Arctic Biodiversity Assessment ✓ CAFFs cooperation with the Arctic Spatial Data Infrastructure (SDI) <p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic EIA ✓ Arctic Resilience Action Framework <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is addressed in the three regional Adaptation Actions for a Changing Arctic (AACA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017). <p>This is partly addressed in the Arctic Ocean Acidification assessment report (AOA, 2018). This is supported by the AMAP monitoring and assessment programme</p>			
7.1.5	Enhance local involvement in the collection of information and monitoring of	<p>PAME</p> <ul style="list-style-type: none"> ✓ Meaningful Engagement of Indigenous Peoples and Local Communities in Marine Activities project (MEMA) Part II Report 	<p>PAME</p> <ul style="list-style-type: none"> ✓ Meaningful Engagement of Indigenous Peoples and Local Communities in Marine Activities project (MEMA) Part II Report 			

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
	the marine environment including by using traditional and local knowledge in the work of the Arctic Council.	<ul style="list-style-type: none"> ✓ Resource Exploration and Development Expert Group - Information gathering. ✓ Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO. <p>SDWG</p> <ul style="list-style-type: none"> ✓ One Health ✓ Arctic Adaptation Exchange Portal ✓ Arctic as a Food Producing Region <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is supported by the AMAP Monitoring Programme (when relevant) and is the ambition of SAON <p>EPPR</p> <ul style="list-style-type: none"> ✓ Prevention, Preparedness and Response for Small Communities (focusing on oil spill response) <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ A report on Traditional Knowledge and Wisdom: Changes in the North American Arctic and the involvement of northern communities ✓ TK holders in the development of the CBMP Arctic Coastal Biodiversity Monitoring Plan. ✓ CAFF's educational kits 	<ul style="list-style-type: none"> ✓ Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO. <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment ✓ A report on Traditional Knowledge and Wisdom: Changes in the North American Arctic and the involvement of northern communities ✓ TK holders in the completion of the CBMP Arctic Coastal Biodiversity Monitoring Plan ✓ CAFF's educational kits <p>SDWG</p> <ul style="list-style-type: none"> ✓ One Health ✓ Arctic as a Food Producing Region ✓ Solid Waste Management in Small Arctic Communities <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is partly addressed in the three regional Adaptation Actions for a Changing Arctic (AACA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017). ✓ This is supported by the AMAP monitoring and assessment programme and is the ambition of SAON (when relevant) 			

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
7.1.6	Improve and coordinate communication of knowledge generated in Arctic Council assessments to the circumpolar and global community.	<p>PAME</p> <ul style="list-style-type: none"> ✓ Collaboration with international organizations on Arctic related activities of common interest ✓ Engagement with Observer states ✓ PAME Communication and Outreach Strategy. <p>SDWG</p> <ul style="list-style-type: none"> ✓ ECONOR III <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is the ambition of AMAP assessment work and in particular of AACA <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ CAFF's framework of Resolution of Cooperation with relevant biodiversity related multi-lateral environmental agreements and bodies (CBD, Ramsar, AEWA, CMS). ✓ CAFF's Arctic Biodiversity Data Service (ABDS) 	<p>PAME</p> <ul style="list-style-type: none"> ✓ Collaboration with international organizations on Arctic related activities of common interest ✓ Systematic engagement with Observer States on shipping-related work ✓ Communication and Outreach Strategy <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ CAFF's framework of Resolution of Cooperation with relevant biodiversity related multi-lateral environmental agreements and bodies (CBD, Ramsar, AEWA, CMS). ✓ CAFF's Arctic Biodiversity Data Service (ABDS) ✓ Hosting the second Arctic Biodiversity Congress <p>SDWG</p> <ul style="list-style-type: none"> ✓ One Health ✓ Arctic EIA ✓ Arctic Resilience Action Framework ✓ Assessing the Use of Heavy Fuel Oil (HFO) in Indigenous Communities ✓ The Arctic as a Food-Producing Region <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is the ambition of AMAP assessment work. This was in particular in focus for the three 			

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
			regional Adaptation Actions for a Changing Arctic (AACAA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017)			
7.1.7	Continue the development and standardizing of data sharing and management at a circumpolar level.	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Ship Traffic Data project (ASTD): A proposed system for maritime traffic analysis which will allow the Arctic Council to be on the forefront of monitoring trends in Arctic shipping. <p>SDWG</p> <ul style="list-style-type: none"> ✓ ECONOR III <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is the ambition of SAON and in particular the Arctic Data Committee <p>EPPR</p> <ul style="list-style-type: none"> ✓ Standardization as a tool for prevention of oil spills in the Arctic <p>CAFF</p> <p>See previous entries regarding CBMP and ABDS</p>	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Ship Traffic Data project (ASTD) ✓ Arctic Shipping Best Practice Information Forum, including the launch of its web-portal (www.arcticshippingforum.is) ✓ Proposed MoU with the Arctic Regional Hydrographic Commission (ARHC) ✓ The MEMA Database (www.memadatabase.is): a compilation of over 750 documents that relate to engagement of Indigenous Peoples and local communities and formed the basis for the MEMA Reports I & II. <p>CAFF</p> <ul style="list-style-type: none"> ✓ See previous entries regarding CBMP and ABDS <p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic Remote Energy Networks Academy (ARENA) ✓ The Arctic as a Food-Producing Region ✓ Arctic Renewable Energy Atlas (AREA) Arctic EIA <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is the ambition of SAON and in particular the Arctic Data Committee 			

