

Working Group on Introduction and Transfers of Marine Organisms (WGITMO)

2016/MA2/SSGEPI02 The Working Group on Introduction and Transfer of Marine Organisms (WGITMO), chaired by Cynthia McKenzie, Canada, will work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	VENUE	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 2017	13-15 March	Woods Hole, MA, USA	Interim report by 15 April	
Year 2018	7-9 March	Madeira, Portugal	Interim report by 15 April	
Year 2019	4-6 March	Weymouth, UK	Final report by 1 May to SCICOM	

ToR descriptors

TO R	DESCRIPTION	BACKGROUND	SCIENCE PLAN CODES	DURATION	EXPECTED DELIVERABLES
a	Advance research, develop collaborations and address surveillance and knowledge gaps in issue related to the introduction and transfer of marine organisms, through annual reviews of national/international activities and responding to advice requests.	Data, information and knowledge collated and synthesised ensures timely update of AquaNIS. This information will be used as an underlying information source for other ToR's, responding to incoming advice requests as well as organising collaboration with other international science organisations (e.g. PICES and CIESM).	2.1; 2.4; 3.3	3 years	Annual reports to ICES. Further develop and advance AquaNIS database, and populate it with new data. Respond to incoming advice requests as requested.
b	Evaluate the impact climate change may have on the introduction and spread of non-indigenous marine organisms, incl. in Arctic environments.	This work will be carried out jointly with WGBOSV. Contributes to SICCOME and ICES high-priority action areas 'Arctic research'.	2.5; 2.2; 3.6	3 years	Primary publication on the Arctic environment and the spread of non-indigenous species.
c	Investigate biofouling as a vector for the introduction and transfer of aquatic organisms on vessels and artificial hard structures, their pressure and impact on the ecosystem with a comparison of prevention or selective mitigation methodologies.	Biofouling has been increasing recognized as an important vector in the introduction and transfer of aquatic organisms. Elements of this work will be carried out jointly with WGBOSV as a comparison vector in invasion pathways. Biofouling is an increasing concern for aquaculture (WGAQUA), energy installations, and coastal development as stressors on coastal environments.	2.7; 2.1; 6.4	3 years	Input on the general applicability of preventive measures and selective mitigation technologies through technical paper or manuscript submitted to peer-reviewed scientific journal.
d	Advance knowledge base to further develop indicators to	The aim is to develop wider knowledge-base to more	2.2; 2.7; 6.1	3 years	At least one manuscript to be

	evaluate the status and impacts of non-indigenous species in marine environments.	effectively address several legislative acts related to introductions of non-native species, such as EU IAS Regulation and EU MSFD (D2). Specifically, WGITMO aims to improve/develop metrics and critically evaluate the underlying uncertainties.			submitted to a peer-reviewed scientific journal.
e	Evaluate the development and utilization of DNA- and RNA-based molecular tools for early detection and monitoring of non-native species.	There are potentially several benefits for molecular approaches in support of surveillance programmes for non native species, however, this does not mean that such approaches are free from limitations and biases. Although further improvements are needed, these DNA-based approaches are promising, and already effective for active surveillance of specific/targeted species for which the above mentioned limitations had been overcome. Effective use of these new tools will be evaluated for detection of non-native species.	2.5; 1.6; 4.4	year 3	Input on the effective utilization of these methods for international and national regulators through meeting participation, correspondence group and/or technical paper.
f	Completed - Contribute regional text (~ 150 words and 1-2 graphs in each case) to new ecosystem overviews for (i) Iceland, (ii) Norwegian Seas, (iii) Azorean ecoregion and (iv) the Oceanic north-east Atlantic ecoregion in relation to the rate of discovery of invasive species where information is available.	Advisory request	2.1; 6.5	year 1	WGITMO will work intersessionally to deliver the first two ecosystem overviews (i and ii) by the end of 2016 and during 2017 for the ecosystem overviews (iii and iv) for the attention of ACOM.

Summary of the Work Plan

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

Supporting information

Priority	The work of the Group forms the scientific basis for essential advice related to the introduction and transfer of marine organisms, particularly non-indigenous species. Consequently, these activities are considered to have a very high priority.
Resource requirements	The research programmes which provide the main input to this group are already underway, and resources are already committed. The additional resource required to undertake additional activities in the framework of this group is negligible.

Participants	The Group is normally attended by some 25–35 members and guests.
Secretariat facilities	None.
Financial	No financial implications.
Linkages to ACOM and group under ACOM	The group will serve as primary respondents to incoming advice requests on various issues relating to introduction and transfer of marine organisms.
Linkages to other committees or groups	There is a very close working relationship with the Working Group on Ballast Water and Other Ship Vectors (WGBOSV). In addition to relevance to 'sectorial' expert groups, such as Biodiversity Science (WGBIODIV), Aquaculture (WGAQUA), Harmful Algae Bloom Dynamics (WGHABD), WGITMO also contributes to Integrated Ecosystem Assessments EG's.
Linkages to other organization	PICES and CIESM