

RECENT PROPOSALS FOR CONSERVATION AND MANAGEMENT AND RESEARCH RECOMMENDATIONS
Last updated - AC 29/08/2022 (SC28 proposals and recommendations & Responses from Parties included)

This table provides the list of proposals for conservation and management and recommendations for research with implications for management that have been							
Green boxes contain new proposals and recommendations from SC/28 for consideration and possible endorsement by the Management Committees							
Light yellow boxes indicate updates reported at SC/28							
Bright yellow boxes contain a proposed change of status for consideration of the Management Committees							
Orange boxes contain proposals from the SC that the Management Committees have considered but a decision was taken to not endorse them							
Advice Reference (SC report & agenda item no.)	Country	Endorsed	Proposal for Conservation & Management	Recommendation for Research with Implications for Member Countries	Response from NAMMCO Committees	Response from Member Countries	Status (Active unless otherwise stated)
GENERAL PROCEDURES							
SC/25-2018, 5.4.1	FO/GL/IS/NO	NAMMCO 27-2019	Encouraging reliable reporting on struck and lost data should be developed as a joint initiative between SC and CHM		CHM proposed a collaborative effort be advanced though NAMMCO's involvement in a project coordinated by NORDECO. SC/26 were not convinced S&L should be a made a focal topic for NAMMCO's involvement in the NORDECO project (SC/26, 2019)	<p>NO: Important for the coastal seal hunt in Norway (NAMMCO 27, 2019).</p> <p>2020 Updates: NO - Mandatory reporting of struck and lost animals for Norwegian sealing vessels since 2019. Also in the coastal seal hunt, the number of lost animals are included in the total catch figures.</p> <p>2021 Updates: IS: Mandatory reporting of struck and lost animals for Icelandic sealing since 2019 FO: S&L zero in Faroese whaling, and there is currently no seal harvest.</p> <p>2022 Updates: GL; Struck and lost reporting is mandatory for all marine mammals. The reporting system is continuously improved for all species. For seals and small cetaceans, an information campaign in the Piniarneq-information sheet was undertaken in 2020 and continued through our pamplet distributed to all persons with licens. NO: see 2020 updates FO: no updates</p>	

SC/26-2020, 5.3.2	FO/GL/IS/NO	NAMMCO 28-2021	The NAMMCO Secretariat should be informed of any and all revisions of catch statistics taking place at a national level (e.g revisions of historical data or revisions after submission of national progress reports)			FO: catch statistic currently considered complete; NO:Updated including 2021	
SC/26-2020, 5.5.1	FO/GL/IS/NO			To inform the NAMMCO Scientific Publications data policy, MCs are asked to make clear their position on the desirability of having open data archiving for survey data	CN28 noted that this required further discussion. The Secretariat was asked to create a draft data policy and circulate this for comment at a later stage.	GL: Aggregated data is acceptable 2022 Updates: GL: Aggregated data is acceptable; NO: Aggregated data available	Ongoing
SC/27-2021, 3.1	IS/NO/FO/GL	NAMMCO 28-2021	Validate all data (direct catch, by-catch or other) before submission to formal databases and repositories			NO: we attempt to peer review and publish estimates of by-catch before submitting to formal databases and repositories. 2022 Updates: GL have internal validating processes during the whole season. FO: no updates on bycatch; NO: Bycatch data vil bi valitated before submission to formal databases. bycatch data for harbour porpoise published. Bycatch data for humpback and killer whales accepted for publication. Bycatch data for harbour and grey seals under preparation.	
ENVIRONMENTAL / ECOSYSTEM ISSUES							
MARINE MAMMAL – FISHERIES INTERACTIONS							
						Improvement in Sampling design will be discussed at an international IMR workshop 19-20 June 2019, and a recommendation on changes in sampling design will be developed based on the outcome from the workshop (NAMMCO 27)	

<p>SC/23-2016, 6.1.1 SC/24-2017 7.1.3 SC/25-2018 7.1.2</p>	<p>NO</p>	<p>NAMMCO 26-2018</p>	<p>NO should modify the design of the Coastal Reference Fleet, both the selection process and the number of vessels in areas of concern, according to BYCWG recommendations.</p>		<p>This is being discussed with the Directorate, and it may be able to increase CRF in problematic areas (SC/24) An evaluation of the sampling design will be begun as part of a new PhD project (SC/25)</p>	<p>2020 Updates: The CRF can be increased to a maximum of 30 vessels; the Institute of Marine Research does not have the capacity to administer any more vessels than that. However, bycatch monitoring can possibly be supplemented by an independent fleet of vessels using Remote Electronic Monitoring (video recording) and machine learning to identify marine mammals caught in gillnets. REM equipment was installed on the first fishing vessel operating in high bycatch areas in February 2020, as a pilot/feasibility study.</p> <p>2021 Updates: A system for Remote Electronic Monitoring is now under modification to meet the requirements of the Norwegian privacy legislation. The system will be tested on a commercial vessel in 2021.</p> <p>2022 Updates: NO: A system for Remote Electronic Monitoring has been modified to meet the requirements of Norwegian privacy legislation and a prototype is now under testing on a commercial vessel.</p>	
<p>SC/23-2016, 6.1.1</p>	<p>NO</p>	<p>NAMMCO 26-2018</p>		<p>Norway should improve species identification of by-caught seals.</p>	<p>SC/28 Norway should continue to improve the monitoring of by-catch rates and accurate species identification through the implementation of REM systems, habitat preference models, and photographs.</p>	<p>Photos of by-caught seals have been requested from the CRF to help verify fisherman's own identifications (NAMMCO 27, 2019 & SC/26 2019) 2020 Updates: Photos still not available, but REM project described above will help with seal identification issues</p> <p>2021 Updates: A system for Remote Electronic Monitoring is now under modification to meet the requirements of the Norwegian privacy legislation. The system will be tested on a commercial vessel in 2021.</p> <p>2022 Updates: NO: A prototype of REM is now under testing on a commercial vessel.</p>	

SC/28-2022, 20.2				In the Norwegian CRF, the collection of the lower jaw of seals becomes a mandatory terms in the boat contract.		2022 Updates: NO: This is impractical.	
SC/23-2016, 6.1.1	IS	NAMMCO 26-2018	Iceland should obtain by-catch rate for the cod fishery outside the April peak season.			Some sampling does take place outside of April, but on a small scale. Improvements in progress (NAMMCO 27, 2019). 2021 Updates: The main data source is the annual gillnet survey conducted by the MFRI. However, data is also collected throughout the year by onboard inspectors from the Directorate of Fisheries which could be used to obtain by-catch rates outside the April 2022 Updates:	
SC/23-2016, 6.1.1	FO	NAMMCO 26-2018		Provide data on the fleet especially on the pelagic and semi-pelagic trawl fisheries including VHVO trawl (fleet composition, relative effort and by-catch information) to BYCWG.		2021 Updates: FO: Partly provided to the BYCWG 2018 2022 Updates: FO no updates	
SC/23-2016, 6.1.1	GL	NAMMCO 26-2018		Greenland should provide information on the reliability of by-catch reporting for all species.		2020 Updates: Mandatory to report bycatch from the fishery by log book, by fishery observer scheme or via the reporting of purchases of fish and fishery products. Furthermore any person with a hunting license has the obligation to report any bycaught marine mammal. 2021 Updates: None 2022 Updates: GL: The task is in our list of work to do, but not realistic to start the work within 1-2 years.	
SC/24-2017, 7.1.3					Reported to the BYCWG (2018) but only the IS lumpsucker fishery analysis was endorsed.	NO: Revised Norwegian estimates of harbour porpoise bycatch have been presented to BYCWG and preliminarily accepted for use in assessment. (NAMMCO 27, 2019)	

