

Working Group on Marine Habitat Mapping (WGMHM)

2014/MA2/SSGEPI06 The Working Group on Marine Habitat Mapping (WGMHM), chaired by James Strong, UK, will meet to work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	VENUE	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 2015	18-22 May	Reykjavik, Iceland	Interim report by 1 July to SSGEPI	Outgoing Chair: Pål Buhl-Mortensen, Norway
Year 2016	9-11 May	Winchester, UK	Interim report by 1 July to SSGEPI	Incoming Chair: James Strong, UK
Year 2017	29 May - 2 June	ICES HQ, Copenhagen, Denmark	Final report by 1 August to SCICOM	

ToR descriptors

ToR	DESCRIPTION	BACKGROUND	SCIENCE PLAN	EXPECTED	
			TOPICS ADDRESSED	DURATION	DELIVERABLES
A	International programmes Report on progress in international mapping programmes (including OSPAR and HELCOM Conventions, Emodnet, EC and EEA initiatives, CHARM, Mesh-Atlantic and other projects);	a) Science Requirements b) Advisory Requirements c) Requirements from other EGs		Three years	Chapters in report
B	National programmes (National Status Reports) Present and review important results from national habitat mapping during the preceding year, as well as new on-going and planned projects focusing on particular issues of relevance to the rest of the meeting. Provide National Status Report updates in geographic display in the ICES webGIS	a) Science Requirements b) Advisory Requirements		Three years	Chapters in report
C	Habitat mapping techniques and modelling Evaluate recent advances in marine habitat mapping and modelling techniques, including field work methodology, and data analysis and interpretation	a) Science Requirements b) Advisory Requirements		Three years	Chapters in report
D	Review practise about the use of habitat maps, for example Mapping for the MSFD, marine spatial planning, and management of MPAs; and assess the ability to use habitat maps for monitoring of the environment	a) Science Requirements b) Advisory Requirements		Three years	Chapters in report
E	2015/4 Support for the development of common and candidate OSPAR biodiversity indicators for				

benthic habitats: Benthic habitats

ICES is requested to support on-going OSPAR indicators work on benthic habitats, in support of the requirements under the MSFD¹.

a) Using mobile bottom contacting gear data, produce fishing abrasion pressure maps² (2009-2014) using the BH3 approach as a follow-up of the OSPAR request to ICES (Request 5/2014).

Fishing abrasion pressure maps should be analysed by gear distribution, and type, in the OSPAR maritime area and be based on the methodology propose on the physical damage indicator (BH3). Specifically ICES is requested to:

- i. collate relevant national VMS and logbook data;
- ii. estimate the proportions of total fisheries represented by the data;
- iii. using methods developed in Request 5/2014, where possible, collect other non-VMS data to cover other types of fisheries (e.g. fishing boats < 12m length);
- iv. prepare maps for the OSPAR maritime area (including ABNJ) on the spatial and temporal intensity of fishing using mobile bottom contacting gears (BH3 approach);

b) Evaluate the applicability of a reduced list of habitats in support the development of Typical Species indicator (BH1)³. This work should consider those habitats that have previously been identified by the COBAM Benthic experts group. Evaluation should consider data availability, and suggest possible prioritisation of habitats already included in the OSPAR list of threatened and declining habitats.

c) Evaluate monitoring and assessment requirements for multimetric indicator (BH2)² and/or typical species (BH1)², by providing:

- i. overview of existing monitoring

¹ Any analysis relating to main threats and development of abrasion maps should not be applied to the Portuguese continental shelf

² There should be consultation with OSPAR in the drafting of the data call that will be required to deliver of this request. This should build on the experience and lessons learned from the 2014 VMS/Log book data call.