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
7.1.8	Improve awareness of Arctic shipping activity and its impacts, promote expanded information sharing of ship traffic data among Arctic states and, as appropriate, other stakeholders, and update selected parts of the 2009 Arctic Marine Shipping Assessment (AMSA) Report, including those pertaining to the volume, composition and destination of Arctic shipping, shipping impacts, and key infrastructure needs such as hydrographic surveying and nautical charting.	<p>PAME</p> <ul style="list-style-type: none"> ✓ The identification of a project for PAME to report on Polar Code implementation, Port States Control Regime statistics on ship compliance, and challenges, if any, in observing the Polar Code ✓ Regular updates on the work of the IMO with respect to black carbon ✓ Arctic Ship Traffic Data project (ASTD): A proposed system for maritime traffic analysis which will allow the Arctic Council to be on the forefront of monitoring trends in Arctic shipping. <p>AMAP</p> <ul style="list-style-type: none"> ✓ Adaptation Actions for a Changing Arctic (AACA) <p>EPPR</p> <ul style="list-style-type: none"> ✓ Development of a Database of Arctic Response Assets ✓ Initial engagement (IALA) 	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Ship Traffic Data project (ASTD) ✓ Arctic Shipping Best Practice Information Forum, including the launch of its web-portal (www.arcticshippingforum.is) ✓ Information paper sent to IMO on PAME's work on HFO. ✓ Systematic engagement with Observer States on shipping-related work ✓ Collect and report information on use of Heavy Fuel Oil (HFO) in the Arctic <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is partly addressed in the three regional Adaptation Actions for a Changing Arctic (AACA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017) 			

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
7.1.9	Strengthen, where feasible, the collection, observation, monitoring and dissemination of relevant data on the Arctic marine environment. This could include hydrographic and bathymetric data; oceanographic data (including tides and currents) and meteorological information for numerical modeling and forecasting; pollutants; climate change-related impacts (especially ocean acidification); and ecosystem and biodiversity status and trends (including invasive species and other metrics of	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Ship Traffic Data project (ASTD): A proposed system for maritime traffic analysis which will allow the Arctic Council to be on the forefront of monitoring trends in Arctic shipping. ✓ Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO ✓ Resource Exploration and Development Expert Group (REDEG) Information gathering <p>SDWGW</p> <ul style="list-style-type: none"> ✓ Arctic Adaptation Exchange Portal <p>AMAP</p> <ul style="list-style-type: none"> ✓ Part of this is the ambition of AACA. It is supported by the AMAP Monitoring Programme and assessment activities like AOA <p>EPPR</p> <ul style="list-style-type: none"> ✓ Conditions on Oil Spill Circumpolar Response Viability Analysis <p>CAFF</p> <ul style="list-style-type: none"> ✓ See earlier entries re ABDS and CBMP, and CAFFs data agreements with GBIF and OBIS 	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Ship Traffic Data project (ASTD) ✓ Arctic Shipping Best Practice Information Forum, including the launch of its web-portal (www.arcticshippingforum.is) ✓ The MEMA Database (www.memadatabase.is): a compilation of over 750 documents that relate to engagement of Indigenous Peoples and local communities and formed the basis for the MEMA Reports I & II. ✓ Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO ✓ Implementation of the Arctic Invasive Alien Species Strategy and Action plan (ARIAS) <p>CAFF</p> <ul style="list-style-type: none"> ✓ See earlier entries re ABDS and CBMP, and CAFFs data agreements with GBIF and OBIS <p>SDWGW</p> <ul style="list-style-type: none"> ✓ Solid Waste Management in Small Arctic Communities ✓ Arctic EIA ✓ Assessing the Use of Heavy Fuel Oil (HFO) in Indigenous Communities <p>AMAP</p> <ul style="list-style-type: none"> ✓ Part of this is addressed in the three regional Adaptation Actions for a 			

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
	environmental change).		<p>Changing Arctic (AACA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017).</p> <ul style="list-style-type: none"> ✓ This is partly addressed in the Arctic Ocean Acidification assessment report (AOA, 2018). ✓ This is supported by the AMAP monitoring and assessment programme. 			
7.1.10	Strengthen the development of circumpolar procedures for, and improve remote sensing capabilities to support, ice detection, monitoring, and forecasting and improve the provision of near-shore and off-shore ice information (current and forecast conditions).	<p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ the Land Cover Change Index ✓ (SAON – The indicators’s work. It is in a very premature phase) ✓ See earlier note on CBMP suite of indicators under 7.1.9 and 7.1.9 <p>EPPR</p> <p>Initial engagement - International Ice Charting Working Group (IICWG)</p>	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Shipping Best Practice Information Forum: Web-Portal (www.arcticshippingforum.is) <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ CAFFs Land Cover Change Index ✓ (SAON – The indicators’s work. It is in a very premature phase) ✓ See earlier note on CBMP suite of indicators under 7.1.9 and 7.1.9 			
7.1.11	Support continued development of circumpolar indicators of changes and stressors across the	<p>PAME</p> <ul style="list-style-type: none"> ✓ PAME has worked jointly with CAFF on finalizing the Arctic Protected Areas: Indicator Report and the release of the harmonized dataset based on data 	<p>PAME</p> <ul style="list-style-type: none"> ✓ PAME MPA-network Toolbox: Area-based conservation measures and ecological connectivity 			