	NO/IS	NAMMCO 26-2018		Revised by-catch analysis for harbour porpoise and seals should be presented to BYCWG	SC/28 reiterated this recommendation	<p>2021 Updates:</p> <p>NO: The Norwegian estimates of harbour porpoise by-catch 2006-2018 are published in the ICES Journal of Marine Science.</p> <p>IS: Estimates of by-catch in the lumpsucker fishery was completed in 2019, but work on by-catch rates in the cod gillnet is ongoing.</p> <p>2022 Updates: NO: working on updated harbour seal by-catch rates</p>	
SC/24-2017, 7.1.3	IS	NAMMCO 26-2018		Collect jaws/photos of by-caught seals to improve species identification, and collect skin samples to inform genetic research.	SC/27 reiterated the importance of improving the identification of by-caught seals	IS: Photo programme started in 2019 (NAMMCO 27, 2019)	
SC/28-2022, 20.2				<p>Update: to encourage collecting DNA samples and taking photos of by-caught seals in 2022 to validate inspector reports and calculate rate of misidentification by fishermen.</p> <p>Update: to support the analysis of DNA samples to assess rates of species misidentification through the provision of necessary funding</p>	SC/28 reiterated this recommendation	<p>2021 Updates: In progress</p> <p>2022 Updates:</p>	
SC/24-2017, 7.1.3	IS	NAMMCO 26-2018	Monitoring of the monkfish and Greenland halibut gillnet fishery in Iceland.		SC/28 reiterated this recommendation	<p>IS: Recommendation forwarded to Directorate of Fisheries (NAMMCO 27, 2019).</p> <p>2021 Updates: Monkfish gillnet fishery in Iceland is insignificant. The Greenland halibut gillnet fishery is monitored by onboard inspectors from the Directorate of Fisheries. However due to Covid-19 inspection effort was limited in 2020.</p> <p>2022 Updates:</p>	

SC/28-2022, 20.2	IS		To include a field for target species in the logbook as well as other ways to distinguish these coastal and offshore (cod and Greenland halibut) fisheries for monitoring by-catch.			2022 Updates:	
SC/24-2017, 7.1.3	FO	NAMMCO 26-2018		A proper assessment of the by-catch risk in the various fisheries in the Faroe Islands should be undertaken	Not yet undertaken (SC/25)	2021 Updates: FO: Planned for next BYCWG. 2022 Updates: FO no updates	
SC/23-2016, 6.1.1 SC/24-2017, 7.1.3 SC/25-2018 7.1.2	FO	NAMMCO 26-2018	Add the selection of local marine mammal species to e-logbook design			IS: Finished in Iceland, a drop down menu of local marine mammals is available to captains when reporting bycatch (NAMMCO 27, 2019). 2021 Updates: Not yet implemented 2022 Updates: FO: not completed	
SC/24-2017, 7.1.3 SC/25-2018, 7.1.2	FO	NAMMCO 26-2018	Implement a reporting system for vessels below 15 GMT			2021 Updates: Not yet implemented 2022 Updates: FO: not implemented	
SC/24-2017, 7.1.3	FO	NAMMCO 26-2018		Review and present to the BYCWG the data already collected by fishery observers on the monkfish fishery	Not presented to BYCWG 2018	2021 Updates: Partly presented to the BYCWG 2018. 2022 Updates: FO: no update	
SC/24-2017, 7.1.3	FO	NAMMCO 26-2018	Monitor vessels in the pelagic pair-trawl fisheries fleet with an electronic monitoring video system (EM) or onboard observers			An observer has been on pelagic vessels since 2018, with a primary task to look at by-catch of different pelagic species and to note any by-catch of marine mammals. No marine mammal by-catch has been observed during this period 2021 Updates: awaiting feedback from ongoing trials in Norway. 2022 Updates: FO: not implemented yet	
			Implement observer coverage			2021 Updates: timing related to EM trials and	

SC/24-2017, 7.1.3	FO	NAMMCO 26-2018	Implement observer coverage in other fleets with potential for by-catch (see BYCWG)			2022 Updates: FO: no update	
SC/24-2017, 7.1.3	FO	NAMMCO 26-2018	Include documentation of marine mammal by-catch in the protocol of fisheries observers, as well as other standard characteristics of the fleet (effort, location, month, etc.)			2021 Updates: Not yet implemented 2022 Updates: FO: no update	
SC/24-2017, 7.1.3	GL	NAMMCO 26-2018		Review marine mammal by-catch reports made in fishery logbooks previous to 2016	Not presented to BYCWG in 2020 or the SC	2020 Updates: GL: Data (2016-2019) from log book, by fishery observer scheme or via the reporting of purchases of fish and fishery products and from any person with a hunting license has been collected and described in an updated review paper on bycatch in Greenland by The Ministry of Fisheries, Hunting and Agriculture, 2019. 2022 Updates: GL: See comments next line	
SC/24-2017, 7.1.3	GL	NAMMCO 26-2018		Summarise and make available the data collected by fisheries inspectors regarding marine mammal by-catch events	Not presented to BYCWG in 2020 or the SC	2020 Updates: GL: Data (2016-2019) from log book, by fishery observer scheme or via the reporting of purchases of fish and fishery products and from any person with a hunting license has been collected and described in an updated review paper on bycatch in Greenland by The Ministry of Fisheries, Hunting and Agriculture, 2019. 2022 Updates: GL: the updated information is that the above mentioned document from 2019 was never approved internally and not recommended to be used. The task to summarize and make it available is in our list of work to do	
SC/24-2017, 7.1.3	GL	NAMMCO 26-2018	Implement a reporting system similar to that mandated by the species-specific executive			2020 Updates: GL: A new executive order is under way for small cetaceans, including reporting scheme for relevant species. 2021 Updates: None	

			orders			<p>2022 Updates: GL: the work is on going, the work on executive orders are on a priority list. The remaining is on other small cetaceans than beluga and narwhal. The draft will soon be sent for public hearing if approved by the minister</p>
SC/24-2017, 7.1.3	GL	NAMMCO 26-2018	Include in the online reporting system for the hunters some kind of automatic validation			<p>2020 Updates: Improvements of the reporting system is an ongoing</p> <p>2021 Updates: None</p> <p>2022 Updates: GL; an online reporting system called Jagtapp is on a development phase re terrestrial animals, then will include all species, including marine mammals on quota system in few years. As it is now all species in qouta system are to be reported on specific schemes which are put in to the electronic reporting system - database.</p>
SC/24-2017, 7.1.3	GL	NAMMCO 26-2018	Validation of by-catch reporting data from the licensed hunters' online system against those from the buyers		No information presented to the BYCWG in 2020 or the SC	<p>2020 Updates: GL: Data (2016-2019) from log book, by fishery observer scheme or via the reporting of purchases of fish and fishery products and from any person with a hunting license has been collected and described in an updated review paper on bycatch in Greenland by The Ministry of Fisheries, Hunting and Agriculture, 2019.</p> <p>2022 Updates: See comments re SC24-2017,7.1.3</p>
SC/25-2018, 7.1.2	IS/FO	NAMMCO 27-2019	Information available on by-catch from foreign vessels should be presented to BYCWG			<p>IS: Foreign vessels represent a miniscule amount of overall effort within the Icelandic EEZ. Recommendation forwarded to Directorate of Fisheries/MII (NAMMCO 27, 2019).</p> <p>2021 Updates: IS: Information is available from foreign vessels via PSC/logbook data. Information can be provided. FO: Pending</p> <p>2022 Updates: FO: no update</p>
SC/25-2018, 7.1.2	IS	NAMMCO 27-2019	Provide a description of the coverage in by-catch reports (even if none) as it provides			<p>In progress (NAMMCO 27, 2019).</p> <p>2021 Updates: Due to Covid-19 pandemic surveillance effort at sea has been limited. Details can be provided.</p>

			evidence of by-catch risk			2022 Updates:	
SC/25-2018, 7.1.2	IS	NAMMCO 27-2019	Provide details of the amount of observer effort in pelagic trawl fleets			In progress (NAMMCO 27, 2019). 2021 Updates: None 2022 Updates:	
SC/25-2018, 7.1.2	IS/NO/FO/GL	NAMMCO 27-2019	Logbooks should not be used for calculating by-catch rates, only as a qualitative indicator for raising concern			NO: Logbooks are not used to estimate bycatches or bycatch rates in Norway (NAMMCO 27, 2019). IS: This is already done (NAMMCO 27, 2019). 2021 Updates from FO & GL: None 2022 Updates from FO & GL: logbooks not used for bycatch estimations	
SC/27-2021, 3.1	IS/NO/FO/GL	NAMMCO 28-2021	Since self-reporting is an insufficient basis for quantifying by-catch, always seek additional sources of information (e.g. independent observation)			NO: Data from the Reference Fleets are used as additional source IS: Data from onboard inspectors and MFRI surveys is used as the main source of information while logbooks are used for comparison. 2022 Updates: GL; wildlife officers and municipality workers are tasked to review reporting system and send the data to the Ministry, that continuously are monitored from Ministry of Fisheries and Hunting. FO: plan to use inspectors and independent observers/electronic monitoring. NO: REM prototype is currently tested on a IS: Under Consideration	
SC/27-2021, 3.1	IS	NAMMCO 28-2021	DNA collection of by-caught seals should be continued and analysis conducted to assess the level of species misidentification			2022 Updates:	
MULTISPECIES APPROACHES TO MANAGEMENT / ECOSYSTEM MODELLING							
SC/25-2018, 7.2.1	NO/IS/FO/GL	NAMMCO 27-2019	Funding should be sought to apply and extend the approach of the MareFrame project to focus on marine mammals.			2021 Updates: NO: Nothing has happened here, other initiatives on the issue are in progress. 2022 Updates: GL - This seems to be out of Greenland's jurisdiction.	

