



Ref. GFP-002

STATEMENT OF WORK (SOW)

1 **SCOPE OF WORK**

The Scope of work is the development of a Training Package on Biofouling Management (the Training Package).

2 **PURPOSE**

The purpose of developing the Training Package is to create international reference training material that will be used to increase the expertise on biofouling management in the twelve GloFouling Partnerships project's beneficiary countries, namely Brazil, Ecuador, Indonesia, Fiji, Jordan, Madagascar, Mauritius, Mexico, Peru, Philippines, Sri Lanka, and Tonga, to prevent aquatic invasive species introductions. The Training Package will be used by experts and trainers to deliver training activities in all the beneficiary countries during the lifespan of the GloFouling Partnerships project. It is also expected that the training package will be incorporated in the curricula of selected maritime academies and other academic institutions.

3 **BACKGROUND**

GloFouling Partnerships (www.glofouling.imo.org) is an initiative of the International Maritime Organization (IMO), in collaboration with the United Nations Development Programme (UNDP) and the Global Environment Facility (GEF), to protect marine ecosystems from the negative effects of invasive aquatic species transferred through biofouling on ships and other marine structures.

Within the framework of the GloFouling Partnerships project, it is expected that the project's twelve beneficiary countries, referred to as Lead Partnering Countries (LPCs), will benefit from a series of technical cooperation activities, including training activities, designed to enhance their capacities to prevent the introduction and spread of invasive aquatic species via biofouling.

4 **REQUIREMENTS**

4.1 The Training Package will include the following three elements:

- Participant Manual (provided in Microsoft Word);
- Trainer Manual (provided in Microsoft Word); and
- Presentation slides (provided in Microsoft PowerPoint).

4.2 The Training Package must:

- Provide an overview of:
 - Biofouling related issues, including biofouling vectors, biofouling formation, biological risk associated to biofouling; and magnitude of the issue globally;

- Factors influencing biofouling (ship design and operational profile; vessel idle time; vessel speed; voyage duration; trading routes and water conditions; hull maintenance history and coating characteristics and condition);
 - Environmental co-benefits associated with improved biofouling management (reduction of fuel consumption and associated emissions of greenhouse gases and other air pollutants);
 - Biofouling management preventative practices, methods and techniques, including the use of anti-fouling coating systems; Marine Growth prevention Systems; and grooming and other alternative techniques;
 - Biofouling management reactive practices (in-water cleaning and cleaning in dry-dock);
 - International IMO Biofouling Guidelines and review status; and
 - Description and comparison of existing national legislations and requirements.
- Include practical sessions and other activities in the lectures to enhance student engagement (in the form of a tabletop exercises or quizzes, for instance);
 - Provide the list of references and sources of information used; and
 - Provide links to further resources of interest.

The list of requirements outlined above is comprehensive but may not necessarily be exhaustive. The Expert is encouraged and expected to provide any additional suggestion or information that is deemed relevant in fulfilling the objectives of this Assignment.

5 FORMAT/LANGUAGE

Both the Participant and Trainer Manuals shall take the form of well designed; practical; user friendly documents with format and content appropriate for end users (trainees for the Participant Manual and trainers for the Trainers Manual).

The Manuals and presentation slides shall be drafted in English. To the extent possible, clear/plain (but exact) language should be used so it is easy for both specialized and non-specialised audience to understand.

The Manuals and module presentation slides must include photos and videos; tables and visuals throughout. The GloFouling Partnerships project maintain a database of pictures and videos on various aspects of biofouling that can be used for the purpose of illustrating training modules and for exercises. The slides should also, as much as possible, include interactive features.

6 QUALITY CONTROL

A quality control process must be undertaken by the Expert early in the development process of the Training Package to ensure that the final version is adequately designed to achieve its end purpose.

Following the first delivery of the Training Package during two national workshops organised by the GloFouling Partnerships, the Expert will update the training materials based on feedback received from the GloFouling Project Coordination Unit (PCU) and the participants.

7 DELIVERABLES

The Expert shall provide the following deliverables:

Deliverable 1 - Detailed methodology and work plan for developing the Training Package: Based on discussions with the PCU for this Assignment during the **Initial meeting**, the Expert must provide a final methodology and work plan to achieve the Requirements outlined above. These documents must also reflect interactions with the PCU during the initial meeting and any further discussion after the meeting.

