

**TERMS OF REFERENCE**

**FOR THE CONSTRUCTION SUPERVISION CONSULTANT  
FOR THE  
MARITIME SAFETY CAPABILITY IMPROVEMENT PROJECT  
FOR THE PHILIPPINE COAST GUARD**

**I. PROJECT INFORMATION**

**a. Background**

The Government of the Republic of Philippines has applied for and received a loan from the Japan International Cooperation Agency (hereinafter referred to as "JICA") to finance the implementation of the Maritime Safety Capability Improvement Project for the Philippine Coast Guard (PCG) (hereinafter referred to as "the Project"). The Project aims to improve the capabilities of the PCG to quickly and appropriately respond to coastal maritime incidents, such as search and rescue (SAR) missions, maritime law enforcement (MARLEN) activities, etc., by providing Multi-Role Responsive Vessels (MRRVs) to the Philippine Coast Guard (PCG), thereby contributing to maritime safety of the country.

The Government of the Republic of Philippines intends to use part of the proceeds of the loan for eligible payments for consulting services for which this Terms of Reference (TOR) is issued.

**b. Scope of the Project**

The Project is comprised of the following components:

- i) Construction and delivery of ten (10) Multi-Role Response Vessels (MRRVs) and related services; and,
- ii) Consulting Services.

**c. Location of the Project**

The ten (10) Multi-Role Response Vessels (MRRVs) will be delivered to PCG Headquarters in Manila, such that they will be utilized flexibly all around the coastal areas in the Philippines, including the following twelve (12) Districts of PCG:

- (1) NCR-Central Luzon (CGDNCR-CL) located in Manila;
- (2) Central Eastern Visayas (CGDCEV) located in Cebu;
- (3) South Western Mindanao (CGDSWM) located in Zamboanga City;

- (4) Palawan (CGDPAL) located in Puerto Princesa City;
- (5) Southern Tagalog (CGDSTL) located in Batangas City;
- (6) Western Visayas (CGDWV) located in Iloilo City;
- (7) Northern Luzon (CGDNLZ) located in San Fernando, La Union;
- (8) South Eastern Mindanao (CGDSEM) located in Davao City;
- (9) Bicol (CGDBCL) located in Legaspi City;
- (10) Northern Mindanao (CGDNM) located in Cagayan de Oro City;
- (11) North Eastern Luzon (CGDNELZN) located in Appari City; and
- (12) Eastern Visayas (CGDEV) located in Ormoc

**d. The Project Implementation Schedule**

The Project is expected to commence in May 2014 and be completed by October 2018, including twelve (12) months defects liability period.

**e. The Organization for Project Implementation**

Executing Agency(ies) (EA) :	The Department of Transportation and Communication (DOTC)
	The Philippine Coast Guard (PCG)
Project Management Office :	DOTC-PCG PMO composed jointly of members from DOTC and PCG

The DOTC and PCG (hereinafter referred to as “Executing Agency/ies”). DOTC, as a contract party, in coordination with PCG will be the contracting party during the planning stage of the Project, while PCG shall provide necessary endorsement for the technical issues. Thus, both are responsible for overall coordination and implementation of the Project from the planning to the completion of the Project. The Executing Agency will establish the Project Steering Committee (PSC), comprising representatives of DOTC and PCG. The PSC will meet whenever necessary to assess the Project implementation status and provide guidance to the PMO on Project implementation matters.

On the other hand, the Philippine Coast Guard (PCG) is the end user of the Project. The said agency is responsible for reviewing and endorsing all technical matters during the planning and implementation stages; and is also responsible for conducting an ex-post evaluation during the operation and maintenance stage of the Project. Under the Executing Agencies, the Project Management Office “DOTC-PCG PMO” has been established. The PMO is headed by the Director and six members, consisting of both the

Executing Agencies staff. The PMO is responsible for day-to-day monitoring and supervising the performance of the Consultant and the Contractor to ensure the proper and timely execution of the Project in all the stages.

**f. Technical information for the Project**

The reports on “Preparatory Survey on Maritime Safety Capability Improvement Project for the Philippine Coast Guard” will be made available to the Consultant.