SC/27-2021, 5.3	NO/IS/FO/GL	NAMMCO 28-2021	Ensure the availability of relevant information from seismic surveys to allow for proper sound estimation to meet research and management needs			2022 Updates: GL- No new information; NO:MD is working on this problem	
OTHER ENVIRONMENTAL ISSUES							
SC/24-2017, 7.3	GL	NAMMCO 26-2018	Cumulative effects should be considered when new shipping and icebreaking activities are proposed for narwhal and beluga habitat areas			2020 Updates: Hearing processes are nationally in place in Greenland, but can be more challenging in regards to other nations' projects. 2021 Updates: None 2022 Updates: GL - no new information	
SC/24-2017, 7.3	CA	NAMMCO 26-2018	All information on the Mary River project be presented to the JWG. Someone from the Fisheries Protection Division in Canada should attend the next NAMMCO-JCNB JWG in 2019/2020.		SC/26 & SC/27 received an update on the Mary River project. The JWG meeting in 2021 also received an update on the project	2022 Updates:	
SC/26-2019, 7.3.2	CA		Plans for monitoring impacts on narwhal in Eclipse Sound (as well as other species wintering in west Greenland) from the Mary River project be developed within the context of the JWG with JCNB			2022 Updates:	
SC/27-2021, 3.2	NAMMCO	NAMMCO 28-2021		Hold an expert workshop to review the impacts of noise disturbance on hunted populations of narwhals, belugas, walrus and seals from shipping connected to the Baffinland mine.	SC/27 endorsed the recommendation but proposed asking the JWG to define more specific terms of reference for the workshop	2022 Updates: Workshop planned for the period 12-16 December 2022 in Copenhagen	

SC/25-2018, 7.3	NAMMCO	NAMMCO 27-2019		Secretariat review pollutants for all marine mammals and report to SC 26	This review is underway but requires additional resources and expertise to be completed (SC/26, 2019)	2022 Updates:	
SEALS & WALRUS							
HARP SEALS							
SC/23-2016, 7.1.2 and WGHARP 2016	NO	NAMMCO 25-2017		Staging surveys should be conducted during aerial surveys of all populations of harp seals.		Will be implemented whenever possible (NAMMCO 27, 2019) 2020 Updates: Next survey will be in 2022 - staging will be implemented. 2022 Updates: NO: A survey in the West Ice conducted in 2022. It included staging of pups	
SC/23-2016, 7.1.2 and WGHARP 2016	NO	NAMMCO 25-2017			Planned for 2018 (NAMMCO-26)	NO: not implemented. Will be done in 2019 (NAMMCO 27, 2019) 2020 Updates: Survey is planned in April 2020, all tags will be deployed on beaters. 2021 Updates: Activity cancelled in 2020 due to the pandemic. Survey is planned in April 2021, all tags will be deployed on beaters. 2022 Updates: NO: Activity cancelled. Tags have been delivered to Russian colleagues (VNIRO/PINRO, Murmansk & MMRI, Archangelsk). Deployments will be carried out by Russia and results shared between the two countries.	
SC/26-2019, 8.1.2 & WGHARP 2019	NO	NAMMCO 28-2021	Upper limits of removals: 21,172 in the Barents Sea/White Sea and 11,548 in the Greenland Sea			2022 Updates: NO: No changes in upper limits in removals compared to 2021.	
SC/26-2019, 8.1.2 & WGHARP 2019		NAMMCO 28-2021		New aerial survey of harp seal pups in the Greenland Sea be conducted in 2022		2022 Updates: NO: Aerial photographic survey carried out in March-April 2022 in the Greenland Sea. Images are under analysis manually and using	

SC/28-2022, 20.3	GL/NO/Russia			Update (NO/Russia): a survey of harp seal pup production be carried out as soon as possible in the White Sea and adjacent Barents Sea waters		novel Machine Learning. No new survey carried out in the Barents Sea / White Sea. Renewed efforts by Russia to carry out survey in 2023.	
SC/26-2019, 8.1.2 & WGHP 2019	NO	NAMMCO 28-2021		Efforts to obtain reproductive samples continue, particularly in years when an aerial survey is completed		2022 Updates: NO: No reproductive samples collected in 2022, as samples were collected in 2021 and analyses are underway.	
HOODED SEALS							
SC/23-2016, 7.1.2 and WGHP 2016	NO	NAMMCO 25-2017		Staging surveys should be conducted during aerial surveys of all populations of hooded seals.		NO: not implemented. Will be done in 2019 (NAMMCO 27, 2019) Updates 2020: Next survey will be in 2022 - staging will be implemented. 2022 Updates: NO: A survey in the West Ice conducted in 2022. It included staging of pups	
SC/26-2019, 8.1.2 & WGHP 2019	NO/GL	NAMMCO 28-2021	No commercial catch in the Greenland Sea, however current levels of scientific and subsistence hunting can continue			2020 GL: supports this proposal 2022 Updates: GL; unchanged situation subsistence hunting is allowed; NO: Continued in 2022.	
SC/26-2019, 8.1.2 & WGHP 2019	NO	NAMMCO 28-2021		New aerial survey of hooded seal pups in the Greenland Sea be conducted in 2022		2022 Updates: NO: Completed	
RINGED SEALS							
SC/23-2016, 7.3.2	GL	NAMMCO 26-2018		Satellite telemetry and collection of samples for genetics	Satellite tagging and genetics study ongoing (NAMMCO 26, 2018) Genetic analysis ongoing (SC/26, 2019)	Updates 2020: ongoing process 2022 Updates: GL: ongoing process	

SC/24-2017. 8.3.3	NAMMCO	NAMMCO 26-2018		Convene a ringed seal WG (possibly in conjunction with a bearded seal WG) in 2020/2021.	In the workplan for 2021 from SC/25. SC/26 proposed to postpone the WG, based on an assessment of the sufficiency of available data at SC/27. In 2020, CN requested that this WG not be delayed beyond 2022. SC27 scheduled the WG for 2022.	2022 Updates:	
GREY SEALS							
SC/23-2016, 7.4.2	NO	NAMMCO 26-2018		More frequent surveys, particularly in the areas of decline.	A survey was conducted in 2018 in Troms and Finnmark (SC/25).	Trøndelag and Nordland (excluding Lofoten) was surveyed in 2018. Low pup production confirmed. (NAMMCO 27, 2019) Updates 2020: Grey seal surveys will be conducted in Lofoten in September-October 2020 Updates 2021: Grey seal surveys will be conducted in Finnmark in 2021. 2022 Updates: NO: Completed	
SC/23-2016, 7.4.2	NO	NAMMCO 25-2017	In the Management Plan, the target population level should be evaluated as the levels are not based on any biological assessment		IMR in discussions with the management authorities on evaluating the target population levels for both grey and harbour seals (SC/24).	Will be on the agenda for the Marine Mammal Scientific Advisory Board 2019 (NAMMCO 27, 2019) Updates 2020: Will be on the agenda in the at the Marine Mammal Scient. Advis. Board in 2020 Updates 2021: Will be discussed in the NAMMCO CSWG and SC. 2022 Updates: NO: Management Plan is under revision	

