

Guidelines for fisheries research and basic marine science activity in the SEAFO Convention Area.

The primary purpose of these guidelines is to facilitate that high-quality science may be conducted freely and to the benefit of all while also ensuring that the activity is conducted in a manner which does not cause significant adverse impacts (SAI) on the marine ecosystems and organisms, including fisheries resources.

Definitions of fisheries research, other marine science, and exploratory fishing.

Fisheries research shall as a primary objective create a firm basis for fisheries management advice. As all other sciences, fisheries research shall satisfy best scientific practices and standards. The objective is fulfilled by conducting repeatable experiments, field investigations, and data analyses that collectively enhance the quality of: a) resource and ecosystem assessments, b) evaluations of negative impacts on non-target species, incidental by-catch species and vulnerable marine ecosystems (VMEs), and c) measures implemented to mitigate negative impacts on stocks and VMEs. Top priority outputs from fisheries research are data analyses on:

- 1) target fisheries resources;
- 2) non-target resources and organisms occurring as incidental by-catch;
- 3) ecosystems that may be impacted by fisheries (e.g. VMEs);
- 4) fishing technologies, methods and strategies facilitating sustainable fisheries.

Fisheries research may be distinguished from primarily *curiosity-driven marine science* which, independent of the utility of the results in relation to management and commercial interests, aims to study the environment, organisms, and ecosystems in order to explain patterns and processes in the sea. In terms of scientific rigor, however, there is basically not a major difference between these two categories.

Exploratory fisheries, however, are fishing experiments solely or primarily aimed to discover new resources or new fishing grounds and are as such from the outset motivated by commercial interest. Exploratory fisheries will thus normally not satisfy the above definition of fisheries research. Exploratory fisheries are regulated by SEAFO by agreed protocols, hence these guidelines are not relevant for exploratory fisheries.

The Guidelines are as follows:

Notwithstanding obligations of Chapter VIII of the SEAFO System of Observation, Inspection, Compliance and Enforcement, any party intending to conduct fisheries research as well as other marine science activity in the SEAFO Convention Area (CA) is requested to adhere to the following guidelines during the planning, field and publication phases of the activity:

1. Planning phase

1.1 The party is requested to submit to the Executive Secretary of SEAFO, preferably no later than 6 months of the intended period of sea-going activity, a letter of intent explaining the activity being planned. In return, the Executive Secretary will provide guidance on any management measures that may be relevant to the intended research activity, as well forms and routines for submitting reports and/or data.

1.2 Upon receiving the response from SEAFO, the party is requested to submit, no later than one month prior to the sea-going activity, a more detailed plan outlining methods to be used, what areas will be sampled, sampling intensity, samples generated, and data gathered. Evaluated against SEAFO measures, the plan should also provide information on what measures will be implemented to mitigate anticipated negative impacts on fisheries resources and biodiversity, in particular VMEs.

1.3 Upon receipt the letter of intent and detailed plan should be forwarded to all SEAFO Contracting Parties and the SEAFO Scientific Committee (SC).

2. Field phases

2.1 During the field experiment every effort should be made to avoid activity compromising the SEAFO measures implemented to conserve fisheries resources and biodiversity, especially VMEs. This applies in all subareas of the SEAFO CA but is particularly important in subareas closed to commercial fishing in order to protect VMEs.

2.2 Sampling levels should satisfy scientific standards and requirements specific to the research being conducted, but excessive sampling of fisheries resources and organisms associated with VMEs should be avoided. The use of invasive sampling methods in benthic environments, especially in areas where VMEs may occur, should preferably be avoided. If invasive sampling cannot be fully excluded from the sampling design, (e.g. tow lengths of trawls, lengths of longlines, and sampling with bottom-touching benthos samplers) should be carefully planned and monitored in order to minimize sampling to a level satisfying the sampling design required for the analyses but at the same time preventing excessive redundancy.

2.3 Sampling of regulated species (e.g. fish resources) is encouraged to the extent that such sampling facilitates provision of much needed data to the SEAFO SC. Care should be taken to avoid incentives to sample excessively by e.g. facilitating or allowing marketing of retained excessive catches. Care should also be taken to avoid the need for discarding of superfluous samples of such species.

2.4 During the conduct of field sampling, considerations should be given to how to facilitate timely post-cruise reporting of data and results of relevance to SEAFO.

2.5 Vessels are requested convey VMS signals or equivalent positional data to SEAFO. This request applies to registered research vessels as well as vessels of other categories conducting research, e.g. commercial fishing vessels chartered or otherwise engaged in science activity led and conducted by the scientific party referred to under Pt. 1.1.

3. Publication and data provision phase

3.1 Cruise reports, at least those made available in the public domain, should be provided to SEAFO as soon as possible after the completion of the cruise. The SEAFO Executive Secretary will forward such reports to the CPs for information.

3.2 Any publication deemed relevant to SEAFO resulting from the research activity described under Pt 1 should be submitted to SEAFO and thereby made available for the work of the SEAFO Scientific Committee. This request remains valid throughout the life-time of the project/research programme under which the activity was conducted.

3.3 Parties are requested to submit data of relevance to the assessments and evaluations conducted under the mandate of the SEAFO SC. Such data, marked with source and origin, will be stored in a Secure SEAFO database. Restrictions on use and reference requirements will be agreed between the party and the SEAFO Executive Secretary.

3.4 If raw data cannot be submitted to SEAFO, then aggregate data at an agreed level of aggregation may be made available. Of particular significance would be data on VME indicator species occurrence and density, i.e. data seldom available from fisheries-independent sources.