Annex II – STATEMENT OF WORKS

Project: UNDP/GEF Yellow Sea Large Marine (YSLME) Ecosystem Project

RAS/00/G31 Reducing Environmental Stress in the Yellow Sea Large Marine Ecosystem

Objective: I - Fisheries Component

Sub-Objective: B – Carrying Capacity

TOR Code: TOROIB1202carrycap

Contract Code: CONOIB1202carrycap_[country acronym]

Description: *Developing Methods for Serial Carrying Capacity Analysis for the Yellow Sea Large Marine Ecosystem*

1. Background

In the approved Implementation Plan of the UNDP/GEF Yellow Sea Project, "Reducing Environmental Stress in the Yellow Sea Large Marine Ecosystem (YSLME)," one of the activities of the Fisheries Component is to assess the carrying capacity of the Yellow Sea (as it applies to fisheries).

The development objective of this task is to produce an appropriate mechanism for the reliable, continuous, joint-regional monitoring of the state of carrying capacity in this Large Marine Ecosystem (LME) for improved management of fisheries resources for the future. For this to be possible, current methods of evaluating carrying capacity in this system will be assessed, and improvements made where possible, to ensure accurate and reliable monitoring of the state-of-the-ecosystem.

The immediate objectives of this task are to assemble information on the existing methods for assessing the carrying capacity of fisheries stocks in the Yellow Sea, highlighting the knowledge gaps and/or barriers to carrying capacity analysis in this region, and try to fill those knowledge gaps with contemporary global information and/or recommendations on how to obtain the lacking data. From this point, then prepare guidelines for the analysis of carrying capacity as it applies to the Yellow Sea, undertaking training of personnel where required to implement a multiple series of carrying capacity analyses of the Yellow Sea Large Marine Ecosystem.

The details of this task are described hereunder:

Geographic Scope: The Yellow Sea Large Marine Ecosystem is defined in this Project Document as the body of water delineated at the south, by a line connecting the north bank of the mouth of the Chang Jiang (Yangtze River) to the south side of Cheju Island; at the east, by a line connecting Cheju Island to Jindo Island along the coast of the ROK; and to the north, a line connecting Dalian to Penglai (on the Shandong Peninsula).

2. Description of Required Services

A competent incumbent, selected through the required United Nations bidding procedure, will be contracted to carry out the identification of knowledge gaps for carrying capacity analysis in the Yellow Sea, and based on the outcome, will develop suitable guidelines for the repetitive modelling and analysis of carrying capacity for the Yellow Sea for integration into the YSLME Project Strategic Action Programme (SAP) and National Yellow Sea Action Plans (NYSAP), and develop the training programmes required to ensure that the repetitive analysis is carried out appropriately.

The incumbent(s) shall carry out the following activities:

1) Prepare a detailed report on the current techniques/methodologies used to model carrying capacity. The summary should describe:

    a. A description of the techniques/methodologies used to model carrying capacity in this region.
    b. A description of other contemporary techniques/methodologies used to model carrying capacity of similar marine systems around the globe.
    c. The types of data and information collected, and used in the analysis, for all these methods.
    d. The analytical and statistical methodology utilised in each model.
    e. The benefits, drawbacks and difficulties of each method.
    f. The knowledge gaps in the current method of Yellow Sea carrying capacity analysis, and the barriers to obtaining data.
    g. A recommendation for the most practicable and appropriate method to use to assess carrying capacity in the Yellow Sea with recommendations on how to fill knowledge/data/information gaps in the future.

    This should be done by utilising data and information collected during the YSLME initial data/information collection activities, existing locally and internationally, accomplished through internet searches, telephone interviews, library research, visits to/communication with national fisheries offices, research institutions, government agencies and related NGOs, compare methodologies and fill in gaps in knowledge.

2) Prepare guidelines for a reiterative series of carrying capacity analysis for the Yellow Sea comprising of:

    a. Recommendations for the frequency of a 'reiterative series' of carrying capacity analysis.
    b. Instructions for carrying out a reiterative analysis of carrying capacity of the Yellow Sea;
    c. Recommendations for the acquisition of data – methodology, type, etc;
    d. Recommendations for the analysis of data – analytical and statistical models; and
    e. Recommendations for outputs – charting and graphical display of resultant data.
    f. Recommendations on how data should be archived and/or managed.
    g. Recommendations on where final results should be published and how stakeholders and the general public can access these guidelines.