SC/23-2016, 7.4.2	NO	NAMMCO 25-2017	Management plans should include all sources of mortality, not just the hunt		This has been suggested (SC25)	<p>Will be on the agenda for the Marine Mammal Scientific Advisory Board 2019 (NAMMCO 27, 2019)</p> <p>Updates 2020: Will be on the agenda in the at the Marine Mammal Scient. Advis. Board in 2020</p> <p>Updates 2021: Will be discussed in the NAMMCO CSWG and SC.</p> <p>2022 Updates: NO: All anthropogenic mortality will be included</p>	
SC/23-2016, 7.4.2	NO	NAMMCO 25-2017	A mechanism for consulting IMR on for example seal distribution when fish farms are being built should be required when management plans are revised.		IMR is working on implementing a mechanism where they can be consulted on issues such as seal distribution when fish farms are being built, but thus far this has not been implemented (SC/24).	<p>NO: Will be on the agenda for the Marine Mammal Scientific Advisory Board 2019 (NAMMCO 27, 2019)</p> <p>Updates 2020: Nothing new to report.</p> <p>Updates 2021: Nothing new to report.</p> <p>2022 Updates: NO: This will be proposed included ine revised Management Plans</p>	
SC/23-2016, 7.4.2	NO	NAMMCO 25-2017	Reporting of all removals, incl. fish farms and commercial and recreational gillnet fisheries.		IMR has been in discussions with the Directorate on possibly implementing such a system (SC/24).	<p>Updates 2020: It is problematic to determine the different seal species in the Reference fleet, which result in unusable data to estimate total numbers of grey and harbour seals taken as by-catch.</p> <p>Updates 2021: No longer permitted to shoot seals near fish farms, otherwise nothing new.</p> <p>2022 Updates: NO: Nothing new on recreational fisheries</p>	

SC/23-2016, 7.4.2	IS	NAMMCO 25-2017	Management Plan should be developed including: the frequency of surveys, legislation of seal hunting and re-evaluation of the target population level objective with the new level being based on biological criteria.		Development of an advisory management plan for the population is ongoing, which includes a re-evaluation of current target population level objective (based on biological criteria) (SC/24).	<p>Updates 2021: New legislation on seal hunt in Iceland. Survey plan for approximately 2 years between surveys for the two coastal seal species.</p> <p>2022 Updates:</p>	
SC/23-2016, 7.4.2	IS	NAMMCO 25-2017	Reporting of all removals (e.g., by-catches, hunted seals, any other removals)		New management plan includes development of a reporting system for seal hunting and increased effort in by-catch data collection (SC/24).	<p>IS: New legislation will hopefully be finalised in 2019.</p> <p>Updates 2021: New legislation prohibits seal hunting with few exceptions, that are to be fully reported.</p> <p>2022 Updates:</p>	
SC/23-2016, 7.4.2	IS	NAMMCO 25-2017		Tagging of pups for staging	Tagging for staging continues (SC/24).	<p>Ongoing depending on funding</p> <p>Updates 2021: Under consideration</p> <p>2022 Updates:</p>	
SC/23-2016, 7.4.2	IS	NAMMCO 25-2017		Investigate whether the peaks in pupping differ in different areas around the country	Tagging for geographical differences in timing continues (SC/24).	<p>Ongoing depending funding (NAMMCO 27, 2019).</p> <p>Updates 2021: Under consideration</p> <p>2022 Updates:</p>	
SC/23-2016, 7.4.2	IS	NAMMCO 25-2017		Genetics samples should be collected and analysed		<p>Analysis in progress (NAMMCO 27, 2019)</p> <p>Updates 2021: Under consideration</p> <p>2022 Updates:</p>	
SC/23-2016, 7.4.2	FO	NAMMCO 25-2017	Develop a monitoring plan that includes regular assessments		The development of a monitoring plan for grey seals in the Faroe Islands will await the outcome of the 2018 survey (SC/24).	<p>Updates 2021: currently no harvest, summer count surveys continue, assessment awaits progress by the joint effort on seal modelling</p> <p>2022 Updates: FO: in progress</p>	
					Summer survey planned for	<p>Updates 2020: Ongoing</p> <p>Updates 2021: Survey in 2021</p>	

SC/23-2016, 7.4.2 Reiterated: SC/27-2021, 3.3	FO	NAMMCO 25-2017		Obtain minimum population estimates via haulout counts	2018 (NAMMCO/26). Summer survey conducted in 2019, corrections on estimates ongoing. Plans to mount 8 scouting camera at haul out sites in 2020 (SC/26, 2019) Minimum population count delivered to SC/27. SC/27 recommended that work to develop minimum population estimates continue	2022 Updates: FO: in progress	
SC/23-2016, 7.4.2 Reiterated: SC/27-2021, 3.3	FO	NAMMCO 25-2017		Telemetry tagging studies	Plans to deploy satellite tags on up to 8 seals during the 2018 survey (SC/24). Plans to deploy up to 10 satellite tags in 2020 SC/27 informed 2 tags deployed with total of 10 planned. Recommended this continue	Updates 2021: two seals tagged in 2020, more tagging planned for 2021 2022 Updates: FO:two seals tagged in 2022, more tagging planned	
SC/23-2016, 7.4.2	FO	NAMMCO 25-2017		Photo-ID study for a mark-recapture based population size	Likely too time-consuming and likely not achievable compared to a survey (SC/24)	Update 2020: FO: Postponed. Updates 2021: Not prioritised 2022 Updates: FO: skipped	
SC/24-2017, 8.4.3	FO	NAMMCO 26-2018		Research recommendations for Faroe Islands from CSWG in 2016 should be given a high priority.		Updates 2020: Ongoing, population estimate to be presented to the CSWG 2021. Updates 2021: Ongoing 2022 Updates: FO: ongoing	

HARBOUR SEALS

SC/23-2016, 7.5.2	NO	NAMMCO 25-2017	Re-evaluate management units to ensure they are based on biological parameters.		Management units – new genetics data being collected, started in north, some analysis being done, some structuring seen, full results later (SC/24). SC/27 reiterated importance of this	Genetic samples are collected and analyses underway (NAMMCO 27, 2019). Updates 2020: Sampling for genetic studies is in progress. Updates 2021: Sampling for genetic studies is in progress. 2022 Updates: NO: This work in in progress	
SC/23-2016, 7.5.2	NO	NAMMCO 25-2017	In the Management Plan, the target population level should be evaluated as the levels are not based on any biological assessment		IMR in discussions with the management authorities on evaluating the target population levels for both grey and harbour seals (SC/24).	NO: Will be on the agenda for the Marine Mammal Scientific Advisory Board 2019 (NAMMCO 27, 2019). Updates 2020: Ongoing, TL has been adjusted based on new data in some areas in Norw. Skagerrak Updates 2021: Will be discussed in the NAMMCO CSWG and SC. 2022 Updates: NO: Management Plan under revision	
SC/23-2016, 7.5.2	NO	NAMMCO 25-2017	Management plans should include all sources of mortality, not just the hunt		Reporting of removals- discussing with directorate, numbers from fish farms, also accepted by-catch estimate expected (SC/24)	NO: Will be on the agenda for the Marine Mammal Scientific Advisory Board 2019 (NAMMCO 27, 2019). Updates 2020: See comments on by-catch of grey seals. Updates 2021: Will be discussed in the NAMMCO CSWG and SC. 2022 Updates: NO: All anthropogenic mortality will be included	
SC/23-2016, 7.5.2	NO	NAMMCO 25-2017	A mechanism for consulting IMR on for example seal distribution when fish farms are being built should be required when management plans are revised.			Updates 2020: Nothing new to report. Updates 2021: Nothing new to report. 2022 Updates: NO: This will be proposed included in revised Management Plans	

