

### Activity 1 of Output 3.3.1 (REV)

Review of policies and regulations in China and RO Korea dealing with pollution control and assess compliance with UNCLOS, the future WE Want, multi-lateral environmental agreements and programs ratified by both countries, and prioritize legal and regulatory reforms in both countries

## TERMS OF REFERENCE

### **Legal Expert to review country compliance with international ocean-related environmental agreements**

**Consultancy classification:** International consultant

**Budget line:** 71200, Activity 1 of Output 3.3.1, Component 3. Budget: USD8,000;

**Estimated start of work:** January 2018 until December 31, 2018

### **Background**

Component 3 of UNDP/GEF YSLME Phase II Project aims at improving ecosystem carrying capacity with respect to regulating and cultural services. In Outcome 3.3 of Component 3 entitled “Strengthened legal and regulatory processes to control pollution”, the project will support several Activities leading to four project targets, to be concise, 1) regional guidelines for micro-plastics monitoring and assessment; 2) new incentives and measures adopted in coastal cities in support of recycling economy; 3) new provincial regulations to improve water quality; and 4) new profitable businesses developed from waste reuse and recycling.

As one of the proposed activities, Activity One may be further broken into three sub-activities which are as follows: 1) review of policies and regulations in China dealing with pollution control, 2) assess compliance with UNCLOS, the Future We Want, multi-lateral environmental agreements and programmes ratified by PR China, and 3) prioritize legal and regulatory reforms at domestic level. Satisfactory accomplishment of sub-activity one provides good reference for achieving the four project targets. Drafting new guidelines and regulations, adopting new incentives and measures, and developing new green profitable businesses should all be conducted based on the current legal and regulatory framework. On the other hand, ideas, norms, plans and/or techniques etc. arising from the other four Activities may provide valuable feedback to the process of conceiving legal and regulatory reforms. Review of current policies and regulations on pollution control can lead to not only a library for policy-makers for informed decisions but also to precisely find their inherent inconsistencies and gaps including those as described in SAP for YSLME and propose targeted solutions. Compliance assessment with applicable agreements/programmes establishes a two-way channel by which domestic regulations and policies can be analyzed and improved to be compliant with international or regional standards and best domestic practices may be identified and populated into related agreements/programmes in future negotiations. All in all, Activity One is indispensable for Outcome 3.3 and thus Component 3. In this context, the project plans a consultancy with the following terms of reference (TOR).

### **Objectives**

The objective underlying the proposed consultancy is to enhance the regulating services of YSLME in particular by strengthening the legal and regulatory processes to control pollution through, inter alia, improving pollution-concerned legal and policy system at domestic level by ontology analysis

and international/regional compliant comparative assessment taking into account the principles and approaches of YSLME-based integrated coastal and marine management.

### **Expected Outputs**

The consultant is expected to deliver the following results:

1. An inventory of domestic laws/regulations/policies dealing with pollution control in PR China
2. An inventory of international/regional environment agreements/programmes effective for PR China with respect to pollution control
3. An analysis report concerning inconsistencies and gaps of domestic laws/regulations/policies dealing with pollution control in PR China and compliance assessment with relevant environment agreements/programmes, together with recommendations on legal and regulatory reforms

### **Activities**

The consultant under supervision of the Chief Technical Advisor and technical guidance of RWG-G and P in close collaboration with the local project team will conduct the following activities to achieve the three outputs:

#### Output 1: An inventory of domestic laws/regulations/policies dealing with pollution control

- With assistance from legal intern in PMO and National Coordinators from PR China and RO Korea, to conduct an inventory of domestic laws, regulations, policies of PR China and RO Korea in relation to pollution control, reduction and management;
- Review contents of above laws, regulations and policies;

#### Output 2: An inventory of international/regional environment agreements/programme effective both for China and ROK with respect to pollution control