**g. Related Project**

A related initiative to the project is Technical Cooperation project entitled “Enhancement of Practical Capability for Maritime Law Enforcement Project” involving the Philippine Coast Guard.

**II. OBJECTIVES OF CONSULTING SERVICES**

The objective of the consulting services is to ensure that ten (10) units of MRRVs are satisfactorily constructed in accordance with the specifications required in the contract executed between the DOTC-PCG and the Vessel Construction Contractor (herein after referred to as “Contractor”) and delivered to the designated locations according to the agreed time schedule. In view of the Government's priority to deliver the 1<sup>st</sup> batch of vessels within November 2014 to October 2015, the Consultant shall pay utmost attention to the delivery schedule

The consulting services shall be provided by an international consulting firm (hereinafter referred to as "the Consultant") in association with national consultants in accordance with Guidelines for the Employment of Consultants under Japanese ODA Loans, April 2012.

The objective of the consulting services is to achieve efficient and proper preparation and implementation of the project through the following:

- (1) Procurement Assistance/Tendering – involves preparation of tender documents; provision of technical assistance in the bid process for Contractor selection; and other related tasks.
- (2) Supervision during Construction and Delivery of Vessels – involves supervision and inspection during and after vessel construction activities; review of construction plans, designs and schemes; coordination of contractor activities; sea trial supervision; and other related tasks;
- (3) Assistance for Technology Transfer to be Implemented by the Contractor – involves providing support in the technology transfer aspect of the project to be provided by the

contractor

- (4) Other Administrative Assistance – involves other related logistical, managerial, reportorial, tasks in line with the project, among others.

An outlined list of tasks in line with the consulting services components stated above is included in “Section III” of this Terms of Reference.

### **III. SCOPE OF CONSULTING SERVICES**

The services of the consultants will consist of the following:

#### **A. Procurement Assistance / Tendering**

- 1) Provide technical assistance in evaluating the bids in accordance with the criteria set forth in the bidding documents and submit the same in the form of Bid Evaluation Report for approval of the Executing Agency;
- 2) Provide technical assistance in the negotiation between Executing Agency and prospective contractors for the construction contract;
- 3) Provide technical assistance to prepare a draft and final contract agreement;
- 4) Toward the end of the guarantee period, perform the necessary inspection to examine or re-examine the remedial works already complete, and the instruct the Contractor to expedite any remedial measures to be undertaken; and,
- 5) Perform other related tasks in line with procurement assistance and tendering for the Project.

#### **B. Supervision during Construction and Delivery of Vessels**

The Consultant shall perform his duties during the contract implementation period of the contracts to be executed by the Executing Agency (EA) and the Contractor. Standard Bidding Documents under Japanese ODA Loans for Procurement of Plants will be applied to this Project. In this context, the Consultant shall:

- 1) Act as the Project Manager to execute construction supervision and contract administration services in accordance with the power and authority to be delegated by the Executing Agency;
- 2) Provide assistance to the Executing Agencies concerning variations and claims which are to be ordered/issued at the initiative of the Executing Agencies. Advise the Executing Agencies on resolution of any dispute with the Contractor;
- 3) Issue instructions, approvals and notices as appropriate;

