

A Working Group on Shipping Impacts in the Marine Environment (WGSHIP), chaired Cathryn Murray*, Canada, and Co-chair (tbc), will be established and will work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	VENUE	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 2019	25-27 November	ICES HQ, Copenhagen, Denmark		
Year 2020				
Year 2021			Final report by Date	

ToR descriptors

ToR	Description	Background	SCIENCE PLAN CODES	Duration	Expected Deliverables
a	Conduct strategic planning through review of national research on shipping interactions with the environment and report on priorities, knowledge gaps and opportunities for further collaboration.	ICES strategic plan Goal 2: understand the relationship between the impact of human activities (e.g., shipping) and marine ecosystems to estimate pressures and impacts and develop science-based sustainable pathways.	2.1; 2.5;	2 years	Report to ICES. Respond to advice requests, as applicable.
b	Review availability of data on the intensity, geographical scope and trends in current and future global shipping activity, including those in the Arctic and in/near marine protected areas.	The distribution and intensity of commercial shipping is increasing and there is a growing need to assess and mitigate the impacts of vessel activities on the marine environment, especially in areas of enhanced protection. The Arctic is one such area but there are a number of other productive sea areas where the shipping intensity has increased to an extent where impacts on the environment are becoming obvious.	2.1; 2.4; 2.7	2 years	Technical paper or peer-reviewed manuscript.
c	Review and evaluate methods to assess the risk of shipping on the marine environment, including estimates of accident probabilities and cumulative effects.	Cumulative effects assessment is needed to address the sheer volume and frequency of vessel movements, the interaction and summation of multiple impact pathways, and effects which overlap spatially and manifest through time.	2.1; 2.2; 6.1	3 years	Input on the general applicability or otherwise of such methods to IMO or national regulators through meeting participation, correspondence group and/or technical paper or peer-reviewed manuscript.

d	Review and identify possible mitigation strategies for decreasing noise (from shipping) in general and specifically in sensitive areas.	The impact of noise has been the topic of discussion at the Environment Committee (IMO) for years. In parallel quite a lot of research has been carried out and it is time to summarize the knowledge and recommend action and further research.	2.1; 2.7; 6.1		Input on the general applicability or otherwise of such strategies to IMO or national regulators through meeting participation, correspondence group and/or technical paper or peer-reviewed manuscript.
e	Review and identify methods for holistic management of shipping impacts, considering possible trade-offs across impact types.	Vessel activities can have transboundary impacts and successful mitigation efforts require coordination and collaboration between trade partners. Methods for holistic management are urgently needed to balance the benefits of industry with environmental impacts.	6.1; 6.2	3 years	ICES Viewpoint

Summary of the Work Plan

Year 1	Working on all ToRs, but with special focus on ToRs a, b
Year 2	Working on all ToRs, but with special focus on ToRs c, d, e
Year 3	Report on all ToRs

Supporting information

Priority	The work of the Group forms the scientific basis for advancing knowledge related to the impacts of shipping on the environment. It is anticipated that advisory requests could soon be received concerning shipping impacts, thus it is high priority to establish a Group to address any new requests.
Resource requirements	The research programmes which provide the main input to this group are already underway, with resources provided by national governments and scientific funding agencies. The additional resources required to undertake activities in the framework of this group are negligible.
Participants	The Group has had expressions of interest from more than 30 members.
Secretariat facilities	Standard secretarial support.
Financial	No financial implications.
Linkages to ACOM and groups under ACOM	Development of ICES Viewpoint in collaboration with ACOM
Linkages to other committees or groups	Potential linkages with WGBOSV, WGITMO, WGSFD, WGMHM, WGMPCZM, IEASG
Linkages to other organizations	Potential linkages with Arctic Council, the Baltic Marine Environment Protection Commission (HELCOM), European Maritime Safety, Agency (EMSA), International Maritime Organization (IMO), National Oceanic and Atmospheric Administration (NOAA), North Pacific Marine Science Organization (PICES), OSPAR Commission and UNEP Oceans and Seas Program. In addition, the outcomes are relevant to other national and international organizations involved in the development of regulatory policies.