- To conduct inventory of international and regional environment agreements and programs effective in both countries with respect to pollution control, reduction and management. (The inventory should be compiled with four essential parts – an overall introductory review, indexes of contents systematically structured within discretion of the consultant, summaries including simple analysis of important clauses or articles consistent with the index, and copies of the official documents related to pollution control);
- To identify sources of information and download for analysis. Copies and related information of the official documents may be obtained from libraries, reliable internet services, or domestic/international authorities such as local governments, State Oceanic Administration, Ministry of Transport, Ministry of Agriculture, Ministry of Foreign Affairs, and secretariat of relevant organizations, with assistance from legal intern in PMO;
- Provide guidance legal intern in PMO to upload these documents on project website to use the inventories as practical manual for domestic decision makers or executive staff regarding pollution control so that the inventory itself should be easy to understand and specific provisions need to be easily located when needed for reference;
- Incorporate comments and submit the final inventories electronically. The introduction, index, and summaries should be in English while copies of the main texts of the official documents will be in English and could be in Chinese and Korean if possible.

#### Output 3: An analysis report concerning inconsistencies and gaps of domestic laws, regulations and policies dealing with pollution control in China and compliance assessment with relevant

## environment agreements/programmes, together with recommendations on legal and regulatory reforms

- Review Outputs 1 & 2 thoroughly by collecting and analyzing background and historical implementation information there of which could include contemporary social, economic and environmental contexts, meeting minutes and reports, guidelines, resolutions or declarations, administrative decisions, court or arbitration judgments, expert opinions, media reports, questionnaire answers, etc.;
- Identify inconsistencies or gaps of domestic laws/regulations/policies with same or different statutory level(s) including the implementation thereof;
- Conduct comparative assessment between Output 1 and Output 2 and identify potentially non-compliant clauses or issues;
- Determine YSLME-based integrated management principles and approaches for coastal and marine pollution taking into account domestic management realities, project targets, progress of the other Activities, YSLME Phase I Project achievements, outcomes of review of Output 2, and other well-acknowledged ideas, doctrines or techniques;
- Identify gaps existing between domestic laws/regulations/policies and outcomes of Step 4;
- Propose new regulations or amendments based on Steps 2, 3, and 5 as appropriate;
- Summarize the best domestic practices for pollution control which are not covered by but hopefully could contribute to the future international/regional regimes;
- Form the final analysis report by compiling the outcomes of the aforementioned Steps and recommend legal and regulatory reforms with clear priorities and goals.

### **Inputs**

UNDP/GEF YSLME Phase II Project management Office (PMO) will assist to provide the background information and documents, and will be responsible for providing financial support and the logistics support to participation in designated workshops or meetings and spread of questionnaires.

### **Timing**

The consultancy will begin in late-November 2017 and complete in June 20, 2018.

### **Reporting**

The consultant will produce the following reports within the specified timeframe:

1. By March 31, 2018, submit the inventory of
  - a. domestic laws/regulations/policies dealing with pollution control in PR China;
  - b. international/regional environment agreements/programmes effective both for China and ROK with respect to pollution control;
2. By December 31, 2018, submit the analysis report concerning inconsistencies and gaps of domestic laws/regulations/policies dealing with pollution control in PR China and compliance assessment with relevant environment agreements/programmes, together with recommendations on legal and regulatory reforms.

The consultant can submit reports electronically to Mr. Yinfeng Guo, CTA/Manager at email: [yinfengg@unops.org](mailto:yinfengg@unops.org). All reports should be submitted in English unless otherwise indicated in the present TOR.

### **Competencies**

- Advanced university education at Master or Ph.D. level with expertise in area of law or policy of sea
- At least 5 years of professional experience in coastal and marine management and technical support
- Strong skills in analysis and evaluation, and ability to communicate and produce high-quality reports/publications in English
- Experience with international/regional marine environment treaties/initiatives/programmes/projects

## Term of reference of developing regulatory measures for marine litter management in Weihai City of PR China:

**Estimated start of work:** May 06, 2018

### **Background and Justification**

Marine litter, including plastics and microplastics, is considered “a global concern affecting all the oceans of the world”. It has been observed everywhere: from coastal areas to remote areas far from any anthropogenic pollution sources; from surface waters throughout the water column to the deep water and ocean sediments; and from the equator to the poles, including trapped in sea ice. The pollution is significant and widespread, with plastic debris found on even the most remote coastal areas and in every marine habitat. More than 800 marine species have been found to interact with marine litter to date, with ingestion and entanglement the two main types of interaction. Based on the transboundary diagnostic analysis of the Yellow Sea, one of the major environmental problems is the marine litter in the Yellow Sea.