SC/23-2016, 7.5.2	NO	NAMMCO 25-2017	Reporting of all removals, incl. fish farms and commercial and recreational gillnet fisheries.			<p>Updates 2020: Reporting of bycatch in recreational fisheries will be possible in an app from summer 2020</p> <p>Updates 2021: No longer permitted to shoot seals near fish farms, otherwise nothing new. 2022 Updates: NO: will be included in revised Management Plan.</p>	
SC/23-2016, 7.5.2	NO	NAMMCO 25-2017		Collect data from by-catch (age, sex, species etc)	Data from by-catches – some older data being analysed, depending on problems identified. Period of bounty on coastal seals, required to send jaws (SC/24).	<p>NO: What is the purpose of these data? (NAMMCO 27, 2019)</p> <p>Updates 2021: Nothing new to report</p> <p>2022 Updates: NO: Species recorded in bycatch</p>	
SC/23-2016, 7.5.2	IS	NAMMCO 25-2017	All removals should be reported (e.g., hunting, by-catch, etc.)			<p>New legislation including mandatory reporting of direct catches is in preparation and will hopefully be finalized in 2019. Bycatch reporting already mandatory (NAMMCO 27, 2019).</p> <p>Updates 2021: New legislation in place.</p> <p>2022 Updates:</p>	
SC/23-2016, 7.5.2	IS	NAMMCO 25-2017	A Management Plan should be developed including outlining the frequency of surveys and legislation of seal hunting		Advisory management plan for the Icelandic harbour seal population is being considered which includes a re-evaluation of current target population level objective, outlining of the frequency of censuses, development of a reporting system for seal hunting and increased effort in by-catch data collection (SC/24)	<p>Updates 2021: As above for grey seals</p> <p>2022 Updates:</p>	
SC/23-2016, 7.5.2	IS	NAMMCO 25-2017	The target population level objective should be re-evaluated and be based on biological criteria		See above.	<p>Updates 2021: In progress</p>	

SC/23-2016, 7.5.2	IS	NAMMCO 25-2017		Reproductive rates should be collected		Not initiated (NAMMCO 27, 2019) Updates 2021: Under consideration but difficult without a hunt 2022 Updates:	
SC/23-2016, 7.5.2	IS	NAMMCO 25-2017		Continue to investigate the effects of disturbance from tourism, and possible mitigation	Research on effects of tourism are continuing (NAMMCO/26).	Updates 2021: In progress 2022 Updates:	
SC/25-2018, 8.5	GL	NAMMCO 27-2019	Accuracy and validation of reported catches needs to be improved and accurate information be provided to the catch data base.		SC27 heard that attempts to validate historical catch data have revealed significant errors and recommended that the MCSW and CN should consider removing this data from the website.	Updates 2020: Ongoing process to annually validate reported catch data for specific species 2022 Updates: GL - ongoing process	
SC/27-2021, 3.3	NO	NAMMCO 28-2021		Complete the collection and analysis of DNA samples from harbour seal pups to help determine stock structure and propose more scientifically based management units.		2022 Updates: NO: This work is in progress	
SC/27-2021, 3.3	GL	NAMMCO 28-2021		Enhance efforts to identify new breeding and moulting sites for harbour seals (particularly in West Greenland) using most feasible methods in the different areas.		2022 Updates: GL - ongoing process	
SC/27-2021, 3.3	NAMMCO	NAMMCO 28-2021	Discuss the proposal that all catch statistics for harbour seals in Greenland be removed from the NAMMCO website due to known errors and a lack of validation			2022 Updates:	

SC/27-2021, 3.3	NAMMCO	NAMMCO 28-2022	Complete assessments for all relevant member countries as soon as the necessary data becomes available			2022 Updates:	
BEARDED SEALS							
SC/28-2022, 20.2	GL			Data on local abundance be analysed and made available to the Bearded Seal WG (planned for March 2023) - this implies that the analysis be prioritised.		2022 Updates: planned bearded seal and ringed seal NAMMCO/CAFF WG stalled by the stop of all meeting activities in CAFF	
SC/28-2022, 20.2	GL+NO		The catch data should be made available in such a way that the origin of the catch can be attributed to smaller areas than those reported now (West and East Greenland and Svalbard)			2022 Updates: GL: The location of the catches is the village the hunter comes from, so there exist more detailed data than the one reported to NAMMCO. GL will validate the catch data before the Joint CAFF-NAMMCO WS in March 2023.	
WALRUS							
SC/25-2018, 8.7	GL/CA	NAMMCO 27-2019		Improve data on stock structure and seasonal movements between GL and CA		Updates 2020: GL: presently no new information to provide Updates 2022: GL: presently no new information to provide	
SC/25-2018, 8.7	GL/CA	NAMMCO 27-2019		Maintain regular surveys of all GL stocks coordinated with Canadian surveys		Updates 2020: GL: Monitoring plan from Greenland in place and followed Updates 2022: GL - Monitoring plan in place and followed, West Greenland survey carried out in March 2022 (target species walrus, beluga and bowhead whale). NOW surveyed in 2018. Next survey planned i NOW 2026	
SC/25-2018, 8.7	GL	NAMMCO 27-2019		Explore relationship between present findings and hunting and non-hunting impacts		Updates 2020: No new information to provide Updates 2022: GL; No new information to provide	
SC/25-2018, 8.7	GL	NAMMCO 27-2019		Update age/tusk relationships for all GL populations		Updates 2020: No new information to provide Updates 2022: GL - no new information	

SC/25-2018, 8.7	GL/CA	NAMMCO 27-2019	Possibility of joint management process for shared stocks should be evaluated by GL and Canada.			Updates 2020: GL: No new information to provide Updates 2022: GL; No new information to provide. There are no systematic dialog or a committee between GL and Canada on shared stocks except JCNB
SC/25-2018, 8.7	GL	NAMMCO 27-2019	Dialogue between managers and hunters should be established to discuss method of collecting S&L data.			Updates 2020: No new information to provide Updates 2022: GL; No new information to provide; question of resources
SC/25-2018, 8.7	GL/CA	NAMMCO 27-2019	Advance cooperation between GL and CA on shared stocks.			Updates 2020: GL presently no new information to provide 2022 Updates: GL; presently no new information to provide
SC/25-2018, 8.7	CA	NAMMCO 27-2019	Encouraged to provide more complete catch data			Updates 2022:
SC/26-2019, 8.7	GL		The presence of walrus in Wolstenholme fjord be monitored for impacts from shipping and industrial activity and catch levels adjusted if needed			2020 GL: Supportive. The company present is obliged to monitor. If any negative impact is observed, mitigating measures will be started. Updates 2022: GL - dialog with mining company ongoing. GINR mounted a camera in haul out site in 2021-2022

CETACEANS

FIN WHALE

SC/23-2016, 8.1	IS	NAMMCO 25-2017		Samples from a wider geographical area to include in an existing study on close-kin relationship		Sampling will occur on an opportunistic basis (NAMMCO 27, 2019) Updates 2021: Continued opportunistic sampling program Updates 2022:
SC/23-2016, 8.1	IS	NAMMCO 25-2017		Gather information on the annual cycle of fin whales including overall movements and indications of possible breeding areas (e.g. applying satellite telemetry).		Not initiated. Pending funding (i.e. Development of super tag) (NAMMCO 27, 2019) Updates 2021: In preparation. Success depends largely on the outcome of the super-tag project Updates 2022:
SC/23-2016, 8.1	IS	NAMMCO 25-2017		Continued collection of biological samples for age, reproduction, etc. from whales caught off Iceland.		Ongoing (NAMMCO 27, 2019) Updates 2021: Ongoing Updates 2022:

HUMPBACK WHALE							
SC/24-2017, 9.2	FO/GL/IS/NO	NAMMCO 26-2018		Research on possible movements of individuals between summering areas in the North Atlantic (e.g. satellite tagging, biopsies, photo-ID etc.)	SC/27 provided updated information on a collaborative research project to collect and analyse satellite tagging data from across the North Atlantic. Data has been shared and analysis will soon begin.	<p>NO: In 2018: 4 satellite tagged, 30 biopsy sampled and a few hundred photo-ID (NAMMCO 27, 2019).</p> <p>IS: ongoing research project (NAMMCO 27, 2019)</p> <p>Updates 2020:</p> <p>NO: 3 satellite tags and one videotag on humpbacks in 2019, many biopsies for pollutants and genetics, all in North Norway.</p> <p>GL: No tagging tookplace in 2019. Biopsies and photo-ID was collected</p> <p>Updates 2021:</p> <p>NO: In January 2021 all data have been compiled and analyses will take place in the spring 2021.</p> <p>FO - few observations, mainly offshore</p> <p>2022 Updates: FO: status unchanged; NO: Satellite tagging, photo ID and biopsy were conducted in 2021 and will be attempted in 2022.</p>	
SC/25-2018, 9.2.4	NAMMCO	NAMMCO 27-2019		Workshop on humpback tagging projects across the Atlantic in 2020 to combine with IWC meeting in Caribbean.	IWC meeting not taking place in Caribbean in 2020, so SC/26 proposed researchers first meet at WMMC in 2019 and discuss possibility of sharing data	2022 Updates:	
COMMON MINKE WHALE							
SC/23-2016, 8.2	IS	NAMMCO 25-2017		Collect age / sex / reproductive data		<p>Ongoing (NAMMCO 27, 2019)</p> <p>Updates 2021: Ongoing</p> <p>2022 Updates:</p>	
BELUGA							
SC/23-2016, 8.4	CA	NAMMCO 25-2017		Detailed information on the Mary River Project should be made available to the JWG.	An update given at JWG 2020, not sufficient time to review environmental impact assessment in depth	2022 Updates:	
SC/23-2016, 8.4	GL	NAMMCO 25-2017		GINR should be consulted when projects are in development, before final approval, or if the project plans change and/or develop further.		<p>Updates 2020: GINR already involved as consulting party via ESPO Convention. Would like to be more involved.</p> <p>Updates 2022: GL- No new information</p>	

SC/23-2016, 8.4	GI	NAMMCO 25-2017		Satellite tagging to get information on movements and distribution.		Updates 2020: No new information to provide Updates 2022: GL - no new information	
SC/24-2017, 9.4	GL	NAMMCO 26-2018		Genetic analysis for stock identity of the summer takes in Greenland.		Updates 2020: No new information to provide Updates 2022: GL - genetic evidence for a separate stock in the NOW, see report from JWG in the SC/27	
SC/24-2017, 9.4	GL	NAMMCO 26-2018		More accurate, and recent, struck and lost data	WGs will indicate which hunts are priority, where S&L rates would improve assessment (SC/24).	Updates 2020: no new information to provide Updates 2022: No new information to provide	
SC/26-2019, 9.4	GL	Not endorsed (NAMMCO-26)	Seasonal closures (including no hunt south of 65 degrees) (re-iteration of previous advice 2005, 2012, 2017, 2019, 2021):		SC/26 reiterated its concerns and recommendation for seasonal closures, noting insufficient evidence to conclude that disturbance from non-hunting activities would need to be stopped to enable the population to re-establish since several stocks of beluga are found in areas with extensive shipping and fishing but no hunting (SC/26, 2019). SC/27 also reiterated the recommendation for seasonal closures	Greenland has not implemented the recommended seasonal closures because it sees it as not sufficient to use seasonal closures to rebuild a stock that is not there, because of other non-hunting activities found in the areas, including fisheries and shipping activities.	
					SC/28 reiterated the implementation of seasonal closures for the hunt of belugas in West Greenland, and also reiterated that no hunting of belugas be allowed at any time in the area south of 65 degrees North in West Greenland.	2022 Updates: GL; Greenland has not implemented the recommended seasonal closures because it sees it as not sufficient to use seasonal closures to rebuild a stock that is not there, because of other non-hunting activities found in the areas, including fisheries and shipping activities.	

SC/28-2022, 20.1 & 20.2	GL		Belugas in East Greenland should remain fully protected, as there is insufficient information to perform an assessment of belugas in East Greenland.			2022 Updates: The Cabinet decided not to establish beluga quota both in 2021 and 2022 in East Greenland as recommended by scientists. Any hunt of beluga will therefore be seen as illegal hunt	
SC/28-2022, 20.3	GL			Conduct a summer survey of the High Arctic beluga population		2022 Updates: GL - survey planned for 2023, if budget allows	
SC/28-2022, 20.2	GL		Any by-catch of Belugas in East Greenland be documented in the Special Reports.			2022 Updates:	
SC/28-2022, 20.2	GL			Hunter observations of belugas in East Greenland be collected in a structured manner, incl. photo or video footage of the animals, where and when the sighting took place and how many individuals were seen.		2022 Updates: When by-catch occurs hunters are obliged to collect information as recommended. However, not all places have possibility to collect the information due to lack of equipment or facilities to store samples.	
SC/28-2022, 20.2	GL		In case of live by-caught belugas, all efforts be made to release the animal			2022 Updates: GL; not occurred lately, The Departement cannot make it obligatory to release by-caught belugas because the ice and sea condition have to be in order due to safety reason	
SC/28-2022, 20.2	GL			From all dead by-caught belugas en Eat Greenland and all caught belugas in West Greenland, besides already mandatory information, collect the following additional samples: skin biopsy sample, length, tooth, girth measurements and whether there is milk in the female's mammary glands.		2022 Updates: GL -Hunters are obliged to deliver samples but not all places have facilities or access to store the samples.	
SC/27-2021, 3.2	GL/CA	NAMMCO 28-2021	Carry out new surveys in Somerset Island in the summer and West Greenland in the winter.			2022 Updates: GL- West Greenland winter survey carried out in March 2022.	

SC/27-2021, 3.2	GL	NAMMCO 28-2021		Hold a half day workshop to exchange information on effective tagging practices for belugas	SC/27 proposed to do this in connection with the agenda of the JWG meeting in 2021	2022 Updates: GL -no new information	
NARWHAL							
SC/24-2017, 9.5 SC/25-2018, 9.5.2	GL	NAMMCO 27-2019	No catches south of 68°N.		See above	<p>Updates 2020:The Government of Greenland has taken a decision on the East Greenland quota for 2020-2023 based on a gradual reduction.</p> <p>2021-2022 Updates: GL: The Government of Greenland has taken a decision on the East Greenland quota for 2022 due to meat supply to communities</p>	
SC/26-2019, 9.5.2	GL		Immediate reduction to 0 catches in all three management areas of East Greenland (at least until a new abundance estimate is generated)		Strongly reiterated by SC/28	<p>2022 Updates: The Government of Greenland has taken a decision on the East Greenland quota for all three management areas of East Greenland for 2021 and 2022 due to need for meat supply for the communities.</p>	
SC/26-2019, 9.5.2	NAMMCO	NAMMCO 28-2021		Guidance be developed on a standard or principle based approach for how to manage small stocks and harvest advice	This was reiterated by SC/27 and was noted as relevant for species beyond narwhal as well	2022 Updates See SC report 2022	
SC/26-2019, 9.5.2	GL	NAMMCO 28-2021		Data on struck & lost be obtained to inform assessments of sustainability if harvest continues		<p>2020 GL: Reporting of struck and lost data on all marine mammals is mandatory in Greenland and will be taken from the quota for the relevant species</p> <p>2022 Updates: GL: Reporting of struck and lost data on all marine mammals is mandatory in Greenland and will be taken from the quota for the relevant sub- species</p>	
SC/26-2019, 9.5.2	GL	NAMMCO 28-2021		Reports of any landed animals include the length of the animal in addition to age category and presence of a foetus		<p>2020 GL: Data collection of this type must be specified in an Executive order</p> <p>2022 Updates: GL: Data collection of this type must be specified in an Executive order</p>	

SC/26-2019, 9.5.2	GL	NAMMCO 28-2021		Ways to improve reporting of user observations be investigated to inform future assessments		2020 GL: supports Greenland Institute of Natural Resources to work together with KNAPK on this 2022 Updates: GL; no new information	
SC/26-2019, 9.5.2	GL	NAMMCO 28-2021		The negative impact of climate change on narwhals be recognised and included in management decision-making on all stocks		2020 GL: supports this being done in the modelling by the SC where relevant and possible. A discussion could be started with relevant stakeholders on how to include this in management decision-making on all stocks; very ambitious project 2022 Updates: GL: supports this being done in the modelling by the SC where relevant and possible. A discussion could be started with relevant stakeholders on how to include this in management decision-making on all stocks; very ambitious project	
SC/28-2022, 20.3	GL			Life history data be collected from non-depleted stocks of narwhals in W Greenland and Canada, to examine impact of climate change		2022 Updates: GL - new executive order being drafted, where more data will be required from hunters.	
SC/28-2022, 20.2	GL		The effects of climate change be reduced and mitigated to protect narwhal's habitat			2022 Updates: GL - no new information	
SC/28-2022, 20.3	GL			Further research be undertaken on stock structure and abundance in Smith Sound		2022 Updates: GL - survey planned for 2023, if budget allows	
SC/28-2022, 20.3	GL			New survey be conducted in Melville Bay and Inglefield Bredning as soon as possible		2022 Updates: GL - survey planned for 2023, if budget allows	
SC/26-2019, 9.5.2	GL	NAMMCO 28-2021		Further research to clarify stock structure (especially in Ittoqqortoormiit), e.g. through spring tagging, spring survey, genetic analysis		2020 GL: supportive, survey planned for April with hunters feedback 2022 Updates: GL genetic analyses ongoing, spring survey carried out in 2022	