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	Arctic marine environment, as well as metrics for monitoring biodiversity.	<p>received from Member States.</p> <p>AMAP Adaptation Actions for a Changing Arctic (AACCA) project.</p>	<p>CAFF</p> <ul style="list-style-type: none"> ✓ See CAFFs work on identifying key focal ecosystem components in Arctic marine and coastal ecosystems, and their monitoring and assessment via the CBMP. Also see CAFFs suite of headline indicators ✓ See CAFFs work initiated on looking at impacts of plastics on seabirds <p>AMAP</p> <ul style="list-style-type: none"> ✓ Part of this is addressed in the three regional Adaptation Actions for a Changing Arctic (AACCA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017). ✓ This is supported by the AMAP monitoring and assessment programme 			
7.2.1	Promote the implementation of the ecosystem approach to management in the Arctic through synthesis and application of the results of relevant work by the Arctic Council and associated efforts by relevant organizations.	<p>PAME</p> <ul style="list-style-type: none"> ✓ Status of implementation of the Ecosystem Approach to management (EA-EG) ✓ Conference report from the International science and policy conference on the status of implementation in the Arctic (August 2016) ✓ White paper: Status of Setting Ecological Objectives in the Arctic ✓ Work of the joint ICES/PAME working group <p>SDWGG</p> <ul style="list-style-type: none"> ✓ Arctic EIA <p>AMAP</p>	<p>PAME</p> <ul style="list-style-type: none"> ✓ Preparation of Guidelines for EA/EBM Implementation in the Arctic ✓ Integrated Ecosystem Assessment of the Central Arctic Ocean <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ The ecosystem approach is fundamental to CAFF's mandate and promoting its use and application including support to AC cross-cutting efforts e.g. EA expert group is 			

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		<ul style="list-style-type: none"> ✓ Part of this could be the in scope of the Central Arctic Ocean assessment <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ The ecosystem approach is fundamental to CAFF's mandate and promoting its use and application including support to AC cross-cutting efforts e.g. EA expert group is reflected in the CAFF work plan. 	<p>reflected in the CAFF work plan.</p> <ul style="list-style-type: none"> ✓ CAFF releasing series of state of the Arctic ecosystems reports. <p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic EIA 			
7.2.2	Identify and assess threats and impacts to areas of heightened ecological and cultural significance and how such areas may be influenced in the future by climate change and other human induced changes and activities.	<p>AMAP</p> <ul style="list-style-type: none"> ✓ AOA may identify and assess such areas <p>ACAP</p> <ul style="list-style-type: none"> ✓ Circumpolar Local Environmental Observer (CLEO) <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. 	<p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. 			
7.2.3	Identify and develop tools and methodologies for assessing cumulative impacts and risks for Arctic marine ecosystems and areas of heightened ecological and	<p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic EIA <p>AMAP</p> <ul style="list-style-type: none"> ✓ AMAP monitoring and assessment work, including the Adaptation Actions for a Changing Arctic (AACA) project. <p>CAFF</p>	<p>PAME</p> <ul style="list-style-type: none"> ✓ Integrated Ecosystem Assessment of the Central Arctic Ocean <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ See earlier notes to CBMP, and ABDS 			

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	cultural significance with the aim of using them for integrated assessments.	<ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ See earlier notes to CBMP, and ABDS ✓ Participation in the PAME led EA expert groupAs part of its support to the CBD work to identify EBSAs in the Arctic CAFF has processed and made accessible via the ABDS the data collected by the CBD for its work to identify EBSAs in the Arctic 	<ul style="list-style-type: none"> ✓ Participation in the PAME led EA expert group <p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic EIA <p>AMAP</p> <ul style="list-style-type: none"> ✓ Part of this is addressed in the three regional Adaptation Actions for a Changing Arctic (AACA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017). ✓ This is supported by the AMAP monitoring and assessment programme. 			
7.2.4	Encourage the Arctic states to implement appropriate measures, – or to pursue such measures at relevant international organizations to protect Arctic marine Areas of Heightened Ecological and Cultural Significance. Focus should be on species and ecosystems particularly at risk from climate change and cumulative impacts, including areas of refuge for ice-associated	<p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. 	<p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. 			