The PCU will review the detailed methodology and workplan and provide comments to the Expert within (1) week after receiving the documents.

Deliverable 2 - Preliminary Training Package Outline and 2nd Meeting: Presentation of a preliminary outline for the Training Package by the Expert during a second meeting, no later than 5 weeks after the Assignment award date. This will provide an opportunity to confirm general direction, timelines and to discuss any issues identified by the Expert or the PCU.

Deliverable 3 – Table of Contents: The Expert must provide a Table of Contents listing and describing the modules addressing the training content detailed under the section 4.2.a of this SOW. Titles of the modules, sections and subsections shall be included, with a brief description of their contents and how they specifically link to the other parts of the Training Package.

The PCU will review and provide comments to the Expert within one (1) week after receiving the document.

Deliverable 4 – Training Package Draft 1: The Expert will provide an electronic copy of Draft 1 of the Training Package. Draft 1 shall contain all three elements of the Training Package mentioned under section 4.1 above of the present SOW.

Draft 1 shall also address comments received during regular progress of this assignment.

The PCU will review the contents and provide new comments to the Expert within two (2) weeks after receiving the Draft 1.

Deliverable 5 – 3rd (mid-assignment) meeting: A 3rd meeting will be required following the review of Draft 1 by the PCU to confirm direction, timelines and provide the opportunity to discuss any issues the Expert or the PCU may foresee.

Deliverable 6 – Training Package Draft 2: The Expert shall provide an electronic copy of Draft 2 of the Training Package. Draft 2 shall be an almost finalised version and incorporate/address all comments provided by the PCU on Draft 1.

The PCU will review and provide comments to the Expert within two (2) weeks after receiving Draft 2.

Deliverable 7 – Final Draft: The final version of the Training Package shall incorporate/address all comments provided by the PCU throughout the duration of this assignment.

The Expert must provide the Final Draft electronically in Microsoft Word, Microsoft PowerPoint and Adobe Acrobat (PDF).

8 REQUIREMENTS REGARDING MATERIAL PRODUCED

Background material, information or other items used to develop the Training Package (such as notes, text, graphics, surveys, raw data, spreadsheets and records of discussions) shall be made available to the PCU.

All rights, including title, copyright and patent rights, in any work produced by the Expert for this Assignment, shall be vested in IMO, which alone shall hold all rights of use. Where necessary, adequate authorisation shall be secured for any third-party materials included in the Training Package.

9 COMMUNICATION

Regular feedback (every two weeks as feasible) through email, and/or phone calls must be maintained between the expert and the PCU for this Assignment.

10 SCHEDULE FOR DELIVERABLES

The Final Deliverable (Deliverable 7) shall be provided no later than twenty (19) weeks after the Assignment award date (AAD). A delivery timeline for all Deliverables is outlined in this Table:

Task/Deliverable	Delivery Timeline
Initial Meeting	Within 10 working days of AAD
Methodology & Work Plan (Deliverable 1)	No later than 3 weeks after AAD
Preliminary Outline (Deliverable 2)/2nd Meeting	Week 5
Table of Contents (Deliverable 3)	No later than 6 weeks after AAD
Draft 1 (Deliverable 4)	No later than 8 weeks after AAD
3rd Meeting/Mid-Assignment (Deliverable 5)	Week 11
Draft 2 (Deliverable 6)	No later than 14 weeks after AAD
Final Draft (Deliverable 7)	No later than 19 weeks after AAD

11 WORK LOCATION

All work will be performed from the Expert's place of business. Meetings and presentations with the PCU's designated resource person (and any other relevant PCU team member or other IMO staff) will be conducted by conference call. If more practical and agreed between the PCU and the Expert, one or more meetings could be conducted in person. In this latter case, travel costs related to the meeting shall be borne by the GloFouling Partnerships project.

12 EXPERT/EXPERT TEAM PROFILE

The expert/expert team should have sound knowledge of scientific technical and legal aspects of biofouling management.

The expert/expert team should have direct experience, derived from previous projects and assignments, of training package development.

The expert/expert team should also have extensive skills related to pedagogic tools and interactive features. Solid drafting skills and capacity to present complex issues in an understandable manner are essential.

13 PROPOSED ASSIGNMENT IMPLEMENTATION TIMELINE

Early March to Mid-July 2020 (Delivery of Final Draft).