- 4) Provide recommendation to the Executing Agencies for acceptance of the Contractor's performance security, advance payment security and required insurances;
- 5) Assess adequacy of all inputs such as materials, labor and equipment provided by the Contractor;
- 6) Check and approve the Contractor's method of work, including site organization, program of performance, quality assurance system, safety plan and environmental monitoring plan so that the requirements set forth in the applicable laws and regulations, the specifications or other parts of the contract are to be duly respected;
- 7) Review and approve the proposals submitted by the contractors which include shipbuilders' production control and quality control schemes, work program, method statements, material sources, manpower and equipment deployment;
- 8) Regularly monitor physical and financial progress, and take appropriate action to expedite progress if necessary, so that the time for completion set forth in the contract will be duly respected by Contractor;
- 9) Explain and/or adjust ambiguities and/or discrepancies in the Contract Documents and issue any necessary clarifications or instructions;
- 10) Review and approve the Contractor's design for the works to be constructed, working drawings, shop drawings and drawings for temporary works;
- 11) Liaise with the appropriate authorities to ensure that all the affected utility services are promptly relocated;
- 12) Carry out field inspections on the Contractor's setting out of the works in relation to original points, lines and levels of reference specified in the contract;
- 13) Organize, as necessary, management meetings with the Contractor to review the arrangements for future work. Prepare and deliver a minutes of such meetings to the Executing Agencies and the Contractor;
- 14) Supervise the works so that all the contractual requirements are met by the Contractor, including those in relation to i) quality of the works, ii) safety and iii) protection of the environment. Confirm that an accident prevention officer proposed by the Contractor is duly assigned at the project site;
- 15) Supervise field tests, sampling and laboratory test to be carried out by the Contractor;
- 16) Inspect the construction method, equipment to be used, workmanship at the site, and attend shop inspection and manufacturing tests in accordance with the Executing Agencies' Requirements;
- 17) Regularly monitor physical and financial progress against the milestones as per the contract so as to ensure completion of the contract time;

- 18) Review change orders that may arise to those that have not been anticipated in the contract documents prior to contract signing and approval;
- 19) Inspect and test major equipment/machineries and sea trials at shipyard;
- 20) Submit inspection and/or test report;
- 21) Coordinate the works among different contractors employed for the Project;
- 22) Verify payment applications submitted by the Contractor and issue payment certificates such as interim payment certificates and final payment certificate as specified in the contract;
- 23) Modify the Executing Agencies' requirements as may be necessary in accordance with the actual site conditions, and issue variation orders (including necessary actions in relation to the works performed by other contractors working for other projects, if any);
- 24) Carry out timely reporting to the Executing Agencies for any inconsistency in executing the works and suggesting appropriate corrective measures to be applied;
- 25) Inspect and verify claims issued by the parties to the contract (i.e. the Executing Agencies and Contractor) and make recommendations to the EA for agreement between the parties to the contract;
- 26) Supervise Pre-commissioning carried out by the Contractor, check and approve the Contractor's Pre-commissioning report, and issue the Completion Certificate as specified in the contract;
- 27) Supervise Commissioning and Guarantee Test carried out by the Contractor, check and approve the Contractor's report on the Commissioning and Guarantee Test, and issue the Operational Acceptance Certificate as specified in the Contract;
- 28) Provide periodic and/or continuous inspection services during defects liability period and if any defects are noted, instruct the Contractor to rectify;
- 29) Check and certify as-built drawings prepared by the Contractor;
- 30) Check and certify the operation and maintenance manual prepared by the Contractor;
- 31) Conduct maintenance supervision during the 12 months period of guarantee on the works by the Contractor, and determine or advice regarding the Contractor's liability in respect of any defects found during this stage, and give instructions to the Contractor as necessary or when so required;
- 32) Assist in settling disputes or differences in opinions, which may arise between the Executing Agencies and the Contractor in connection with, or arising out of the construction contract or the execution of the construction and installation, except litigation and arbitration; and,
- 33) Perform other tasks related to construction supervision and delivery of the MRRVs.

**C. Assistance for technology transfer to be implemented by the Contractor**

The Consultant shall provide technical advice to effect the transfer of technology in the maintenance and operation of the vessels. The Consultant’s task shall be finalized depending on the bidding document preparation and contract negotiation for the vessel procurement package.

**D. Other Administrative Assistance**

- 1) Prepare and submit reports to the Executing Agency, which are detailed in Section IV, REPORTS and DELIVERABLES in relation to the implementation of the Project;
- 2) Develop and monitor the Project benefit based on the reference indicators for the monitoring and evaluation of activities for the Project;
- 3) Deliver to the Executing Agency upon completion of the works all job records, reproducible “as-built” drawings and the instruction necessary for the satisfactory operation and maintenance of the works;
- 4) Prepare an Operation Management Study Report that will incorporate maintenance procedures and guidelines aimed at preserving the integrity of the MRRV during its operational life;
- 5) Provide any additional services related to the project upon request, subject to the approval of Executing Agency, of the basis of justifiable and mutually acceptable billing rates/costs; and,
- 6) Prepare a final certificate only when the works are reinstated to the satisfaction of the Consultant; and
- 7) Perform all other administrative duties as necessary and incidental to the satisfactory execution of the project.