³ In the implementation of this request ICES should ensure that there is a dialogue established between the relevant Working Group chairs and coordinators of the relevant OSPAR subsidiary bodies, including the ICG-COBAM Expert group for Benthic Habitats and ICG-Cumulative Effects. This is to ensure consistent interpretation of the request to meet the needs of OSPAR and avoid duplication in supporting the development and testing of OSPAR common indicators. Where data has been analysed as part of the work to deliver this request, the advice should be delivered in a form that will enable its use in subsequent analyses (including spatial analysis).

programmes with associated benthic sampling stations (e.g. WFD, MPA, Natura2000, impact assessment studies, etc.), taking into account the work done under the JMP project/art 11 reporting by countries.

- ii. overview of existing network of sampling stations and monitoring frequency across all OSPAR regions.
- iii. evaluation of on-going monitoring with regard to, geographical coverage, parameters consistently measured across the whole network, monitoring design and sampling strategy for assessment requirements (BH2/BH1). Evaluation should identify any gaps and indicate how they could be completed (monitoring sampling strategy and/or methods).

F	<ul style="list-style-type: none">1) Using input from WGDEC and BEWG, incorporate and evaluate information on sensitivity of the benthic community of the various seafloor habitats, and provide habitat maps for sensitivity of at least one demonstration area of NW European waters (MSFD region/subregion).2) Provide input based on ToR 1) to WGSFD	<p>ICES has been asked by the EU (DGENV) to provide guidance in the interpretation of fishing pressure maps in relation to impacts on benthic habitats and the related indicators. WGDEC and BEWG will provide recommendations for scoring the sensitivity of habitats; these recommendations should preferably be compatible with each other. WGMHM will incorporate information on sensitivity of the benthic community of the various seafloor habitats, and will produce habitat sensitivity maps for at least one demonstration area of NW European waters (MSFD region/subregion). WGSFD will produce impact maps by combining and evaluating the benthic information on sensitivity and fishing pressure maps (fishing abrasion, weight and value of landed catch), taking into account differences in benthic impact of the various fishing gears / metiers. Following this, an ICES Workshop on guidance on how pressure maps of fishing intensity contribute to an assessment of the state of seabed habitats (WKFBI) on 31 May - 1 June 2016 will develop indicator principles and good practices for use regionally when assessing the</p>	<p>Work on ToRs 1) and 2) should be done intersessionally (January – May 2016) and, if required, during the WGMHM meeting. WGMHM will report on ToRs 1) and 2) as soon as possible but at the latest by 11 May 2016 for the attention WGSFD (and of ACOM).</p>
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		impact of fishing on the seafloor. The workshop outputs will then be used in the ICES advisory process.			
G	Sources of existing information to support habitat map production and method development: A database containing sources of useful data (physico-chemical and biological) that support habitat mapping.	The WG wish to maintain a database of useful data sources that support habitat mapping. This will be updated annually and be a working tool for habitat mappers. The database will grow over time and will become a standing deliverable for the group annually.	1, 8, 27 and 31	Ongoing	Annual update of database
H	Theoretical aspects of habitat mapping: This ToR will be used to deal with some of the fundamental topics underpinning the assumptions typically used by habitat mappers. This includes aspects such as potential vs. realized niches, inclusion of landscape ecology topics in mapping and the limitations imposed on habitat maps by classification schemes.	The WG require dedicated time in the meetings to present and discuss aspects of fundamental ecology that underpin the mapping process.	2, 3, 5, 9 and 16	Ongoing	Annual contributions to WG annual report

Summary of the Work Plan

Year 1	Working on all ToRs, but with special focus on ToR D, and identifying points of collaboration with other WGs. Election of new chair.
Year 2	Working on all ToRs, but with special focus on ToR C. Election of new chair.
Year 3	Working on all ToRs, but with renewed focus on ToR A

Supporting information

Priority	This Group coordinates the review of habitat classification and mapping activities in the ICES area and promotes standardization of approaches and techniques to the extent possible.
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 15–20 members and guests.
Secretariat facilities	None.
Financial	No financial implications.
Linkages to ACOM and group under ACOM	ACOM
Linkages to other committees or groups	There is a close working relationship with BEWG, WGEXT, WGDEC, WGMPCZM
Linkages to other organization	OSPAR, HELCOM, EEA