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	species that are, or are expected to become particularly important to Arctic marine biodiversity under future climate conditions.					
7.2.5	Develop and encourage the Arctic states to implement common measures and support research into technology and techniques for early detection and reporting of marine invasive species in the Arctic marine environment.	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic invasive species strategy and action plan (in collaboration with CAFF) <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ Arctic invasive species strategy and action plan 	<p>PAME</p> <ul style="list-style-type: none"> ✓ Implementation of the Arctic Invasive Alien Species Strategy and Action plan (ARIAS) <p>CAFF</p> <p>See earlier entries re ABDS and CBMP, and CAFFs data agreements with GBIF and OBIS</p>			
7.2.6	Identify and map areas of the marine environment that are particularly vulnerable to the effects of ocean acidification to inform appropriate monitoring	<p>AMAP</p> <ul style="list-style-type: none"> ✓ AOA may identify and assess such areas 	<p>AMAP</p> <ul style="list-style-type: none"> ✓ This is addressed for selected areas in Arctic Ocean Acidification assessment report (AOA, 2018) 			

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	and adaptation measures.					
7.2.7	Promote cooperation among Arctic and non-Arctic states to address threats to the staging and wintering grounds and migrating corridors of migratory species using the marine environment.	CAFF <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ Arctic Migratory Bird Initiative (AMBI) 	CAFF <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ Arctic Migratory Bird Initiative (AMBI) 			
7.2.8	Actively support efforts, in cooperation with indigenous peoples, to: <i>reduce long range pollution accumulating in the Arctic marine food-chains, and; address climate change and ocean acidification by reducing emissions and implementing adaptation measures, as a matter of urgency.</i>	AMAP <ul style="list-style-type: none"> ✓ AMAP monitoring and assessment work, including the Adaptation Actions for a Changing Arctic (AACCA) project. CAFF <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. 	CAFF <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. AMAP <ul style="list-style-type: none"> ✓ This is partly addressed in the three regional Adaptation Actions for a Changing Arctic (AACCA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017). ✓ This is partly addressed in the Arctic Ocean Acidification assessment report (AOA, 2018). ✓ This is supported by the AMAP monitoring and assessment programme 			

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
7.2.9	Limit the impacts of climate change in the short term through concerted efforts to create inventories of and reduce emissions of short lived climate forcers, in particular black carbon and methane.	<p>AMAP</p> <ul style="list-style-type: none"> ✓ AMAP monitoring and assessment work, including the Adaptation Actions for a Changing Arctic (AACA) project. <p>ACAP</p> <ul style="list-style-type: none"> ✓ A number of projects that deal with black carbon reduction, not directly marine related <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. 	<p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. <p>AMAP</p> <ul style="list-style-type: none"> ✓ Short-lived climate pollutants: An update of AMAP assessment of short-lived climate forcers (ongoing). Reference to <i>UN ECE Convention on Long-range Transboundary Air Pollution</i> <p>Arctic Council:</p> <ul style="list-style-type: none"> ✓ Expert Group in support of implementation of the framework for action on Black Carbon and Methane (active 2017-2019) 			
7.2.10	Develop a pan-Arctic network of marine protected areas, based on the best available knowledge, to strengthen marine ecosystem resilience and contribute to human wellbeing, including traditional ways of life.	<p>PAME</p> <ul style="list-style-type: none"> ✓ Framework for a Pan-Arctic Network of MPAs follow-up activities: <ul style="list-style-type: none"> ○ A report in support of the “Desktop study on area-based conservation measures and its linkages to categories of Arctic marine biodiversity ‘Toolbox’” project. <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ Reflected in CAFF work plan and CAFF contributes to the implementation of the MPA Framework and with PAME is releasing the 	<p>PAME</p> <ul style="list-style-type: none"> ✓ PAME MPA-network Toolbox: Area-based conservation measures and ecological connectivity <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment ✓ Reflected in CAFF work plan and CAFF contributes to the implementation of the MPA Framework and with PAME is released the 2017 protected areas indicator report ✓ Cooperation with PAME and WCMC to develop a 2018 protected areas indicator update 			

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		2016 protected areas indicator report				
7.3.1	Advance EBM as an overarching framework for conservation and sustainable use of living and non-living resources in the Arctic marine environment, taking into account cumulative impacts on the Arctic and the need for adaptation to climate change.	<p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic EIA <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ The Ecosystem approach is fundamental to CAFF's mandate and promoting its use and application including support to AC cross-cutting efforts e.g. EA expert group is reflected in the CAFF work plan 	<p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and actions from the Arctic Biodiversity Assessment. ✓ The Ecosystem approach is fundamental to CAFF's mandate and promoting its use and application including support to AC cross-cutting efforts e.g. EA expert group is reflected in the CAFF work plan <p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic EIA 			
7.3.2	Improve the understanding of risks and risk reducing measures related to Arctic shipping and oil and gas exploration and development activities, including gap analysis and sharing of best practices related to oil	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Offshore Oil and Gas follow-up activities ✓ Regulatory resource website <p>EPPR</p> <ul style="list-style-type: none"> ✓ Conditions on Oil Spill Circumpolar Response Viability Analysis ✓ Standardization as a tool for prevention of oil spills in the Arctic ✓ Field Guide for Oil Spill Response in Arctic Waters <p>CAFF</p>	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Shipping Best Practice Information Forum: Web-portal (www.arcticshippingforum.is) <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations from the Arctic Biodiversity Assessment ✓ Through its mainstreaming efforts is working to incorporate biodiversity objectives and provisions into all Arctic Council work and encourage the same for 			

