### TERMS OF REFERENCE (ToR) FOR THE PROVISION OF SERVICES TO SIOFA

#### Project SEC2022-01 SIOFA Data Report and Data Assets Visibility

#### **1. INTRODUCTION**

The EU has agreed to a 2.5-year funding arrangement<sup>1</sup> "2020-2022 Support to SIOFA Scientific Work on key stocks, ecosystems, and data" to enable SIOFA to commission a series of scientific studies to support the SIOFA/Scientific Committee's (SC) Work Plan. The actions end on 30 April 2023. Therefore, this proposed project is integrated with SIOFA's ongoing and planned scientific actions.

Particularly, this project (SEC2022-01) focuses on "Reinforcing the data collection, SIOFA data/base systems, and coding and data processes" as per General Objective 4 of the funding arrangement.

Time series of fishing effort, catch, biological samplings are already part of the SIOFA databases. However, the adequacy of these data can be evaluated only in the context of the purposes for which they are used and currently there are strong limitations both for the Secretariat and the final users.

General Objective 4 aims at

"making operational and reinforce the accessibility of the database to users, the coverage or completeness, and also credibility of the data collection process and the internal management process that uses the data including the time-consuming compilation and filing of raw data".

SIOFA has several data assets that have been build following the directions of the MoP and considering the successful implementation of the CMMs. However, SIOFA Contracting Parties, Cooperating Non-Contracting Parties and Participating Fishing Entities (CCPs) have a poor visibility on their content and status.

The proposed project will build on the work already undertaken by previous SIOFA initiatives such as the "independent audit of data security: access, dissemination, and presentation of data" and the "independent audit of data security: physical security" hence the focus on accessibility and visibility of the database to users.

### **2. TERMS OF REFERENCE**

The objective is for the CCPs and the general public to be informed and understand the data that is collected and available<sup>2</sup> at the Secretariat. The data accessibility and visibility would be improved through the creation of a user-friendly system giving the possibility to provide data on to the SIOFA website, under a general "data" section to users.

### 2.1. Categories of information provided:

There would be 2 categories of information provided:

<sup>&</sup>lt;sup>1</sup> This funding arrangement is designed to deliver on five General Objectives and, within each General Objective, a number of specific objectives.

<sup>&</sup>lt;sup>2</sup> Fine-scale data will not be disclosed, as it belongs to the CCPs and would raise confidentiality issues.

#### a. Summary data reports

This category will provide highly aggregated information considering CMM 2016/03 (Data Confidentiality) about targeted species, the main fisheries and biological information stored, and about the spatial and temporal availability of the data. Information provided will be in line with the public domain data as per CMM 2016/03. It is proposed that the aggregation level provide information on a yearly basis and on a SIOFA sub-area geographical scale.

Only highly aggregated data without any information of the number of vessels involved will be disclosed, it does not identify vessels or CCPs and therefore may not violate the requirements of SIOFA CMM 2016/03 on data confidentiality. However, in several instances, yearly species catch tonnages would be calculated from the catch of a single vessel. The system would provide that information to the public if the concerned CCP consent to this.

The coherence between the content of this highly aggregated information and the information contained in the SIOFA overview of fisheries and SIOFA ecosystem summaries is assured.

### b. Data status reports

The other part of information provided would be the status of the recent data submissions and the quality (accuracy and completeness) of the historical data held in the SIOFA databases. The report would provide information on a yearly basis, by fishing flag and by gear.

### 2.2. Technical Concept

Frontend: The website will provide a section from which customized information can be requested by the users' using filters and controls. The customized report and result will be displayed in a HTML page.

The website will also have a page that present the data collection workflow in SIOFA addressing the complex data collection processes for non-technical users.

Other elements to be considered are: Ease extractions to Excel, allow multiple users to access the system simultaneously and allowing different confidentiality levels for different users.

Backend: A dedicated database that contains only the information that can be shared on the website would be installed, and routine process would enable this database to be updated on a regular basis (at least once a year) or by the Secretariat on request.

Any mis-behaviours or hacking tentative on that online database would have no impact as it will contain only of publicly accessible information.

### 2.3. Tasks list/deliverables

**T1. Build a meta-data database** (MDDB) according to the data that need to be made accessible (defined in annex 1).

The database shall be based on current web standards (e.g. MySQL).