    The guidelines should take into consideration:

    a. Existing national agreements; and
    b. The geographic parameters of the Yellow Sea Project.

3) Prepare guidelines for a regional training course on carrying capacity including:

a. An assessment of the training needs in this region as it applies to carrying capacity analysis for the Yellow Sea, indicating the major topics required to be taught.
b. A curriculum of topics, activities and schedule for a single regional training course on carrying capacity;
c. Presentation and training materials (in English, and in Chinese and Korean language if possible);
d. A list of proposed invitees by institute/expertise;
e. A list of proposed venues/locations for the training course;

4) Present the report and both sets of guidelines (#2 & #3) to the Meeting of the Regional Working Group (RWG) - Fisheries. The guidelines will be reviewed with all members of the RWG and the Project Management Office.

5) Based on the comments of the Regional Working Group, revise the guidelines and prepare a work-plan for the regional analysis of carrying capacity in the Yellow Sea and present to the next Meeting of the Regional Working Group Meeting - Fisheries, , for finalisation.

3. Expected Outputs

The final product (report) should be a set of reports as listed below:

(i) A comprehensive report on the current techniques used to model carrying capacity in this region and comparing with other methodologies, describing data types, analytical methods, highlighting knowledge gaps and barriers to obtaining data, and providing information to fill the gaps.

(ii) A list of data and information sources to indicate the sources of the data and information collected in item (i), location of these data and information centres, conditions of access to data and information by different users;

(iii) A report providing suggested method(s) and guidelines for reiterative analysis of carrying capacity analysis for the Yellow Sea.

(iv) Guidelines for a regional training course on analysing carrying capacity in the Yellow Sea including a workplan for the activities.

(v) Project progress reports and financial report as described in the Section on Monitoring/Progress Control and shown in Appendix 2.

All documents must be written in English (and in Chinese and Korean if possible) and provided in both print and electronic form. Three printed copies of each report and one electronic copy will be submitted to the Yellow Sea Project Management Office (PMO) on the due date, and at least three weeks in advance of the RWG Meeting at which it will be reviewed. The contracted institution(s) should then incorporate the comments from the RWG Meeting(s) into the final report(s).

SUGGESTED FINAL REPORT TABLE OF CONTENTS

I. Background of assignment
II. Methods used to carry out assignment
III. Summary of current Carrying Capacity methodology
IV. Location of data & info and access to each site by the public

V. Summary of 2nd RWG-F meeting recommendations
VI. Guidelines(s) for reiterative carrying capacity assessment
VII. Guidelines for training course on carrying capacity assessment
VIII. Summary and Recommendations
IX. Progress and Financial Summary Reports

Annex containing:

Persons / institutions / websites visited or interviewed
List of References

Qualifications:

The incumbent selected to carry out this task should have the following qualifications:

- At least 10 years experience in the area of coastal and pelagic fisheries assessment in the Yellow Sea.
- An extensive knowledge of contemporary carrying capacity analysis methods and the analysis of relevant data and information.
- Ability to access necessary data and information through the databases, information centres, and other relevant institutions in the country.
- Have the appropriate academic qualifications, available time to undertake the task.
- Financial accountability with a professional financial management system.

4. Deliverables and Deadlines

The commissioned assignment will be carried out from September 2005 through June 2007, according to the following schedule:

Task	**Deadline**
Contract signature	November, 2005
Report on the current techniques used to model carrying capacity in this region with gaps in knowledge described and information to fill those gaps supplied, for review at 3rd Regional Working Group Meeting; Guidelines for a regional training course on carrying capacity analysis for review at 3rd Regional Working Group Meeting; Guidelines for a reiterative series of carrying capacity analysis for the Yellow Sea for review at 3rd Regional Working Group Meeting;	May, 2005
Progress report and interim financial statement submitted to PMO/UNOPS	1st March, 2006
Revised guidelines and a new work-plan for a reiterative series of regional carrying capacity analysis in the Yellow Sea, for review at 4th Regional Working Group Meeting;	1st May, 2007

Final Report and Final financial statement submitted to PMO/(UNOPS	1st Jun, 2006

5. Monitoring/Progress Control

The PMO will assume overall supervision and co-ordination of this task. Programmatic guidance should be sought from the Project Manager, Mr. Yihang Jiang (yihang@yslme.org), copied to Mr. Jeff Archer (jeff@yslme.org) at the Yellow Sea PMO. All deliverables should be submitted to Mr. Jeff Archer. The format of the progress, final and financial reports should follow the templates included in Appendix 2 and the schedule as above.