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
	spill prevention, preparedness and response to emergencies in the Arctic.	<ul style="list-style-type: none"> ✓ Recommendations from the Arctic Biodiversity Assessment. ✓ Through its mainstreaming efforts is working to incorporate biodiversity objectives and provisions into all Arctic Council work and encourage the same for on-going and future international standards, agreements, plans, operations and/or other tools specific to development in the Arctic. This includes, but is not restricted to, oil and gas development, shipping, fishing, tourism and mining. A set of biodiversity principles is under development. ✓ Development of TEEB scoping study for the Arctic 	<p>on-going and future international standards, agreements, plans, operations and/or other tools specific to development in the Arctic. This includes, but is not restricted to, oil and gas development, shipping, fishing, tourism and mining. A set of biodiversity principles is under development.</p> <ul style="list-style-type: none"> ✓ Engagement with mining industry to develop report on common challenges and solutions 			
7.3.3	Explore whether there are substances in addition to oil that would benefit from additional pollution preparedness and response cooperation among the Arctic states.	<p>EPPR Technical Workshop - ARCSAFE</p>				
7.3.4	Support the research, development, and implementation of oil spill detection, mitigation	<p>PAME</p> <ul style="list-style-type: none"> ✓ Resource Exploration and Development Expert Group (REDEG) Information gathering <p>EPPR</p>	<p>PAME</p> <ul style="list-style-type: none"> ✓ Explore the environmental, economic, technical and practical aspects of these by ships in the 			

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	measures, and response technologies in ice-covered and ice-infested waters.	<ul style="list-style-type: none"> ✓ EPPR Arctic Oil Spill Response Technology Workshop <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations from the Arctic Biodiversity Assessment. 	<p>Arctic of alternative fuels.</p> <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations from the Arctic Biodiversity Assessment. 			
7.3.5	Develop recommendations for consideration by Arctic states to promote maritime safety and environmental protection with the objective of reducing risks related to international shipping activities in Arctic waters.	<p>PAME</p> <ul style="list-style-type: none"> ✓ The finalization of a report on regional reception facilities arrangements in the Arctic <p>CAFF</p> <p>See note under 7.3.2. re mainstreaming and biodiversity principles</p>	<p>PAME</p> <ul style="list-style-type: none"> ✓ Joint submission of the Arctic States to MEPC: Proposal for a new output to amend MARPOL to allow the establishment of regional arrangements in the Arctic <p>CAFF</p> <ul style="list-style-type: none"> ✓ See note under 7.3.2. re mainstreaming and biodiversity principles 			
7.3.6	Advance continuous improvement of safety and environment protection performance and the use of best and most appropriate practices and technology for all marine activities.	<p>PAME</p> <ul style="list-style-type: none"> ✓ The finalization of a paper entitled “Heavy Fuel Oil & Other Fuel Releases from Shipping in the Arctic and Near-Arctic” and the finalization of a report prepared for PAME entitled “Possible Hazards for Engines and Fuel Systems Using Fuel Oil in Cold Climate” ✓ The identification of specific projects to be identified during PAME I-2017 on mitigating the risks associated with the 	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Shipping Best Practice Information Forum: Web-portal (www.arcticshippingforum.is) ✓ Explore the environmental, economic, technical and practical aspects of the use by ships in the Arctic of alternative fuels <p>CAFF</p> <ul style="list-style-type: none"> ✓ See note under 7.3.2. re mainstreaming and biodiversity principles 			

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		<p>use and carriage of HFO by vessels in the Arctic</p> <ul style="list-style-type: none"> ✓ The Arctic Marine Tourism Project (AMTP) - the first project in a potential suite of renewed efforts by the Arctic Council to analyze and promote sustainable tourism across the circumpolar Arctic. <p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic EIA <p>CAFF</p> <p>See note under 7.3.2. re mainstreaming and biodiversity principles</p>	<p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic EIA 			
7.3.7	Support and enhance international efforts and cooperation to continue to identify, assess and reduce existing and emerging harmful contaminants.	<p>AMAP</p> <ul style="list-style-type: none"> ✓ AMAP monitoring and assessment work on contaminants. <p>ACAP</p> <ul style="list-style-type: none"> ✓ Part of the mandate of ACAP <p>CAFF</p> <p>Recommendations from the Arctic Biodiversity Assessment.</p>	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Shipping Best Practice Information Forum: Web-portal (www.arcticshippingforum.is) ✓ Information paper to IMO on PAME's work on HFO ✓ Joint submission of the Arctic States to MEPC: Proposal for a new output to amend MARPOL to allow the establishment of regional arrangements in the Arctic <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations from the Arctic Biodiversity Assessment. ✓ Arctic Biodiversity Congress: multiple relevant sessions <p>AMAP</p> <ul style="list-style-type: none"> ✓ Biological Effects of Contaminants on Arctic Wildlife and Fish (2018). 			

