

The **Working Group on Resilience and Marine Ecosystem Services (WGRMES)**, chaired by Andrea Belgrano, Sweden; Yajie Liu, Norway; and Pablo Pita, Spain; will work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	VENUE	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 2021	23–26 November	Online meeting		
Year 2022	5-8 September (tbc)	Norway		
Year 2023	5-8 September (tbc)	Spain	Final report by DATE to SCICOM	

### ToR descriptors

TOR	DESCRIPTION	BACKGROUND	<a href="#">SCIENCE PLAN CODES</a>	DURATION	EXPECTED DELIVERABLES
A	To document resilience of marine ecosystem services by using case studies in Europe at different scales (local, regional, national).	Information, data and evidence on resilience and marine ecosystem services (and nature contribution to people) are scarce and not organized. Links to ICES Science Plan 1st, 2nd and 3rd thematic areas, and WGs described above.	1.3; 2.1; 2.4	3 years	-Interim report -Public online repository of data/case studies. -Special Session at ICES Conference
B	To review and document multidimensional valuation of marine ecosystem services.	Valuing marine ES is key for policy makers. This task will be directly linked with the IPBES Global Multiple Values Assessment and the IPBES Global Nexus Assessment. Links to ICES Science Plan 1st and 2nd Thematic Areas; and WGs described above.	3.6; 6.1; 6.5	3 years	-Interim report -A review paper on multidimensional values of marine ecosystem services -Special Session at ICES Conference
C	To document and analyze transformative changes of marine social-ecological systems towards ocean equity.	Document fundamental changes (including property rights, management systems and Marine Protected Areas) which facilitate transformations of social groups. Links to ICES Science Plan 1st, 2nd and 3rd thematic areas, and WGs described above and below. This task will be directly linked with the IPBES Global Transformative Change Assessment, and the Strategic Initiative on the Human Dimension, and the High Level Panel for a Sustainable Ocean Economy.	6.4; 6.5; 7.4	3 years	-Interim report -A review paper -Database with marine seeds for a good Anthropocene linking marine social-ecological information -Special Session at ICES Conference -Special Issue about Ocean Equity

### Summary of the Work Plan

Year 1	Document and review of existing conceptual frameworks, methodologies and tools to analyze
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	and operationalize resilience to monitor sustainability of marine ecosystem services
Year 2	Understand the role of tangible and intangible benefits of the oceans to human well-being from fisheries and aquaculture sectors and their associated value chains.
Year 3	Document and review transformative changes of marine social-ecological systems, including commercial and recreational fisheries, and aquaculture. Provide a better understanding on how fisheries resources, governance institutions and actors learn and respond to diverse drivers of climate change and other human-induced drivers, as well as to design policies and actions aimed at building resilience. Review what plausible pathways exist for achieving the UN 2030 SDGS and the 2050 Vision for Biodiversity.

### Supporting information

Priority	Very high. The current activities of this Group will lead ICES into issues related to marine ecosystem services, integrating fisheries management and transformative changes towards ocean equity. 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 20–25 members and guests.
Secretariat facilities	Standard EG support.
Financial	No financial implications. The WGREMS will explore to get funds from H2020 calls and others to support and expand the activities inside and outside Europe
Linkages to ACOM and groups under ACOM	AFWG, WGRFS.
Linkages to other committees or groups	There is a close working relationship with WGBIODIV, WGECON, WGSOCIAL, WGMHM, WGMPCZM, WGSFD, WGISUR, WGMARS, WGECO and SICCME.
Linkages to other organizations	The work of this group is aligned with other global nodes of ES research such as the IPBES, Future Earth and the Ecosystem Services Partnership. The work is also in line with the Natural Capital Project ( <a href="http://www.naturalcapitalproject.org/">http://www.naturalcapitalproject.org/</a> ), ++ and numerous scientific and regulatory governmental and university's departments in ICES countries.