**IV REPORTS AND DELIVERABLES:**

The Consultant shall prepare and submit to Executing Agency the following report with corresponding number of copies and timing.

	<b>Type of Report</b>	<b>No. of Copies and Schedule</b>
1.	Inception Report	15 copies, within one month from the time of commencement of Services
2.	Monthly Progress Report	15 copies, end of each calendar month
3.	Quarterly Report	15 copies, every quarter;

4.	Annual Report	15 copies, every quarter;
5.	Bid Evaluation Report	10 copies, within one (1) month after the opening of bids.
6.	Information Catalogues and Photos	5 copies upon request
7.	Factory inspection/ Project Inspection Report	Whenever inspection is undertaken
8.	Final/Acceptance Report and ;	15 copies of the Final Progress Report upon completion of the works
9.	Project Completion Report	Upon issuance of Certificate of Completion including the accompanying one (1) set of the construction records comprising the “As-built” drawings and photographs of the construction and accident reports which has been submitted by the contractor and approved by the Consultant/Engineer

#### V EXPECTED TIME SCHEDULE:

The total duration of consulting services will be 57 months. These include the 12 months defect liability period after the completion of the construction/delivery of vessels. The Consultant is expected to commence the services on May 2014. The implementation schedule is shown in Table 1.

Table 1: Target Implementation Schedule

Key Activities	Date	Duration in Months
Commencement of Consulting Services	May 30, 2014	4
Bidding and award of contract for procurement of vessels	February 2014 to July 2014	
Commencement of Construction works	August 2014	41
Delivery of 1 <sup>st</sup> batch of vessels	Nov. 2014-Oct. 2015	
Delivery of last batch of vessels	Nov. 2016-Oct. 2017	
Defect Liability Period	October 2018	12
Termination of Consulting Services	October 2018	



## VI. MANNING REQUIREMENTS AND RESPONSIBILITIES OF KEY CONSULTANTS

### A. Staffing Requirements

The consulting services will require a total of 228 person-months of both international and national consultants, consisting of 151 person-months of International Profession (A) experts, 25 person-months of Local Professional (B) experts and 52 person-months of Local Supporting Staff over the period of 69 calendar months. The input of eight (8) Professional (A) consultants, one (1) professional (B) consultant and one (1) national supporting staff shall be over the period of 69 months duration of consulting services. The estimated inputs of each position are as follows:

#### **International (Professional (A))**

1. Project Manager	33 M/M
2. Naval Architect	25 M/M
3. Machinery Engineer	17 M/M
4. Electrical Engineer	14 M/M
5. Supervisor (hull) (Building Stage only)	21 M/M
6. Supervisor (machinery) (Building Stage only)	21 M/M
7. Document Specialist (Bidding Stage only)	9 M/M
8. Administrator	11 M/M

#### **National (Professional (B))**

1. Assistant Project Manager	25 M/M
------------------------------	--------

#### **National (Supporting Staff)**

1. Local Project Coordinator	52 M/M
------------------------------	--------

---

Total Man-Months	228 M/M
------------------	---------

#### **a. Responsibilities of Key Consultants**

The Consultant shall be responsible to ensure the timely completion of the Project and shall provide the expert personnel as indicated above, manning requirements and in line with the Project Implementation Schedule as shown in Section V of this TOR.

The following are the qualification requirements, roles and responsibilities of Key Consultants who will be assigned in the project:

- 1) **PROJECT MANAGER** - Shall have at least a degree in Naval Architecture or maritime related courses and at least ten (10) years business experiences in shipbuilding/marine engineering which shall include ship building projects. He/she must have skills/experience in project management, monitoring and evaluation, as well as coordinating the works of a team of experts. He/she must be familiar with international guidelines in shipbuilding in the last five (5) years. He/she must be permanent employee of the Firm (or the leading Firm) for the last ten (10) years or longer and have effective communication skills in the English and Japanese languages. He/she will attend to the over-all project management and relations to client and other project proponents. He/she will also handle the technical and administrative management of the Consultancy group, oversees its performance and accomplishment and will conduct review and coordination of design documents.

