

## Working Group on Resilience and marine ecosystem services (WGRMES)

2017/MA2/EPDSG05 The Working Group on Resilience and Marine Ecosystem Services (WGRMES), chaired by Sebastian Villasante, Spain, and Gonzalo Macho Rivero, 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 2018	19–20 November	Vigo, Spain	Interim report by 15 December	
Year 2019	12–14 June	Copenhagen, Denmark	Interim report by 1 August	
Year 2020	10–12 June	Vigo, Spain	Final report by 1 August	

## ToR descriptors

ToR	Description	Background	Science Plan topics addressed	Duration	Expected Deliverables
A	Undertaking an literature search to assess the current data available to document the resilience of marine ecosystem services	Information and data on marine ES is scarce and not organized. Links to ICES Science Plan 1st, 2nd and 3rd thematic areas, and WGs described above	Resilience and properties of marine ES. Links to ICES Science Plan 1st, 2nd and 3rd thematic areas	1 year	-Interim report -Global review paper: Key drivers for resilient small-scale fisheries. -Memorandum of Understanding with EU institutions and fishery organizations -Online repository with results from year (2015-2017)
B	Document the current approaches available in connection to multidimensional valuation of marine ecosystem services	Valuing marine ES is key for policy makers. Regional and local data is lacking in Europe. Links to ICES Science Plan 1st and 2nd Thematic Areas; and WGs described above	Biophysical, economic, cultural and institutional understanding of ecosystem goods and services. Links to ICES Science Plan 1st, 2nd and 3rd thematic areas	2 years	-Interim report -Paper review about intrinsic, instrumental and relational values of marine ES -Special Session at ASC 2018 -Special Session at PICES 2018 -Extended version of the online repository
C	To review the available information and produce a document documenting the co-production of marine ES	Marine ES are co-produced by a mixture of natural capital and various forms of social, human, financial and technological capital. Human intervention in the co-creation of marine ES is a key driver in ES delivery,	Several ICES thematic areas. ICES Action area: ecosystem overview, integrated ecosystem assessment,	2 years	-Interim report -Special Session at ASC 2019 -Special Session at AAA Conference 2019 -Global paper about co-production of

			MSFD, Sustainable aquaculture		marine ES -Special Issue " <i>Blue Growth under the Anthropocene</i> "
D	Tipping points and social transformations of marine ES	Document critical changes which facilitate transformations of social groups. Links to ICES Science Plan 1st, 2nd and 3rd thematic areas, and WGs described above and below. Links to the Strategic Initiative on the Human Dimension	Human dimensions of the oceans. Links to ICES Science Plan 1st, 2nd and 3rd thematic areas	2 years	-Interim report -Global paper documenting social transformations of marine ES. -Special Session at ASC 2020 -Special Issue " <i>Tipping points and social transformations of marine ES</i> "
E	Governance and scenarios for sustainable marine ES	The role of institutions is key to develop assessments of best practices of integrated assessments of marine ES		3 years	-Interim report -Global paper on governance of

## Summary of the Work Plan

Year 1	Review of existing frameworks, methodologies and tools to study socio-economic dimensions of marine ecosystem services
Year 2	Understanding of ecological, economic, cultural, social drives of changes of marine ecosystem services
Year 3	Scenarios and policy recommendations for resilient trajectories of marine ecosystem services

## Supporting information

Priority	High. The current activities of this Group will lead ICES into issues related to marine ecosystem services, integrating fisheries management and ecosystem services frameworks. Consequently, these activities are considered to have a very high priority.
Resource requirements	None required other than those provided by the host institute.
Participants	The Group is normally attended by some 15 members and guests.
Secretariat facilities	None.
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, WGEKO, WGRFS

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Linkages to other committees or groups	There is a close working relationship with WGBIODIV, and also EPISG EGs (WGMHM, WGMPCZM, WGSFD), SICCME, WGIMM, WGLMEBP, WGISUR, WGMARS, and BONUS.
Linkages to other organizations	The work of this group is aligned with other global nodes of ES research such as the Ecosystem Services Partnership in which the one of the chair (Dr. Villasante) is also co-leader of the Thematic Working Group “Economic and monetary valuation” and ( <a href="http://www.es-partnership.org">www.es-partnership.org</a> ). The work is also in line with the current Future Earth Program, 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.

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