**T2. Make a gap-analysis** of the current SIOFA databases against the requirements defined in task 1. And **Provide recommendations** for update of the SIOFA databases to enable the availability of all information required.

## **T3. Set up automated routine(es)** for the MDDB to be automatically updated.

The routines would take information from the SIOFA databases (datasets, catch and effort, observers' data, etc.), process the information as required and upload it into the MDDB. The routine shall be easily updatable to consider new needs that may arise after this project is ended.

**T4. Design the website interfaces** for visitor to request the information.

The interface would preferably be integrated in the current SIOFA website (which is running with Drupal), or a subdomain will be created and dedicated to this service (e.g. data.apsoi.org).

The interface will have an option to login as a Drupal member (members, roles and permissions are currently set on the SIOFA website). Logged-in users from SIOFA will have access to information classified as restricted once defined.

**T5. Construct the outputs pages** for the result to be displayed.

An option would be available to download the information (in a Excel or CSV format) for future use by the user.

## T6. Make available the online system

The system would be first provided in test mode or on a specific address for review by the Secretariat, the SC and MoP heads of delegations (end-users panel) who would need to provide final signoff on the system.

## **T7. Revision and finalisation** by the end-user panel.

The core deliverable of the SIOFA Data Report and Data Assets Visibility is a user-friendly system that can be accessible by all SIOFA users allowing them to easily obtain the needed information.

## **3. SOURCE OF INFORMATION (REFERENCES)**

Following are important sources of information and references for the Consultant:

- SIOFA Databases documentation and structure;
- MoP9 independent audit of data security: access, dissemination, and presentation of data (project SEC2021-05). The restricted document would be provided to the Consultant(s);
- SIOFA CMM 2016/03 (Data Confidentiality);
- SIOFA overview of fisheries;
- SIOFA Website

## 4. SUBMISSION OF THE INFORMATION AND CONFIDENTIALITY

The Consultant should submit all the information collected to the SIOFA Secretariat (including that sourced from the Secretariat).

A copy of all electronic data files, codes, and methods shall be submitted to the SIOFA Secretariat before final payment of the contract is made to the consultant.

All Intellectual Property generated as a part of this contract shall become the property of SIOFA unless otherwise excluded in the proposal and agreed by SIOFA in the contract. In cases where SIOFA agrees that Intellectual Property rights are not passed to SIOFA, provision should be made for the use of any Intellectual Property for the purposes of scientific review and transparency following the conclusion of the contract.

The consultant shall not release confidential data provided for conducting this project to any person or any organisation, other than SIOFA Secretariat. Such information will remain the property of the SIOFA Secretariat, and subject to agreements by data providers and owners may be used for future SIOFA activities subject to SIOFA confidential rules in force.

The consultant shall return and delete all the confidential data obtained as a part of the contract once a copy of all data and analysis files has been submitted and accepted by SIOFA, and immediately after the conclusion of the contract.

## **5. REPORT**

The Consultant shall make one report that include the followings points:

- Data catalogue (inventory) of the information collected;
- Technical documentation for the meta-data database(s) and the source code developed. Pictures, Diagrams and Illustrations as much as possible for anyone to understand contents easily;
- Advice and recommendations on future work; and
- Executive summary.

Refer to timeline (Table 1) on the submission schedule.

### 6. BUDGET and PAYMENTS (refer to the timeline, Table 1)

The maximum allocated budget for this ToRs is 20,000 euros.

The SIOFA Secretariat will pay 32% at contract signature, 32% after delivery of the first version of the web system and 36% after finalization of the project.

#### 7. ADDITIONAL POINTS

The Consultancy is planned to be undertaken remotely. Regular meetings between the project manager, the end-users panel and the Consultant(s) will occur during the implementation period.

If several individuals are proposed for fulfilling the project (e.g. a design expert, a web programmer, etc.) then the applicants shall designate only one person for leading the project and liaising with the Secretariat.

### 8. SUBMISSION OF APPLICATION

Announcement of Call for the Consultant will be placed in the SIOFA home page from 10 August to 09 September 2022 and will be circulated to all Cooperating and Contacting Partiers (CCPs).

