

## Working Group on Offshore Wind Development and Fisheries (WGOWDF)

**2019/FT/HAPISG06 A Working Group on Offshore Wind Development and Fisheries** (WGOWDF), co-chaired by Andy Lipsky\*, USA; Andrew Gill\*, UK; and Antje Gimpel\*, Germany, 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 2020	27–29 April	by corresp/ webex		physical meeting cancelled - remote work
Year 2021		Europe (tbc)		
Year 2022			Final report by DATE to SCICOM	

### ToR descriptors

ToR	DESCRIPTION	BACKGROUND	<a href="#">SCIENCE PLAN CODES</a>	DURATION	EXPECTED DELIVERABLES
a	Review and report on fishing industry interactions with offshore wind development and document lessons learned including effects on the distribution of fishing operations	Europe has been operating offshore wind energy facilities for 20 years. North America is on the verge of large-scale development. The European experience can be used to document the effects of offshore development on fishery operations, fishing communities, and fishery economics. While there are distinct differences in the scale and scope of fisheries between the North American and European wind development areas; there is also the opportunity to identify common issues and promote research to address these issues.	2.2, 2.3, 2.7	2 years	Review paper
b	Develop and report on methodologies to assess the impact of offshore wind development on fishery resources. These assessments should	Offshore wind energy development necessitates changes in fishery-independent survey operations and potentially fishery-	2.2, 2.3, 2.7	3 years	Method development papers

	include observational and model-based approaches and consider hindcast and forecast data and models.	dependent data collection. Wind energy development also transforms habitats, thus affecting the distribution and abundance of fish and shellfish populations. Both statistical survey design and survey techniques need to be adapted and/or developed. In addition, modeling approaches need to be developed to understand the impacts of wind development and forecast possible future conditions.			
c	Consider and report on effects of habitat alteration by offshore wind development on fisheries. This consideration should include anticipated changes to the benthic habitats, potential for invasive species, vertical and horizontal movement of water, sediment suspension, and water column changes.	Construction, operation, and decommissioning of offshore wind energy developments will affect marine habitats. These activities include seafloor and water column disturbance, ocean noise, electromagnetic signals, and habitat transformation. The various activities will be documented and methodologies for study identified. Potential effects will also be documented on the range of marine organisms with particular emphasis to species that are the target of commercial and / or recreational fisheries.	2.2, 2.3, 2.7	3 years	Review paper Recommendations of additional studies linked to other WGs
d	Review ICES expertise and identify gaps and opportunities relative to renewable energy and marine ecosystems and sustainability	The goal of WGOWDEF is to complement the activities of WGMBRED and WGMRE with a focus on fisheries interactions. The development and activities of the WG will be coordinated with these other two WG. The	6.6	Year 3	Report to ICES

WG will also evaluate other ICES activities and coordinate with relevant groups.

### Summary of the Work Plan

Year 1	The WG will meet and exchange ideas on ToR a, b, c. The WG will then develop a plan as to how to address ToR a, b, c in the 3 year time frame. The initial review paper will be planned and worked on during Year 1, both at the inaugural workshop and intersessionally. The WG Chairs will interact with the Chairs of WGMBRED and WGMRE to ensure activities are complementary.
Year 2	The WG will make progress on the all review papers and will plan workshops related to each of ToR a, b, and c. The first workshop will present the draft review for ToR a and work up the final paper. The ToR b and c workshops will be structured to gather the information needed for both the other papers, namely the methodologies and the effects. The WG Chairs will interact with the Chairs of WGMBRED and WGMRE to ensure activities are complementary.
Year 3	The WG will complete the ToR b and c review papers and submit for publication. The WG will also discuss next steps for the WG. The WG will complete review of ICES expertise related to renewable energy and marine ecosystems and sustainability working with WGMBRED and WGMRE. A report will be produced for ICES.

### Supporting information

Priority	Offshore wind energy development continues in Europe and is beginning in earnest in North America. Sustainable fisheries are critical to global food security and renewable energy is critical to energy security and climate change mitigation. Coexistence requires an understanding of the interactions between offshore wind energy development and fishing. This understanding can be used to foster the exchange of information, collaboration in addressing science questions, and support decision-making. Consequently, these activities are considered to have a very high priority across the ICES area especially as wind energy development continues.
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 will be attended by some 30–40 members and guests..
Secretariat facilities	WebEx support for remote participating
Financial	No financial implications.
Linkages to ACOM and groups under ACOM	There are no obvious direct linkages but developing the expertise could link to ACOM in the future.
Linkages to other committee or groups	There is potential for a very close working relationship WGMBRED and WGMRE as well as communication with WKUSER. Also the WGSFD (Spatial Fisheries Data)
Linkages to other organizations	There are linkages to fishing organizations and wind developers in the USA and similar linkages in Europe, including wider links to licencing/permitting authorities and other relevant stakeholders.