SC/28-2022, 20.2	GL			Community-based biopsy programme of live narwhals be established, to provide samples for stock structure analysis.		2022 Updates: GL - no new information	
SC/27-2021	GL/CA	NAMMCO 28-2021	Include body length in the reporting requirements			2022 Updates: GL; In the revision of a draft executive order, we have included a new figure how to measure body length	
SC/26-2019, 9.5.2	NAMMCO	NAMMCO 28-2021		Abundance estimates in East Greenland be reviewed by the JCNB at the next JWG	SC/27 noted that this was unable to be done at the JWG meeting in 2020 but may be placed on the agenda for 2021	2020 GL: supportive 2022 Updates: analysis finished, see SC 28	
SC/26-2019, 9.5.2	NAMMCO	NAMMCO 28-2021	New meeting of the NEGWG in 2021 to review the latest data and update the assessment using revised model		Included in the workplan from SC/27	2020 GL: supportive 2022 Updates: GL done, see SC 28	
SC/28-2022, 20.2	GL		Shipping activities from large vessels (including cruise ships) in the summering ground along East Greenland be regulated to avoid negative impacts on narwhal populations			2022 Updates: GL: The Greenland parliament has decided in Fall 2021 to introduce a new executive order to limit large vessels. A draft is being worked on in the relevant Department.	

SC/28-2022, 20.2	GL			<p>If a narwhal hunt goes ahead (despite recommendations for 0 catches in East Greenland), collect the following additional information from hunted animals: a skin biopsy sample, type of animal (according to the 3 categories described by hunters), photograph of the back, girth measurements and whether there is milk in the female's mammary glands.</p>		<p>2022 Updates: GL: The ministry is waiting for a structured sample programme from Institute of Natural Resources. The task will require infrastructure and facilities that most of the settlements do not have. It requires dialog with the municipality of Sermersooq and hunters. When a programme has been developed the Departement will assist in the dialog with relevant partners.</p>	
<p>SEI WHALE BOTTLENOSE WHALE KILLER WHALE</p>							
SC/23-2016, 8.8.3	FO/GL/IS/NO	NAMMCO 25-2017		<p>Information on killer whales (e.g., catch statistics and abundance estimate) should be gathered with more speed in order for the SC to be able to monitor the hunt.</p>	<p>New abundance estimates from the NASS were endorsed at SC/27</p>	<p>NO: No catches (NAMMCO 27, 2019) IS: Long-term project ongoing. No catches. Biological information collected from strandings (NAMMCO 27, 2019) . Updates 2020: NO: No catches in NO GL: Ongoing process to annually validate reported catch data for specific species. Presently not enough sightings. Stock structure unknown. Updates 2021: NO: No catches (protected) IS: Abundance estimate completed. No catches in Iceland. FO: no hunt, few and irregular observations 2022 Updates: GL; The information on catches is available through the self reporting system. Ongoing process to annually validate reported catch data for specific species. Presently not enough sightings. Stock structure unknown. FO: expecting increased research effort the coming years due to a newly funded project. NO: No catches in Norway. New abundance estimate available.</p>	
						<p>Updates 2020: Ongoing proces to annually validate reported catch data for specific species.</p>	

SC/25-2018, 9.8.2	GL	NAMMCO 27-2019	Catch records in GL should be validated and reporting (inc S&L) should be improved, and included in existing mandatory schemes.			<p>2022 Updates: GL: Ongoing proces to annually validate reported catch data for specific species. As mentioned the Departement is working with the project of "Jagtapp", that will include all species on a quota system, while species not in quota system are reported annually through the self reporting system PINIARNEQ.</p>
SC/25-2018, 9.8.2	FO/GL/IS/NO	NAMMCO 27-2019		Further monitoring and sampling should occur in all NAMMCO countries and pollutant and genetic analyses conducted.		<p>Updates 2020: NO: Biopsy samples collected from 2017 through 2019. Stable isotope and pollutant analyses from most samples just completed, and results to be published. New satellite tags and videotags deployed in 2019. Photo-identification, biopsy sampling and monitoring efforts will be maintained throughout 2020 as well. GL: supporting Updates 2021: IS: Wide range of studies conducted in recent years. FO: attempted when possible</p> <p>2022 Updates: GL - new publications on mercury levels from 2022, under AMAP. Samples from WG & EG are being analysed for genetic studies. FO: in progress ; NO: This work is in progress</p>
SC/25-2018, 9.8.2	GL	NAMMCO 27-2019		Further research on abundance and population structure in the west Atlantic.		<p>NO: West Atlantic not relevant for Norway (NAMMCO 27, 2019) IS: No planned avctivities in the west Atlantic. (NAMMCO 27, 2019)</p> <p>Updates 2020: GL: supporting</p> <p>2022 Updates: GL- new samples collected, interview studies carried out, PhD on toothed whales in the Faroe Island and East Greenland started in July 2022</p>
						<p>Updates 2020: GL: Needs scientific advice on qoutas and an Exeuctive Updates 2021: none</p>

SC/25-2018, 9.8.4	GL	NAMMCO 27-2019	GL regulate the hunt and restrict quotas in a precautionary way.		Advice reiterated by SC/28	2022 Updates: GL; The law on hunting requires both precautionary approach but also to secure meat supply (food security) - GINR: the health authorities of Greenland advice against consumption of killer whale meat because of the levels of pollutants.	
SC/28-2022, 20.4	NAMMCO (FO, GL, IS, NO)			NAMMCO should become involved in the organisation of the North Atlantic part of the World Conference planned for April 2023 in Spain		2022 Updates:	

LONG FINNED PILOT WHALE

SC/24-2017, 9.9	FO	NAMMCO 26-2018		Satellite tagging during grinds be given a higher priority	5 pilot whales were tagged with satellite transmitters in 2019 (SC/26, 2019)	Updates 2020: Tagging continues 2022 Updates: GL - cooperation between FO/GL for a PhD study started in 2022, including tagging of pilot whales, dolphins and killer whales. FO: three pods tagged in 2020, tagging continue	
SC/25-2018, 9.9.1	NAMMCO	NAMMCO 27-2019		A pre-assessment meeting for the PWWG be held to ensure that necessary data for performing assessment is available.	The data available was presented and discussed at SC/27	2022 Updates:	
SC/28-2022, 20.4	FO			The analyses of both the biological and the tagging data be duly completed and forwarded to the PWWG		2022 Updates: FO: in progress	