Marine litter commonly stems from shoreline and recreational activities, commercial shipping and fishing, and dumping at sea. The majority of marine litter (approximately 80 per cent) entering the seas and oceans is considered to originate from land-based sources. Marine litter is as much a transboundary global problem as well as a local issue with a multitude of sources. Litter pollution in the marine and coastal environment is a challenging restoration and governance issue. Similar to many environmental problems, marine litter pollution is transboundary and therefore the governance solutions are complex. Reducing litter inputs and impacts on marine ecosystems is the first critical step in marine environment restoration. It requires a variety of solutions at local, regional, national, and global scales.

With the problem worsening, formal governance through international institutions or instruments, regional organizations or governments alone cannot resolve this exponentially increasing environmental problem. It has been recognized the limitations of existing international law and are calling for the development of a new international instrument specifically addressing marine litters. Although this is an important way forward, the process will be complex, may not be supported by all coastal states, and will not come into force any time soon.

A faster way forward might be to develop regulatory measures for marine litter monitoring, disposal, handling, reuse, and recycle in pilot site to enable investment on recycling economies. Dalian and Weihai, will be selected as the pilot cities. It is expected that this project will contribute to knowledge building in YSLME.

### **Objectives**

The objective underlying the subcontract is to provide regulatory measures for marine litter monitoring, disposal, handling, reuse and recycle in pilot province or city of Yellow Sea. The project will support a series of activities leading to enhanced marine litter management capacity, and development and application of regional guidelines on the control of marine litter.

### **Expected Outputs**

The subcontractor is expected to deliver the following results:

1. Assessment of existing status of marine litter and regulatory and policy framework in the management of marine litter(micro-plastics) in Weihai City;
2. Proposal of policy or financial incentives to incentivize investment by private sector in prevention, control, recycling, reuse of litter;

Under supervision of the Chief Technical Advisor and technical guidance of the RWG-P, in close collaboration with the local project team, the subcontractor will conduct the following activities.

#### **LOT 1**

- Review of historical monitoring data of marine litter (including microplastics) in Weihai City
- Assessment of the types, distribution, quantity and composition, sources and identification of stakeholders of marine litter (including microplastics), and identify the “hotspot” area.

#### **LOT 2**

- Review of current policies and regulations as well as best available technologies for reducing litter and assess cost efficiencies of their application in other cities in applicable
- Identification of policy, regulatory framework, financial and technological gaps based on historical and second-hand monitoring data assessment
- Drafting proposals of policy or financial incentives for consideration by Weihai City to incentivize investment by private sector in prevention, control, recycling, reuse of litter (including microplastics) originated from identified sources;

### **Inputs**

UNDP/GEF YSLME Phase II Project management Office (PMO) will facilitate the access to information and reports of completed and proposed projects, and provide logistics support to field trip to project sites.

### **Reporting:**

The applicant should submit following reports:

1. LOT 1: Inception report detailing the process and methodologies, data or information collection, team structure and workplan, to be submitted electronically in English within two weeks upon signing of the contract;
2. LOT 1: Status and trends of marine litter in Weihai City, before June 20, 2018 (4 copies in Chinese and 4 copies in English) and electronically; Percentage of Total Price (30%)
3. LOT 2: gaps in regulatory and policy measures in the management of marine litter and microplastics, in Chinese and English, to be submitted by November 1, 2018 in hard copies (4 copies in Chinese and 4 copies in English) and electronically; Percentage of Total Price (30%)
4. LOT 2: Proposals for regulatory and financial policies to incentivise investment by private sector in monitoring, reduce, recycling and reuse of marine litter and microplastics, in Chinese and English, to be submitted by April 30, 2019, in hard copies (4 copies in Chinese and 4 copies in English) and electronically. Percentage of Total Price (40%)

#### **Minimum Requirements:**

The applying entity should have a minimum of 5 years of consultancy experiences in the subject area is required. Task Manger should have a minimum of 7 years of professional experiences in similar areas, core members with at least 3 years of similar consultancy experience, while other team members should have at least one year professional experience.