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			Reference to the <i>Stockholm Convention</i> and the <i>Minamata Convention</i> ✓ This is supported by the AMAP monitoring and assessment programme on contaminants			
7.3.8	Promote the management of human activities in the circumpolar Arctic in accordance with Ecosystem Based Management and international law to ensure long term sustainability of stocks and ecosystems.	SDWG ✓ Arctic EIA CAFF ✓ Recommendations and action from the Arctic Biodiversity Assessment. ✓ See earlier note under 7.3.1 re EBM	CAFF ✓ Recommendations and action from the Arctic Biodiversity Assessment. ✓ See earlier note under 7.3.1 re EBM ✓ Arctic Biodiversity Congress: EBM one of Congress themes and multiple relevant sessions SDWG ✓ <u>Arctic EIA</u> ✓ <u>Arctic as a Food Producing Region</u>			
7.3.9	Strengthen the development of a common Arctic protocol for ecotoxicological assessment and screening of chemicals used in resource extraction activities in the Arctic.	CAFF ✓ Recommendations and action from the Arctic Biodiversity Assessment.	CAFF ✓ Recommendations and action from the Arctic Biodiversity Assessment.			

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
7.3.10	Support ongoing work to examine and recommend actions to reduce black carbon emissions from activities in Arctic waters. Encourage research that advances technical definitions, measurement standards, and mitigation options with respect to the impact on the Arctic from black carbon.	<p>PAME</p> <p>The finalization of a paper entitled “Heavy Fuel Oil & Other Fuel Releases from Shipping in the Arctic and Near-Arctic” and the finalization of a report prepared for PAME entitled “Possible Hazards for Engines and Fuel Systems Using Fuel Oil in Cold Climate”</p>	<p>PAME</p> <ul style="list-style-type: none"> ✓ Collect and report information on use of Heavy Fuel Oil (HFO) in the Arctic ✓ Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO (joint project with SDWG) ✓ Prepare an information paper summarizing PAME’s work on HFO ✓ Explore the environmental, economic, technical and practical aspects of the use by ships in the Arctic of alternative fuels <p>AMAP</p> <ul style="list-style-type: none"> ✓ Some of this may be addressed in the update of AMAP assessment of short-lived climate forcers (ongoing). Reference to <i>UN ECE Convention on Long-range Transboundary Air Pollution</i> <p>Arctic Council:</p> <ul style="list-style-type: none"> ✓ Expert Group in support of implementation of the framework for action on Black Carbon and Methane (active 2017-2019) 			

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7.3.11	Promote cooperation to improve and expand a) hydrographic and bathymetric data collection and b) Safety of Navigation services and products (including nautical chart and publication production) to support safe and efficient marine shipping in the Arctic.	CAFF <ul style="list-style-type: none"> ✓ The Arctic SDI initiative 	PAME <ul style="list-style-type: none"> ✓ Arctic Shipping Best Practice Information Forum: Web-portal (www.arcticshippingforum.is) CAFF <ul style="list-style-type: none"> ✓ The Arctic SDI initiative 			
7.3.12	Strengthen the dialogue with relevant business, industry and environmental stakeholders and Arctic inhabitants in order to foster conservation and sustainable use of the Arctic marine environment.	PAME <ul style="list-style-type: none"> ✓ The establishment of an Arctic Shipping Best Practices Information Forum SDWG <ul style="list-style-type: none"> ✓ One Health ✓ Arctic Adaptation Exchange Portal ✓ Arctic as a Food Producing Region ✓ EALLU CAFF <ul style="list-style-type: none"> ✓ Recommendations and action from the Arctic Biodiversity Assessment. ✓ See earlier notes re mainstreaming and Arctic Biodiversity Congress 	PAME <ul style="list-style-type: none"> ✓ Arctic Shipping Best Practice Information Forum CAFF <ul style="list-style-type: none"> ✓ Recommendations and action from the Arctic Biodiversity Assessment. ✓ See earlier notes re mainstreaming and Arctic Biodiversity Congress and Arctic Youth Summit SDWG <ul style="list-style-type: none"> ✓ One Health ✓ ARAF ✓ Arctic as a Food Producing Region ✓ EALLU AMAP <ul style="list-style-type: none"> ✓ Some of this is addressed in the three 			

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			regional Adaptation Actions for a Changing Arctic (AACAA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017)			
7.3.13	Strengthen the dialogue with industry (including through the Arctic Economic Council) in order to foster sustainable development in the Arctic.	<p>PAME</p> <ul style="list-style-type: none"> ✓ The establishment of an Arctic Shipping Best Practices Information Forum ✓ Collaboration with international organizations on Arctic related activities of common interest <p>SDGW</p> <ul style="list-style-type: none"> ✓ Arctic as a Food Producing Region <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and action from the Arctic Biodiversity Assessment. ✓ See earlier notes re mainstreaming and Arctic Biodiversity Congress 	<p>PAME</p> <ul style="list-style-type: none"> ✓ Arctic Shipping Best Practice Information Forum ✓ Collaboration with international organizations on Arctic related activities of common interest <p>CAFF</p> <ul style="list-style-type: none"> ✓ Arctic Biodiversity Congress, Oct 2018: multiple sessions with industry and industry advisory committee informed development of the Congress <p>SDWG</p> <ul style="list-style-type: none"> ✓ Arctic as a Food Producing Region ✓ Arctic Sustainable Energy Futures Toolkit ✓ Arctic EIA <p>AMAP</p> <ul style="list-style-type: none"> ✓ Some of this is addressed in the three regional Adaptation Actions for a Changing Arctic (AACAA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017) 			