ANNEX III – BREAKDOWN OF COSTS (USD)

Please attach your detailed bid for the above contract using the format below. There may be travel costs associated with this task, as outlined in the budget below. Travel costs associated with the missions should be included in the fees below. [Name of institution(s)] will make its own travel arrangements unless otherwise agreed in advance with the PMO.

Item	**Unit Cost (USD)**	**# of Units**	**Total Cost (USD)**
TOTAL AMOUNT REQUESTED			

Appendix I

Report Formats

PROGRESS REPORT

SECTION 1 – BACKGROUND INFORMATION

1.1 PROJECT TITLE: ____*REDUCING ENVIRONMENTAL STRESS IN THE YELLOW SEA LARGE MARINE ECOSYSTEM*____

1.2 CONTRACT NUMBER:__ [contract code]_____

1.3 RESPONSIBLE OFFICE: Yellow Sea Project Management Office, Ansan, Korea.

1.4 CONTRACTOR (SUPPORTING ORGANIZATION):_____

1.5 REPORTING PERIOD: (The number of months covered by this report) _____

1.6 FOCAL POINT NAME:_____

SECTION 2 – PROJECT STATUS

2.1 Status of the Implementation of the Activities and Outputs Listed Under the Workplan (check appropriate box)

☐ Project activities and outputs listed in the Project Workplan for the reporting period have been completed and the Contractor is satisfied that the project will be fully completed on time (give reasons for minor variations as Section 3 below).

☐ Project activities and outputs listed in the Project Workplan for the reporting period have been altered (give reasons for alterations: lack of finance; project reformulated; project revisions; other at Section 3 below).

☐ Project activities and outputs listed in the Project Workplan for the reporting period have not been fully completed and delays in project delivery are expected (give reasons for variations as Section 3.1 and new completion date in Section 3.2 below).

☐ Insufficient detail provided in the Project Workplan.

2.2 List Actual Activities/Outputs Achieved in the Reporting Period: (check appropriate box)

(a) Meetings (duplicate this box for each meeting individually)

☐ Inter-ministry Mtg	☐ Expert Group Mtg	☐ Training Seminar/Workshop	☐ Others

Title:_____
Venue and Dates:_____
Covened By:_____
Organized by:_____
Report issued as doc. No./Symbol_____
Languages_____Dated:_____
For training seminar/workshop, please indicate: No. participants_____and attach **annex**
Giving names and nationalities of participants.

(b) **PRINTED MATERIALS** (Duplicate this box for each printed item)

☐ Report to IG Mtg. □ Technical Publication □ Technical Report □ Others

Title:

_____

_____

Author(s)/Editor(s)

_____

Publisher

_____

Symbol (UN/UNEP/ISBN/ISSN)

_____

Date of Publication

_____

(when technical reports/publications have been distributed, **attach distribution list**)

(c) ☐ **TECHNICAL INFORMATION** □ **PUBLIC INFORMATION** (Posters, leaflets, broadcasts, etc)

Description:

_____

Dates:_____

(d) **SERVICES**

Description:

_____

Dates_____

(e) **OTHER OUTPUTS**

SECTION 3 – PROJECT STATUS

3.1 Summary of the Problems Encountered in Project Delivery (if any)

3.2 Actions Taken or Required to Solve the Problems (identified in Section 3.1 above)

Signed: _____
Name: _____
Designation: _____

PROJECT EXPENDITURE REPORT

Project statement of allocation (budget), expenditure and balance (Expressed in USD) covering the period

From……..**To**…… **Supporting Organization**…UNDP/GEF…….....

Project Title…*Reducing Environmental Stress in the Yellow Sea Large Marine Ecosystem*…

Project Commencing…… (Date) **Project Ending**…….. (Date)

Object of Expenditure	Project Budget Allocation **Amount (1)**	Expenditure incurred from … to …. **Amount (2)**	Unspent balance of budget **Amount (3)**
…... …….. …... …….. (USE ITEMS ACCORDING TO THE BUDGET CATEGORIES IN ACCORDANCE WITH THE SIGNED MEMORANDUM OF UNDERSTANDING OR CONTRACT)			
GRAND TOTAL			

Signed_____

Designation_____

Duly authorized official_____