#### [Activity 1 of Output 3.4.1 \(REV\)](#)

Regional review of existing policies and regulations regarding solid waste disposal as well as technologies for reducing production including recycling opportunities

#### **TERMS OF REFERENCE**

#### **Regional review of existing policies and regulations regarding solid waste disposal as well as technologies for reducing production including recycling opportunities**

**Consultancy classification:** subcontract (NMEMC)

**Budget line:** 72100, Activity 1 of Output 3.4.1, Component 3. Budget: USD8,000;

**Estimated start of work:** in November 01 2017 and end in June 30, 2018

#### **Background and Justification**

The prevalence of marine litter is the result of many different factors, including changing production and consumption patterns, inadequate waste management, and gaps in regulation of waste materials. The diverse sources require a comprehensive response. Given the practical challenges of removing decades of accumulated litter from the oceans, it is clear that prevention, rather than remediation, is critical. Accordingly, countries frequently utilize a variety of laws and policies to prevent, manage, and reduce the proliferation of marine litter. Many of these approaches are part of the general frameworks to reduce the generation and spread of solid waste, rather than being part of frameworks specifically designed to address marine litter. Policies and laws need to address not only the removal of litter but are generally more successful when they govern the production, use, and disposal of products that would otherwise become marine litter.

Based on the transboundary diagnostic analysis of the Yellow Sea, one of the major environmental problems is the marine litter in the Yellow Sea. The increase in marine litter and construction of concrete structures such as jetties and wharfs has also increased the habitat available to the asexual reproductive stage of the jellyfish, another environmental issue in this region. In order to help to develop regulatory measures to control and reduce regional marine litter from the source, the project will conduct an assessment and review regarding solid waste disposal as well as technologies for reducing production including recycling opportunities. It is expected that this review will contribute to knowledge building in YSLME.

### **Objectives**

The objective underlying the proposal is to catalyze strengthening regional and national governance for the production, use, and disposal of products that would otherwise become marine litter.

### **Immediate Objectives**

The objectives underlying the proposal are:

- to map and review national regulatory frameworks and other instruments to identify gaps in addressing solid waste disposal, and catalyze to make an informed decision about priorities for preventing marine litter at the source.

### **Expected Outputs**

The subcontractor is expected to deliver the following results:

1. A scoping study report with recommendations on policies and regulations regarding solid waste disposal as well as technologies for reducing production including recycling opportunities.

### **Activities**

Under supervision of the Chief Technical Advisor and technical guidance of the RWG-P, in close collaboration with the local project team, the subcontractor will conduct the following activities.

1. Conduct desk review to analyze laws and policy that address production and consumer use of a variety of items that end up as marine litter, especially the most abundant type of marine litter, plastic, from its incipient “nurdle” or pre-manufacturing resin stage to ubiquitous and persistent consumer goods such as single-use plastic bags and utensils.
2. Conduct desk review to analyze legislation governing waste disposal into the marine environment, including land-based disposal; cleanup of land-based waste; abandoned, lost, and discarded fishing gear; and litter from ships.
3. Identify gaps in addressing solid waste disposal at regional level.
4. Prepare the draft scoping study report with recommendations on policies and regulations regarding solid waste disposal as well as technologies for reducing production including recycling opportunities. Submit it for consultation and review by members of the Regional Working Group on Pollution of the YSLME Phase II Project.
5. Incorporate comments and submit a final study report electronically.

### **Inputs**

UNDP/GEF YSLME Phase II Project management Office (PMO) will facilitate the access to information and reports of completed and proposed projects, and provide logistics support to field trip to project sites.

### **Timing**

The subcontractor will begin in November 01 2017 and end in June 30, 2018.

## Reporting

The subcontractor will produce:

1. by end of October, an activity report and draft scoping study report;
2. by July 30, 2018, the final report.

All reports should be submitted in English. Reports should be submitted to Mr. YinfengGuo, CTA/Manager at email: [yinfengg@unops.org](mailto:yinfengg@unops.org).