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7.4.1	Improve meaningful engagement of Arctic indigenous peoples and other Arctic inhabitants in relevant decisions, including through the consideration and use of traditional and local knowledge (TLK) in avoiding or mitigating negative environmental, subsistence, and cultural impacts, as well as in maintaining or increasing well-being and socio-economic opportunities.	<p>PAME</p> <ul style="list-style-type: none"> ✓ The Meaningful Engagement of Indigenous Peoples and Communities in Marine Activities (MEMA) Part I Report ✓ Arctic Marine Indigenous Use of Mapping (AIA) project <p>SDWG</p> <ul style="list-style-type: none"> ✓ One Health ✓ Arctic Adaptation Exchange Portal ✓ Arctic as a Food Producing Region ✓ EALLU <p>AMAP</p> <ul style="list-style-type: none"> ✓ AMAP monitoring and assessment work, including the Adaptation Actions for a Changing Arctic (AACA) project. <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and action from the Arctic Biodiversity Assessment. ✓ See earlier notes re TLK 	<p>PAME</p> <ul style="list-style-type: none"> ✓ Meaningful Engagement of Indigenous Peoples and Local Communities in Marine Activities project (MEMA) Part II Report ✓ Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO (joint project with SDWG) <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and action from the Arctic Biodiversity Assessment. ✓ See earlier notes re TLK ✓ Arctic Youth Summit and declaration (Oct 2018) and Arctic youth exchange network ✓ Arctic Biodiversity Congress, Oct 2018 <p>SDWG</p> <ul style="list-style-type: none"> ✓ One Health ✓ Arctic EIA ✓ Arctic as a Food Producing Region ✓ Arctic Sustainable Energy Futures Toolkit ✓ EALLU ✓ Solid Waste Management in Small Arctic Communities ✓ Assessing the Use of Heavy Fuel Oil (HFO) in Indigenous Communities <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is partly addressed in the three regional Adaptation Actions for a Changing Arctic (AACA) 			

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			<p>reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017).</p> <ul style="list-style-type: none"> ✓ This is partly addressed in the Arctic Ocean Acidification assessment report (AOA, 2018) <p>The mentioned activities are supported by the AMAP monitoring and assessment programme</p>			
7.4.2	Facilitate coastal community exchanges between Arctic states to improve sharing of knowledge and experiences and to strengthen the dialog with relevant business and industry in the Arctic in order to foster the conservation and sustainable use of the Arctic marine environment.	<p>PAME</p> <ul style="list-style-type: none"> ✓ The Meaningful Engagement of Indigenous Peoples and Communities in Marine Activities (MEMA) Part II Report ✓ Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and action from the Arctic Biodiversity Assessment. ✓ The report on Traditional Knowledge and Wisdom: Changes in the North American Arctic and the involvement of northern communities and TK holders in the development of the CBMP Arctic Coastal Biodiversity Monitoring Plan. 	<p>PAME</p> <ul style="list-style-type: none"> ✓ Meaningful Engagement of Indigenous Peoples and Local Communities in Marine Activities project (MEMA) Part II Report ✓ Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO (joint project with SDWG) <p>CAFF</p> <ul style="list-style-type: none"> ✓ Recommendations and action from the Arctic Biodiversity Assessment. ✓ Involvement of northern communities and TK holders in the development of the CBMP Arctic Coastal Biodiversity Monitoring Plan. <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is partly addressed in the three regional Adaptation Actions for a Changing Arctic (AACA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017) 			

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7.4.3	Assess vulnerabilities and adaptation options of Arctic coastal communities to changes in climate and the marine environment, as well as challenges and opportunities related to these changes and new patterns of activity.	<p>SDWG</p> <ul style="list-style-type: none"> ✓ One Health ✓ Arctic Adaptation Exchange Portal ✓ Arctic as a Food Producing Region <p>AMAP</p> <ul style="list-style-type: none"> ✓ AMAP monitoring and assessment work, including the Adaptation Actions for a Changing Arctic (AACCA) project. <p>CAFF</p> <p>See above note re coastal monitoring plan as a contribution towards facilitating future such assessments and dialogues</p>	<p>CAFF</p> <ul style="list-style-type: none"> ✓ See above note re coastal monitoring plan as a contribution towards facilitating future such assessments and dialogues <p>SDWG</p> <ul style="list-style-type: none"> ✓ One Health ✓ Arctic as a Food Producing Region ✓ Arctic Sustainable Energy Futures Toolkit ✓ EALLU ✓ Solid Waste Management in Small Arctic Communities ✓ Assessing the Use of Heavy Fuel Oil (HFO) in Indigenous Communities <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is partly addressed in the three regional Adaptation Actions for a Changing Arctic (AACCA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017) 			
7.4.4	In cooperation with the Permanent Participants, encourage engagement, as appropriate, with indigenous peoples organizations and bodies, that have specialized in traditional knowledge	<p>SDWG</p> <ul style="list-style-type: none"> ✓ One Health ✓ Arctic Adaptation Exchange Portal ✓ Arctic as a Food Producing Region <p>AMAP</p> <ul style="list-style-type: none"> ✓ AMAP monitoring and assessment work, including the Adaptation Actions for a Changing Arctic (AACCA) project. <p>CAFF</p>	<p>SDWG</p> <ul style="list-style-type: none"> ✓ One Health ✓ Arctic as a Food Producing Region ✓ Arctic Sustainable Energy Futures Toolkit ✓ EALLU ✓ Solid Waste Management in Small Arctic Communities ✓ Assessing the Use of Heavy Fuel Oil (HFO) in Indigenous Communities <p>AMAP</p>			