The applicants should submit a proposal that contains the following:

- Up-to-date copy of their CVs that summarises the candidates' relevant experiences and works;
- A document outlining the proposed methods and analyses, including a description of how the objectives of the ToR will be achieved;
- Specification of the final report, and any other reports, presentations, or other project outputs that will be produced for the contract;
- Any proposed exclusions to the intellectual property clause;
- Identification of any project risks and associated mitigation and management required to successfully complete the project;
- A statement that identifies any perceived, potential, or actual conflicts of interest of the candidate, including those described in paragraph 4 of the <u>SIOFA recruitment procedure</u>;
- A financial proposal; and
- Any relevant additional information the candidate wishes to submit.

The applications must be submitted to Thierry Clot, Executive Secretary, <u>Thierry.clot@siofa.org</u> (cc <u>secretariat@siofa.org</u>) by 09 September 2022. Applications received after 9<sup>th</sup> September 2022 will not be considered.

### 9. TIMELINE

The project (SEC2022-01) shall follow the timeline described in Table 1.

#### **Table 1**: Timeline of SEC 2022-01

2022	
10 August -09 September	Call for the consultant through the SIOFA web site and also through the circulation to Cooperating and Contacting Partiers (CCPs).
12-16 September	Selection of the Consultant by the Secretariat in consultation with Project Manager and others included in the evaluation panel (EP). After selection, the Secretariat will make a contract with the Consultant. The EP will proceed with the evaluation of the proposal(s). Each tender shall be evaluated on its own merits, and not by reference to another tender.
	The EP report comprises the detailed evaluation of each tender and the corresponding list of the main negotiation points.
19-September– 31 December	Inception meeting and working period of the Consultant. Delivery of the first version of the web system and a draft report to Secretariat.

01-20 January	Review of the website and report by the end-user panel. Requests for additional works and/or revisions will be provided to the consultant by 20 January 2023.
21 January – 17 February	Following any requests for additional works/or revisions the consultant will complete the requests and submit the final version and all information/data to the Secretariat by 17 February 2023.
18 – 28 February	The Secretariat and Project Manager will review the final version, the report and information/data submitted. If acceptable, the Secretariat will pay the final consultant fees within 15 days after 28 February 2023 and in accordance with Payment Terms provided in the contract.

## **11. EVALUATION CRITERIA FOR THE SELECTION OF PROPOSALS**

Applicants should carefully read this section in order to be able to submit a proposal that will be admitted for full evaluation.

The applications will be evaluated in accordance with the following set of criteria:

1. The alignment of the technical offer with the objectives of this project.

The technical offer must cover all aspects and tasks specifically required in this ToR providing all the information needed to apply the evaluation criteria.

- 2. Relevant experience:
  - Strong knowledge in relational database systems.
  - Strong knowledge in web development and dynamic websites.
  - Programming level knowledge of Drupal CMS.
  - Adequate User Interface and User Experience design skills.
  - Desirable understanding of Fisheries or Marine Biology.
- 3. Verification of Administrative compliance:
  - Adequate submission of information to allow the evaluation panel to assess the proposals.
  - The candidate's agreement with confidentiality provisions required for the project.
  - Agreement with the data submission and intellectual property terms required in this ToR.
  - Tenderers Financial and resourcing considerations.

# **11.CONTACT PERSONS**

### SIOFA Secretariat

Thierry Clot, SIOFA Executive Secretary, thierry.clot@siofa.org / secretariat@siofa.org

<u>Project Manager - Project (SEC2022-01)</u> Pierre Périès, SIOFA Data Officer, pierre.peries@siofa.org

## Annex 1

Information to be provided

- Main species (main target and bycatch and species of concern)
- Main gears
- SIOFA Subarea
- Total Catch (tons)
- Total Effort (metrics: number of tows, hooks, pots/traps number, number of fishermen/days)
- Biological information
  - Number of length measurements
  - Number of biological sampling (Weight, Sex, Maturity, etc.)
  - Number of otoliths extracted
- Year (to present)
- Data quality matrix
  - o Temporal availability and accuracy of the information
  - Spatial availability and accuracy of the information

	Temporal accuracy/aggregation			
	Haul level	Daily	Monthly	
Spatial accuracy				
Haul level				
1'				
20'				
30'				
1°				
FAO area				

- Data status
  - Process status of summary data, catch and effort, observer data. (Statuses are processed-and-verified, processed, under-revision, received, not-submitted, no-fishing, not-available (fishing occurred but data is lost or data has not been collected).
  - Computed information at a record level on CCP ownership and number of vessels.
  - Catch summary release agreement from a CCP if the catch summary is only from on vessel of its flag.
  - Access status at record level (restricted / public)