He/she will attend to the over-all project management and relations to client and other project proponents. He will also handle the technical and administrative management of the Consultancy group, oversees its performance and accomplishment and will conduct review and coordination of design documents.

- 2) **NAVAL ARCHITECT**- Naval Architect, with preference to holder of post graduate degree in related field, with at least five (5) years combined experience in architectural and shipbuilding design and construction supervision of the vessel.

He/she shall be in-charge of the review of the designs to be submitted by the Contractor for the vertical facilities and development layout. He/she will supervise construction of the vessel facilities and will provide technical coordination for design and construction interface.

- 3) **MACHINERY ENGINEER** - Mechanical Engineer, with preference to holder of post graduate degree in related field, with at least five (5) years combined experience in marine engineering design, specification and cost estimate preparation and installation supervision of mechanical system such as HVAC for buildings, conveying system, fuel supply system, waterworks sewerage treatment facilities, pumping systems, security facilities, etc.

He/she shall be in-charge of the review of the designs to be submitted by the Contractor for the mechanical engineering works and supervise works such as HVAC for buildings,

conveying system, fuel supply system; waterworks; sewerage treatment facilities, pumping systems; security facilities as well as technical coordination for design and construction interface. He/she will likewise be in-charge of all mechanical related works during the conduct of value engineering.

- 4) ELECTRICAL ENGINEER - Electrical Engineer, with preference to holder of post graduate degree in related field, with at least five (5) years combined experience in electrical engineering, specification and cost estimate preparation and installation supervision of electrical system of marine vessel facilities.

He/she shall be in-charge of the review of the designs to be submitted by the Contractor for the electrical engineering works and supervise the works, provide safety control of electrical facilities as well as construction safety and in all matters related to electrical works. He/she will likewise provide technical coordination for design and construction interface and be in-charge of all electrical related works during the conduct of value engineering.

- 5) DECK (HULL) SUPERVISOR - Shall have at least a degree in Engineering or equivalent. He/she shall have experiences in ship building project for at least 5 years with good communication skills in English Languages and Japanese. He/she will conduct site construction supervision in terms of hull construction, painting deck; commissioning and trials; identify non-conformance and report it to the engineers where necessary; monitor construction schedule regularly to the engineers.

- 6) MACHINERY SUPERVISOR - Shall have at least a degree in Engineering or equivalent. He/she shall have experiences in a ship building project for the at least five (5) years with good communication skills in English Languages and Japanese. He/she will be in charge site construction supervision in terms of machinery and electrical outfitting; commissioning and trials; identify non-conformance and report it to the engineers where necessary; monitor construction schedule regularly, comparing to planned schedule and report the progress regularly to the engineers.

- 7) ASSISTANT PROJECT MANAGER (Local) - Shall have at least a degree in Engineering or equivalent and at least ten (10) years business experiences in the country which shall include maritime transport related projects. He/she must have skills/experience in project management, monitoring and evaluation, as well as coordinating the works of a team of

experts. He/she shall have experiences as a Project Manager in JBIC/JICA ODA project in the Philippines. He/she must be familiar with international guidelines in shipbuilding in the last 10 years.

He/she shall assist and advise the Project Manager for the overall management of the Project. He/she will act as liaison between the PMO and the Consultants, particularly while Project Manager being abroad; review administrative and commercial documents prepared by the Contractor; and prepare recommendations for corrective actions where necessary. He/she will also represent the Consultants in meetings with the PMO on behalf of the Project Manager.

