

## WKMESO – Workshop on monitoring technologies for the mesopelagic zone

2016/2/SSGIEOM12

The **Workshop on monitoring technologies for the mesopelagic zone** (WKMESO), chaired by Benjamin Planque\*, Norway, and Dave Reid, Ireland\* will meet in Bergen, Norway, 6–10 November 2017 to:

- a) review and evaluate the strength and limitations of the approach currently used to monitor the abundance of commercial fish and other species in the mesopelagic zone of the Irminger and Norwegian Seas.
- b) evaluate the potential of trawls, nets, acoustic, optical and other techniques to monitor the abundance of commercial fish and other species in the mesopelagic zone of the Irminger and Norwegian Seas.
- c) recommend additions or modifications in the observation method used by the ongoing WGIDEEPS survey, within the 3y-term of the group.
- d) recommend further developments in the observation method used by the WGIDEEPS survey, beyond the 3y-term of the group.

WKMESO will report by 31 December 2017 for the attention of the SSGIEOM Committee.

### Supporting information

Priority	The activities of this workshop will respond to the need to the Working Group on International Deep Pelagic Surveys (WGIDEEPS) concerning data quality insurance and expansion from individual species towards ecosystem oriented surveys. Provision of reliable data to support redfish stock assessment and to support ecosystem integrated assessment are considered to have very high priority.
Scientific justification	Term of Reference a) Within ICES, WGIDEEPS surveys are the only surveys with targeted monitoring of fish and other species deep in the mesopelagic zone. Yet the observation methodology has not been evaluated externally. This ToR will directly address this lack of evaluation. Term of Reference b) To overcome current observational limitations in the mesopelagic layer, existing or new methodologies should be considered. This ToR will synthesise the strengths and weaknesses of different methodological approaches for monitoring living resources in the mesopelagic layer. Tor a and b will provide the basis for reliable observations in the mesopelagic layer in the future. Term of Reference c) Based on ToRs a and b, alternative observations methods might be readily implemented during the WGIDEEPS surveys. This ToR will identify these methods, how they can be integrated into the survey design and how they will improve nature and quality of the data provided by WGIDEEPS. Term of Reference d) New methods that are in the development process may not be readily available for implementation but offer promising avenues for future observations and data collection. This ToR will identify such methods and evaluate how these may be tested and developed to match the requirements of WGIDEEPS.
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 workshop is expected to be attended by 10–20 participants.
Secretariat facilities	None.
Financial	No financial implications.

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Linkages to advisory committees    There are no obvious direct linkages with the advisory committees.

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Linkages to other committees or group    WKMESO has a very close working relationship with the WGIDEEPS and direct connections to other groups in the SSGIEOM Committee. In particular Working Group on Fishing Technology and Fish Behaviour (WGFTFB), Working Group on Fisheries Acoustics Science and Technology (WGFAST) and Working Group on Integrating Surveys for the Ecosystem Approach (WGISUR).

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Linkages to other organizations

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