DOLPHINS

SC/26-2019, 9.10.1	GL	NAMMCO 28-2021	A way to distinguish between white-sided and white-beaked dolphins in reporting be developed		SC/27 informed that 2 different names for the species have now been introduced	2020 GL: Currently there is no name in Greenlandic to distinguish between the two dolphin species. Requires a follow-up with The Language Secretariat concerning name identification. Requires the two species names to be incorporated in the Database LULI/Piniarneq concerning the reporting. 2022 Updates: GL: The species have their own species names since 2020, right after NAMMCO meeting, and they are incorporated in the Database LULI/Piniarneq concerning the reporting PINIARNEQ.	
HARBOUR PORPOISE							
SC/24-2016, 8.11.2.3	GL	NAMMCO 26-2018	Catches should be validated, if possible, including assessing whether by-catches are included in the catch statistics.			Updates 2020: Reporting of bycatch of all marine mammals are mandatory and are part of the reporting statistics. Ongoing validating and improvement is ongoing Updates 2021: Three pods tagged in 2020. Ten pods tracked in total, results to be analysed and prepared for the upcoming assessment. 2022 Updates: GL - no new information	
SC/24-2017, 9.11	FO	NAMMCO 26-2018		Scientific samples should be taken from harbour porpoises caught in the FO		Updates 2021: No catch reported 2022 Updates: FO: in progress	
SC/24-2017, 9.11 SC/25-2018, 9.11.2	FO/GL/IS/NO	NAMMCO 26-2018		Combined genetics analysis with samples from all NAMMCO countries to investigate population structure and stock identity		NO: Genetic study completed in 1992. New samples collected in 2017-2018 (NAMMCO 27, 2019) . IS: Preliminary results presented at harbour porpoise workshop in 2018 (NAMMCO 27, 2019) Updates 2020: NO: An article with results from genetic analyses of the 2016-2017 material is now in press. GL: ongoing project Updates 2021 NO: Article on harbour porpoise genetics is now published. FO: Ongoing 2022 Updates: GL - new publication in 2022, including samples from GL, IS & Can. FO: ongoing. NO: Article on harbour porpoise	

SC/25-2018, 9.11.1	IS/NO			Estimates for IS and NO be completed.	SC/27 noted that all abundance estimates from NASS surveys have now been finalised and published	<p>NO: Abundance estimate for Norwegian coastal and offshore waters available. Fjord waters: high density of porpoises and abundance estimate underway (NAMMCO 27, 2019)</p> <p>IS: Preliminary results presented at harbour porpoise workshop in 2018 (NAMMCO 27, 2019) .</p> <p>Updates 2021: NO: Nothing new to report. IS: No progress</p> <p>2022 Updates: NO: Complete estimate for Norwegian waters published.</p>	
SC/26-2019, 9.11.4	GL	NAMMCO 28, 2021	Annual catch of no more than 2,629 animals (corresponding to a n expected reported catch of 1,869 animals)			<p>2020 GL: Currently there is no set quota on Harbour Porpoise. GL needs scientific advice on quotas and an Executive Order before setting quotas. Regulation is underway in 2020-21</p> <p>2022 Updates: The Government of Greenland decided december 2021 to prolong the public hearing about introduction of a quota system to harbor porpoise in 2022. Juni-August 2022 there is a public hearing about a quota system.</p>	
SC/26-2019, 9.11.4	GL	NAMMCO 28, 2021		Follow up research be done to investigate how widespread underreporting of catches is in the Piniarneq system		<p>2020 GL: validation process ongoing</p> <p>2022 Updates: GL: No new information. Resource question.</p>	
SC/26-2019, 9.11.4	GL	NAMMCO 28, 2021	Work to eliminate underreporting and validate the catch statistics in both East and West GL			<p>2020 GL: validation process ongoing</p> <p>2022 Updates: GL: Internal validation processes ongoing as describes above. However, it is assumed that the new executive order expected to be adopted Fall 2022/or Spring 2023 will lead to better reporting system as we have formed a new reporting scheme to be done per animal caught once the executive order is adopted.</p>	
SC/26-2019, 9.11.4	GL			Research required to establish a West Greenland sub-population be done		<p>2021 Updates GL: Not endorsed until information on the IUCN process is obtained.</p> <p>2022 Updates: GL - paper published in 2022</p>	

SC/26-2019, 9.11.4	GL			Recognition of new sub-population within the IUCN		2020 GL: ongoing work 2022 Updates: GL; ongoing work.	
SC/26-2019, 9.11.4	GL	NAMMCO 28, 2021	Hunters in East Greenland be asked to provide samples to scientists when harbour porpoises are caught			2020 GL: There is currently no regulation on Harbour Porpoise, however an Executive Order is underway and expected in 2020-21. In this Executive Order an article will make it possible to oblige hunters to provide samples to scientists. 2022 Updates: By the adoption of a new executive order we expect that a sample program be developed by Institute of Natural Resources.	
SC/26-2019, 9.11.4	NAMMCO	NAMMCO 28, 2021	Update the West GL assessment as soon as a new abundance estimate becomes available and no later than 2029		New abundance estimate should be available following the next NASS planned for 2023 (SC/26, 2019). SC/27 noted that new NASS now planned for 2024.	2022 Updates: GL - No new information	
SC/26-2019, 9.11	NAMMCO	NAMMCO 28, 2021		Conduct a formal assessment for Iceland following a full review of available data, including the use of close-kinship genetic analysis to arrive at abundance estimates	2022 proposed as suitable year for performing an assessment (SC/26, 2019). WG meeting scheduled for 2022 in the workplan of SC27.	2022 Updates:	
SC/26-2019, 9.11	IS/NO	NAMMCO 28, 2021		Tagging and tracking studies be carried out to help answer questions about stock identity and management units		IS: No progress. 2022 Updates:	

SC/26-2019, 9.11.4	NAMMCO	NAMMCO 28, 2021		Conduct a formal assessment for Norway with updated by-catch estimates when new abundance estimates become available	2022 proposed as suitable year for performing an assessment (SC/26, 2019), and this was included in the workplan of SC27.	2022 Updates:	
SC/26-2019, 9.11.4	NO		Expand the reference fleet as part of an effort to obtain reliable by-catch estimates			2021 Updates: No need to expand reference fleet as bycatch estimates for 2006-2018 have been obtained using various statistical methods and were recently published in a peer reviewed journal. 2022 Updates: NO has plans to incorporate a REM system in 30 vessels not operating in the reference fleet to obtain reliable by-catch estimates. This, in practice, is equivalent to expanding the reference fleet.	
SC/26-2019, 9.11.4	FO	NAMMCO 28, 2021		To allow an assessment to be conducted, work should be done to obtain reliable removals data, update abundance survey and tag animals for better idea of movements		2022 Updates: FO: in planning phase	
SC/26-2019, 9.11.4	FO/GL/IS/NO	NAMMCO 28, 2021		Each assessment area provide samples to support a multi-dimensional investigation into population structure and stock identity & allow for all existing datasets to be merged into a common analysis		2020 GL: supporting 2021 IS: Supporting. 2022 Updates: FO: no progress; NO: nothing new to report	

SPERM WHALE
BOWHEAD WHALE
BLUE WHALE
NASS & OTHER SURVEYS

SC/23-2016, 9.2	FO/GL/IS/NO	NAMMCO 26-2018		Surveys should be repeated more frequently in areas where declines have been observed		IS: Frequency of seal surveys (harbour and grey) and minke whales has been increased (NAMMCO 27, 2019) Updates 2021: NO: increased survey frequency for grey seals and harp seals due to declines. IS: Increased survey schedule continues. 2022 Updates: NO: increased survey frequency for grey seals and harp seals due to declines.	
SC/24-2017, 10.2	FO/GL/IS/NO	NAMMCO 26-2018		Attempt to get trans-Atlantic coverage	SC should include Russia in these discussions (NAMMCO/26)	Updates 2021: NO: A new NASS is being planned for 2024. IS: Supporting 2022 Updates:	
SC/25-2018, 9.0	NAMMCO			A joint sighting survey database with the IWC should be developed and hosted by NAMMCO	SC/26 requested advice from CN on the desired scope for collaboration with the IWC (e.g. inclusion of small cetaceans (SC/26, 2019)	Updates 2020: GL: supporting for large whales, not small cetaceans. Hosting by NAMMCO should be evaluated Updates 2021: IS: Same policy as GL regarding small cetaceans. Only aggregated data in database. 2022 Updates:	
SC/25-2018, 9.0 SC/26-2019, 9.0 &	NAMMCO			A workshop on novel methods for abundance surveys and estimation should be hosted before the next NASS	SC/26: Following a recommendation from AEWG 2019 that a written review replace this workshop, SC/26 instead proposed that novel methods be included in planning meetings and that external experts be invited to these meetings. (SC/26, 2019)	2020 GL: supporting Updates 2021: 2022 Updates:	
SC/26-2019, 9.0 &	IS	NAMMCO 28, 2021		Carry out a new survey with harbour porpoise as a target species and collect dive data to facilitate the development of a correction factor for this species		Update 2021: IS: Porpoise survey aimed at in 2022 or 2023. 2022 Updates:	