

## WGFAST – Working Group on Fisheries Acoustics, Science and Technology

**2019/FT/EOSG09** A Working Group on Fisheries Acoustics, Science and Technology (WGFAST), chaired by J. Michael Jech\*, USA, 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	22 April	Online meeting	Interim report by 22 May 2020 to ACOM-SCICOM	Michael Jech takes over as chair
Year 2021	19-23 April	Online meeting	Interim report by 30 June 2021 to ACOM-SCICOM	
Year 2022	25-28 April	Dakar, Senegal	Final report by 30 June 2022 to ACOM-SCICOM	

### ToR descriptors

TOR	DESCRIPTION	BACKGROUND	<a href="#">SCIENCE PLAN CODES</a>	DURATION	EXPECTED DELIVERABLES
a	Collate information on acoustic related research and surveys, and interactions with ecosystem and assessment expert groups.	a) Science Requirements b) Advisory Requirements A summary of the information will be presented in the final report	3.1, 3.2, 3.4	3	
b	Review presented recent work within the topics: “Acoustic methods to characterize populations, ecosystems, habitat, and behaviour”; “Acoustic characterization of marine organisms”; and “Emerging technologies, methodologies, and protocols”. Provide guidance by identifying: (1) where training opportunities could be developed; and (2) gaps in knowledge and challenges that should be prioritized by the community.	Create a venue for informing the group members on recent activities and seeking input to further development. An overview of the different contributions and guidance will be presented in the annual report	3.3, 4.1, 4.4	1, 2, 3	
c	Organize a conference session on integrating fisheries acoustics with ecosystem assessment and monitoring at an international scientific meeting such as ASC.		3.1, 3.2, 4.1	2 or 3	

d	Develop, and maintain acoustic metadata and data format conventions and coordinate with acoustic survey groups.	Data format conventions for acoustic metadata and data are required for efficient data interchange and processing of acoustic data, but are lacking in the fisheries acoustics field. CRR 341 (2018) and SISP 4 (2016) have partially addressed this need, but further types of data and acoustic equipment need to be supported.	3.2, 3.5, 4.2	1, 2, 3	Updated metadata convention publication (new guide/handbook series)  Revised sonar-netcdf4 convention publication that includes echosounder data (new guide/handbook series)
e	Develop and recommend procedures for collecting and processing quality acoustic data in inclement weather.	Acoustic data are collected from a variety of vessels that respond to inclement weather in diverse ways. Procedures are needed to provide quality control for data collected in inclement weather to stock assessment.	3.3, 3.6	1	CRR; recommendations on methodology improvements to acoustic survey coordination groups to implement on surveys and update SISPs

### Summary of the Work Plan

<b>YEAR 1</b>	Produce the annual overview of recent developments within the field. Produce an ICES CRR recommending procedures for collecting and processing quality acoustic data in inclement weather. Develop and maintain metadata and acoustic data formats.
<b>Year 2</b>	Produce the annual overview of recent developments within the field. Propose a conference session at an international scientific meeting. Develop and maintain metadata and acoustic data formats.
<b>Year 3</b>	Produce the annual overview of recent developments within the field. Collate information on acoustic related research and surveys. Develop and maintain metadata and acoustic data formats. Publish new guides with updated metadata convention and revised sonar-netcdf4 convention publication that includes echosounder data.

### Supporting information

Priority	Fisheries acoustics and complementary technologies provide the necessary tools and methods to implement the ecosystem approach to fisheries management within ICES and research into their application and further development is vital.
Justification for venue 2022 (in non-ICES member country)	WGFAST has a long and rich history of collaborating with our West African partners, and hosting a meeting in Senegal will facilitate the participation of scientists from Africa (particularly West Africa and the south Mediterranean area), improve the exchange of science and communication on Fisheries Acoustics, Science and Technology between European and African colleagues, and promote the UN Ocean decade initiative. We expect to recruit several new members to WGFAST and even at higher levels, gain new "observatory" countries for ICES in Africa.
Resource requirements	No new resources will be required. Having overlaps with the other meetings of the Working, Planning, Study and Topic Groups increases efficiency and reduces travel costs.
Participants	The Group is normally attended by some 60-100 members and guests.
Secretariat facilities	None.
Financial	No financial implications.

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Linkages to ACOM and groups under ACOM	Stock assessment groups using acoustic abundance indices.
Linkages to other committee or groups	The work in this group is closely aligned with complementary work in the FTFB Working Group. The work is of direct relevance to a number of data collection and coordination groups within EOSG (e.g. WGIPS, WGBITS, WGISUR)
Linkages to other organizations	The work of this group is closely aligned with similar work in FAO, the Acoustical Society of America, the South Pacific Regional Fisheries Management Organization, the Commission for the Conservation of Antarctic Marine Living Resources, and the American Fisheries Society.

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