

2020/WK/HAPISG16 **A Workshop on Geo-Spatial Data for Small-Scale Fisheries**
(WKSSFGEO), chaired by Marta Rufino, Portugal; and Josefine Egekvist, Denmark, will be established and will meet in Lisbon, Portugal, 29 November – 3 December 2021 to:

- a) Discuss and apply methods for identifying trips/hauls in small-scale fisheries, including passive gears, using high resolution geo-spatial data. Participants need to bring their own data for case-studies to develop best practices and common methodologies;
- b) Based on the best practices identified, develop an R-script that can be used as a template for analysis of geo-spatial for small-scale fisheries;
- c) Evaluate how the use of high resolution geo-spatial data improve effort estimates and can help quantify the extent of small-scale fisheries.

WKSSFGEO will report by 15 January 2022 (via HAPISG) for the attention of the ACOM and SCICOM.

Supporting information

Scientific justification In relation to spatial data within the EU, VMS are available for vessels larger than or equal to 12 m since 2012, with a maximum ping rate of 2 hours. The ICES VMS/logbook data call requests VMS-based spatial data, but is missing information on fishery from vessels that are not carrying VMS. It is identified as a caveat in relation to the data outputs used for ICES Advice (e.g. ADGTRADE) that the small-scale fishery is missing, resulting in an underestimation of the fishing pressure, especially in coastal areas.

Some national initiatives have been implemented to obtain spatio-temporal data from vessels < 12 m (e.g. AIS, GPRS trackers), but the methods to deal with this highly temporally resolved data are not harmonized/standardized. Several ICES members, such as the UK, are proposing the use of appropriate vessel tracking systems for the whole inshore fleet (DEFRA < 2018; Marine Scotland, 2019). Additionally, at the EU level current negotiations between the EU Commission, Parliament and Council are underway for the tracking on small scale fishing vessels by all Member States (P9_TA(2021)0076).

Therefore, it is necessary to produce standardised protocols to identify fishing trips and infer fishing activities in SSF.

With regards to passive gears, no matter the type of vessel, measures of fishing effort are often missing. Two types of effort is requested in the ICES RDBES Effort statistics: number of hours the vessel is conducting fishing and handling related activity and the soaking time. The workshop will test the use of highly resolved spatio-temporal data to identify setting and hauling events during fishing trips to infer other measures of effort (such as number of pots/traps, length of the net and/or gear soak time).

The workshop will aim to discuss and develop standard procedures for identifying trips/hauls in SSF using geo-spatial data that can be compatible with VMS derived outputs. Participants will bring their own data for the case-studies. Namely, the workshop participants will explore the possibility of identifying the setting/hauling of passive gears. It will also be explored how different criteria applied affect the identification of fishing trips/hauls (e.g. through sensitivity analysis). The output will be an R-script for working with geo-spatial data for SSF.

Resource requirements	The research programmes which provide the main input to this group are already underway, and resources are already committed. The additional resources required to undertake additional activities in the framework of this group are negligible.
Participants	The group will be attended by members of WGSFD, WGCATCH and other invited experts.
Secretariat facilities	Standard EG support.
Financial	Funding will be requested for on site review.
Linkages to advisory committees	There are no obvious direct linkages with the advisory committees.
Linkages to other committees or groups	WGSFD, WGCATCH, WGBYC, WGTIFD, SCICOM, HAPISG
Linkages to other organizations	EU Regional Coordination Groups Intersessional Subgroups on Small-scale fisheries and Metier and transversal variable issues.