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		2015-2017 Arctic Council working groups and subsidiary bodies (name)	2017-2019 Arctic Council working groups and subsidiary bodies (name)	External bodies	(started, ongoing or completed)	Notes
	and that can inform the work of the Arctic Council in the protection of the marine environment and in enhance the well-being and the capacity of Arctic inhabitants, including Arctic indigenous peoples to deal with a changing Arctic and increased activity.	<ul style="list-style-type: none"> ✓ See previous entries regarding use of TK and engagement of indigenous peoples in CAFF work e.g. the development of the Coastal Biodiversity Monitoring Plan 	<ul style="list-style-type: none"> ✓ This is partly addressed in the three regional Adaptation Actions for a Changing Arctic (AACA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017) 			
7.4.5	Strengthen efforts on information, education and outreach with Arctic indigenous peoples and other residents regarding the effects of climate change to strengthen resilience and approaches to adaptation.	<p>PAME</p> <ul style="list-style-type: none"> ✓ Collect, report and/or review information about on-shore use by indigenous peoples and local communities of HFO <p>SDWG</p> <ul style="list-style-type: none"> ✓ ARENA ✓ AREA <p>AMAP</p> <ul style="list-style-type: none"> ✓ AMAP monitoring and assessment work, including the Adaptation Actions for a Changing Arctic (AACA) project. <p>CAFF</p> <ul style="list-style-type: none"> ✓ See earlier notes re CAFFs education initiative and the second Arctic Biodiversity Congress ✓ CAFF has a resolution of cooperation with APECS 	<p>CAFF</p> <ul style="list-style-type: none"> ✓ See earlier notes re CAFFs education initiative and the second Arctic Biodiversity Congress ✓ CAFF has a resolution of cooperation with APECS and works to ensure that young scientists have the opportunity to participate in CAFF activities and meetings ✓ Arctic Youth Summit and declaration (Oct 2018) and Arctic youth exchange network <p>SDWG</p> <ul style="list-style-type: none"> ✓ ARAF ✓ One Health ✓ Arctic as a Food Producing Region ✓ Arctic Sustainable Energy Futures Toolkit ✓ EALLU 			

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		and works to ensure that young scientists have the opportunity to participate in CAFF activities and meetings	<ul style="list-style-type: none"> ✓ Solid Waste Management in Small Arctic Communities ✓ Assessing the Use of Heavy Fuel Oil (HFO) in Indigenous Communities ✓ ARENA ✓ AREA <p>AMAP</p> <ul style="list-style-type: none"> ✓ This is partly addressed in the three regional Adaptation Actions for a Changing Arctic (AACA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017) 			
7.4.6	Strengthen the Arctic Council's communication to the public in Arctic and non-Arctic countries pointing out the importance of ongoing changes in the Arctic and their likely impact on non-Arctic areas, and emphasizing the effects on the wellbeing of all Arctic residents.	<p>PAME</p> <ul style="list-style-type: none"> ✓ Addressed by development of project-specific communications plans and outreach efforts such as brochures and website. <p>AMAP</p> <ul style="list-style-type: none"> ✓ AMAP monitoring and assessment work, including the Adaptation Actions for a Changing Arctic (AACA) project. <p>CAFF</p> <p>CAFF addresses this via the implementation of its communications strategy and active outreach programme</p>	<p>PAME</p> <ul style="list-style-type: none"> ✓ PAME website and social media activities. <p>CAFF</p> <ul style="list-style-type: none"> ✓ CAFF addresses this via the implementation of its communications strategy and active outreach programme ✓ Arctic Biodiversity Congress: EBM one of Congress themes and multiple relevant sessions <p>AMAP</p> <ul style="list-style-type: none"> ✓ AMAP monitoring and assessment work, including the three regional Adaptation Actions for a Changing Arctic (AACA) reports (Barents, Bering-Chukchi-Beaufort, Baffin Bay/Davis Strait, 2017) <p>Arctic Council</p> <ul style="list-style-type: none"> ✓ Communication efforts in media and social 			

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			media by the Arctic Council Secretariat.			

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