- 8) DOCUMENT/CONTRACT SPECIALIST- Shall have experience in the preparation and evaluation of prequalification and tender documents using international competitive bidding procedures for bilateral or multilateral financed projects, and extensive experience in contract and document administration. At least five (5) years combined review and updates the tender document, assist in the conduct of prequalification activities and bidding for other contracts packages such as equipment, etc. Provide technical coordination for design specifications and contract administration during construction and maintenance period.
- 9) LOCAL PROJECT COORDINATOR– Holder of a bachelor’s degree or its equivalent. He/she will acts as Administrative Secretary and assists the Assistant Project Manager in operation of the Project in the Philippines. He/she shall have experiences in administrative matter for five (5) to ten (10) years; support the team in communication between Japan and the Philippines; and assist Project Manager in the overall management of the project.
- 10) ADMINISTRATOR – Holder of a bachelor’s degree and its equivalent. He/she acts as Administrative Secretary to the Project in Japan, assisting Project Manager; support the team in communication between Japan and the Philippines; directing, organizing and controlling project, activities, under the direction of a Project Manager and Assistant Project Manager; assist the Project Manager and Assistant Project Manager in the drafting and issuance of project proposals, RFP’s, tenders, budgets, cash flows and preliminary schedules; track the progress and quality of work being performed; keep the Project Manager and the team fully informed about the project status and issues that may impact client relations; assist Project Manager and the team in overall management of the project.

## **VII. ARRANGEMENTS TO BE PROVIDED BY THE GOVERNMENT**

The Philippine Government through the DOTC-PCG will provide the Consultants with the following:

- (1) Make available to the Consultant existing reports and data related to the Project as maybe allowed under Philippine Laws.
- (2) Furnish all available data, maps and information required for the execution of the services as maybe allowed under Philippine Laws.
- (3) Act as counterpart personnel for the purpose of liaison with other Government agencies; and
- (4) Make necessary arrangement to assume the payment of custom duties, internal taxes and levies which might be imposed on the consultant by the Government of Philippines.
- (5) Facilitate the processing of the necessary immigration procedures for the foreign experts, such as applications for entry, stay exit and work permit.
- (6) Use its best efforts to ensure that the assistance and exemption, as described in the Standard Request for Proposal issued by JICA, will be provided to the Consultant, in relation to
  - (i) Work permit and such other documents;
  - (ii) Entry and exit visas, residence permits, exchange permits and such other documents
  - (iii) Clearance through customs; and,
  - (iv) Instructions and information to officials, agent and representatives of the Borrower's Government.

Note: The consultant may hold office within or near the premises of the DOTC-PCG PMO during their expected stay provided advance notice be given to the DOTC-PCG PMO, the executing agencies. However, consultants should provide for their own local transportation.

## **VIII. RESPONSIBILITY OF THE GOVERNMENT**

The Government and its Executing Agencies shall comply with the "Guidelines for the Employment of Consultants under JICA ODA Loans" issued in March 2008", and "Sample Request for Proposal under Japanese ODA Loans (Selection of Consultants) issued in September 2009 both published by JICA.

Special attention should be paid to the following:

- (1) In case of difference of opinion between the Executing Agencies and the Consultant on any important matters involving professional judgment that might affect the proper evaluation

or execution of the Project, the Executing Agencies shall allow the Consultant to submit promptly to the Executing Agencies a written report and simultaneously, to submit a copy to JICA. The Executing Agencies shall forward the report to JICA with its comments in time to allow JICA to study it and communicate with the Executing Agencies before any irreversible steps are taken in the matter. In case of urgency, the Consultant shall have the right to request Executing Agencies and/or JICA that the matter to discussed immediately between the Executing Agencies and JICA.

- (2) The Executing Agencies is responsible for supervising the Consultant's performance and ensuring that the Consultant carries out the assignment in accordance with the contract. Without assuming the responsibilities of the Executing Agencies or the Consultants, JICA may monitor the work as necessary in order to confirm that this is being carried out in accordance with appropriate standard and based on acceptable data. As appropriate, JICA may take part in the discussions between the Executing Agencies and the Consultant. However, JICA shall not be liable in any way for the implementation of the Project by reason of such monitoring or participation in the discussions. Neither the Executing Agencies nor the Consultant shall be released from any responsibility for the project by reason of JICA's monitoring or participation in discussion.