

Workshop on methods to develop a swept-area based effort index (WKSABI)

Approved on the ACOM-SCICOM Forum

2018/2/IEASG02 The Workshop on methods to develop a swept-area based effort index (WKSABI), chaired by Kai Wieland, Denmark, and other chair (tbc) will be established and will meet at ICES Headquarters, Copenhagen, on 8–9 January 2019 to:

- a) Adopt and agree on an effort estimate based in trawl swept-area, valid for all surveys available in DATRAS, independent of ecoregion and survey
 - i) Check and validate the calculations of missing data of the variables related to the swept-area effort estimates submitted by the different countries and surveys;
 - ii) Propose common strategies to reduce missing data in the crucial variables;
 - iii) Define common calculations, when possible, across surveys and countries;
 - iv) Define species groups for which the swept area estimates should be based on door spread (e.g. cod) or wing spread (e.g. flatfish, marine litter) and those for which swept area derived from bottom trawls may not be used (e.g. pelagic fish) because it does not account for differences in vertical opening in respect to depth and here indices in n/hr should be maintained instead;
 - v) BITS and NeAtl IBTS: Define by survey the first possible year for which the required data checking and interpolation of missing values can be done with a reasonable effort and draft a realistic time line to finish this task;
 - vi) NS-IBTS: Define year (after 2014) by country for which new algorithms for interpolation of missing values should be used and provide updates.
- b) Define and describe i) a size-based indicator, and ii) a marine litter indicator based on this swept-area index:
 - i) Run scenarios based on key changes in variables, in order to assess the robustness of the index and describe caveats and shortcomings of the assumptions;
 - ii) Adopt a methodology for the treatment of the main assumptions to be made

WKSABI will report by **March/April 2019** to the attention of IEASG and DIG.

Supporting information

Priority

Scientific justification

The importance of swept-area estimation has been strongly emphasized by IBTSWG in 2013 following recommendations by WGISDAA (Working Group on Improving use of Survey Data for Assessment and Advice) in 2012. Swept-area is suggested as an alternative to haul time, because it would remove possible bias resulting from different riggings or gear specifications.

The large fish indicator (LFI) is the proportion of total fish biomass of a defined suite of species sampled in a particular survey programme that exceeds a specified threshold length. It is an important community indicator that integrates different stocks in a unique regional indicator. The LFI is one of the DCF indicators and is used by OSPAR in the Ecological Quality Objective (EcoQO), by HELCOM as a core indicators of biodiversity, related to the food webs MSFD descriptor D4 and used in ICES Advice. LFIs may also be used in the future as a standard product in the ICES Ecosystem Overviews and will be calculated every year.

Resource requirements

Participants

Secretariat facilities	A meeting room at ICES HQ will be facilitated for the dates of the workshop. In addition, assistance from the ICES Data Centre and Advisory Department will be provided.
Financial	No financial implications.
Linkages to advisory and science committees	There are linkages to IEASG, SCICOM, ACOM, and DIG.
Linkages to other groups	EGs coordinating surveys in DATRAS (IBTSWG, BIFS, WGMAL, WGNSSK, WGCSE, WGBEAM)
Linkages to other organizations	JRC, OSPAR, HELCOM