## Activity 2 of Output 3.4.1 (REV)

Develop & test monitoring system, and conduct a regional baseline survey of marine litter in collaboration with other relevant organizations

### TERMS OF REFERENCE

#### Regional baseline survey of marine litter

**Consultancy classification:** NMEMC

**Budget line:** 71200, Activity 2 of Output 3.4.1, Component 3. Budget: USD8,000;

**Estimated start of work:** November 01 2017 and end in June 30, 2018

## Background

Marine litter, including plastics and microplastics, is considered “a global concern affecting all the oceans of the world”. It has been observed everywhere: from coastal areas to remote areas far from any anthropogenic pollution sources; from surface waters throughout the water column to the deep water and ocean sediments; and from the equator to the poles, including trapped in sea ice. The pollution is significant and widespread, with plastic debris found on even the most remote coastal areas and in every marine habitat. More than 800 marine species have been found to interact with marine litter to date, with ingestion and entanglement the two main types of interaction. Based on the transboundary diagnostic analysis of the Yellow Sea, one of the major environmental problems is the marine litter in the Yellow Sea.

Marine litter commonly stems from shoreline and recreational activities, commercial shipping and fishing, and dumping at sea. The majority of marine litter (approximately 80 per cent) entering the seas and oceans is considered to originate from land-based sources. Marine litter is as much a transboundary global problem as well as a local issue with a multitude of sources. Litter pollution in the marine and coastal environment is a challenging restoration and governance issue. Similar to many environmental problems, marine litter pollution is transboundary and therefore the governance solutions are complex. Reducing litter inputs and impacts on marine ecosystems is the first critical step in marine environment restoration. It requires a variety of solutions at local, regional, national, and global scales.

It is important to understand marine litter distribution in the environment and their implications on marine habitats and marine biota. Development of monitoring (early warning) system, and conducting a regional baseline assessment of marine litter, will help understand marine litter (microplastic) pollution characteristics, such as temporal and spatial distribution, and their sources etc. Assessment of the distribution of marine litter in the marine environment in the Yellow Sea will also



contribute to identify the “hotspot” area, and promote development of regional or local the management measures.

### **Objectives**

The objective underlying the subcontract is to draft regional baseline survey report, and provide data support for marine waste management in the Yellow Sea region. The project will support a series of activities leading to enhance marine litter monitoring, promote to establish regional monitoring (early warning) system.

### **Activities**

The following activities will be undertaken:

- Review published papers which addressing the distribution of marine litter (microplastic) in surface water, beaches, and biota,
- Analyze the challenge of marine litter and microplastic, including definition of size, categories, shape, baseline etc., as well as sampling and laboratory analysis methods
- Draft a marine litter (microplastics) monitoring scheme
- Assessment of regional marine litter (microplastics) pollution status
- Drafting report on status of marine litter(microplastics) in the Yellow Sea

### **Expected Outputs**

The subcontract is expected to deliver the following results:

1. Provide Regional marine litter baseline assessment report

### **Timing**

The subcontractor will begin in November 012017and end inJune30, 2018.

### **Reporting**

The subcontractor will produce the following reports within the specified timeframe:

1. By March 31 2018, prepare and submit a draft of assessment report on marine litter pollution, key elements of the contents include:
  - a. Status of marine litter (microplastics) pollution
  - b. Challenges and difficulties for marine litter monitoring and assessment
2. By June 30, 2018, submit final assessment report on marine litter pollution

### **Competencies**

- A good understanding of marine litter monitoring and assessment
- Advanced university education at MSc or Ph.D. level with expertise in the area of marine litter monitoring and management
- At least 5 years of professional experience in marine litter research.
- Strong skills in analysis and evaluation, and experience in implementing environmental projects
- Ability to produce high quality reports and publications in English

### **Payment and Submission**

The consultant will be paid for a lump sum of USD 8,000 for consultancy upon submission of the first report (50%) and the final report on marine litter management (50%) to Mr. YinfengGuo, CTA/Manager at email: [yinfengg@unops.org](mailto:yinfengg@unops.org).

Develop & test monitoring system, and conduct a regional baseline survey of marine litter in collaboration with other relevant organizations