





**Ministry of Finance  
Republic of Maldives**

## **Terms of Reference**

Thilafushi International Port Development Project

**Project Formulation, Master Planning, Design and Transaction**

**Advisory Consultancy**

Project Number : TES/2019/C-02

February 2019



## **I. Background**

1. Male' Commercial Harbour (MCH) is the main gateway for international cargo into the Maldives and the densely populated island of Male' provides the main warehousing, logistics and distributional infrastructure for a majority of goods that are imported, and distributed to the hundreds of local and resort islands across the country.
2. The MCH is currently operating above its maximum physical capacity and is a binding constraint on the growth of the Maldives economy, which is largely dependent on trade, particularly imports. Continuing the status quo imposes substantial economic costs due to the grave deficiencies in the current infrastructure and the inefficiencies that result from it.
3. The Government of Maldives (GoM) plans to address this critical infrastructure bottleneck to the economy by developing a new international port in the nearby island of Thilafushi, which would be the main maritime port servicing the Maldivian market. The new Thilafushi Port is envisioned to be a modern, technology driven, globally competitive port, with complementary zones including container freight stations (CFS), container storage yards, warehousing, logistics, light manufacturing, distribution and bunkering. The port would be an investment into the future with potential for future expansion, to serve the requirements of the country for the next 30-40 years.

## **II. Objective**

4. The objective of the consultancy is to assist the GoM in formulating the Thilafushi International Port Development project, by initially conducting the surveying, feasibility, master planning and project analysis, based on which, detailed design and technical documents are produced to equip GoM with the documents required for funding and contracting the project.

## **III. Scope of The Services**

5. The consultancy is divided into four main stages. The scope of work of consultancy includes the following:
  - **Stage 1: Project Formulation Stage**
    - Review the existing studies on the development of the Male' Port.
    - Meet with relevant stakeholders in the public and private sector.
    - Update the market studies and demand analysis in consideration of local and international drivers of demand. Based on this analysis, evaluate the forecast for



various traffic and volume scenarios. The market studies should also evaluate the potential for transshipment cargo at the Thilafushi port.

- Conduct site survey, which should include bathymetry of the port area and Thilafushi reclamation area, topographic survey of existing Thilafushi and Gulhifalhu and tide, current and wave data collection required for the port design.
- Conduct geotechnical investigation required for the design of the Port.
- Analyze the optimal layout and requirements of the port. This analysis should consider the design and requirements for infrastructure, superstructure, equipment and facilities at the port, as well as the phasing of the future expansion of the port. The design for the port should consider the utility of accommodating the facilities for break bulk, dry bulk, liquid bulk and other cargo types, in addition to containerized cargo. The port layout should also consider the requirement and placement of domestic distribution facilities within Thilafushi.
- Analyze and consider the port equipment required to handle the various types and quantity of cargo that is expected to be handled in the port. The equipment should be sufficient to handle the number of container throughput forecasted to be handled in the port.
- Port design and layout should take into consideration, the types and sizes of the vessels that are expected to call into Thilafushi Port and should have adequate quay wall length and draft to accommodate and efficiently service such vessels.
- Analyze the interlinkages of the port with other support facilities and industries in the port and the Thilafushi logistics zone. The analysis of Thilafushi should take into account, the existing facilities and economic activities in Thilafushi, such as the waste management center and existing industrial and warehousing facilities. This analysis must also take into account, the utilities requirement for full functionality of Thilafushi and the future bridge connections planned between Male' and Thilafushi.
- Analyze the requirements for the ancillary infrastructure and services, such as electricity, water, Ro-Ro ferries, roads etc.
- High level CAPEX estimates of the port infrastructure, equipment, the integrated developments, land reclamation and the ancillary services.
- Conduct financial feasibility and modelling of the project, with the financial outcomes of the project including, net present value, internal rate of return and payback period.
- Analyze the social and environmental implications of the port project.
- Analyze the overall macroeconomic implications of the port project, including the impact on GDP, government budget and external accounts.



- Produce detailed project report for submission to a funding agency as per the requirements of the funding agency. Funding agency shall be determined at a later stage.
- Present the outputs to the policy makers and key stakeholders in the form of detailed reports and presentations.
  
- **Stage 2: Master Planning and Design Stage**
  - Produce a conceptual masterplan for the whole of Thilafushi and Gulhifalhu based on Stage 1 decisions.
  - Produce preliminary design for Thilafushi Port and logistics zone.
  - Produce detailed design and technical drawings for Thilafushi Port and logistics zone.
  - Conduct Environmental Impact Assessment (EIA) for the project in partnership with a local EIA consultant, registered with the Maldives Environmental Protection Agency.
  - Produce technical requirements for the equipment and facilities required for the port and logistics zone.
  - Produce BOQ and detailed cost estimates for the project.
  - Produce financial analysis for the project (forecast revenue, CAPEX, OPEX, profit, cashflow, NPV, IRR, Payback period).
  
- **Stage 3: Procurement Stage**
  - Produce Master Procurement Plan for Port development.
  - Prepare tender documents to seek Contractors for the project.
  - Assist the Government in reaching to potential internationally leading contractors for the project if requested by the Government.
  - Assist the government in the evaluation and selection of contractors.
  - Produce contracts for the project.
  
- **Stage 4: Post Contracting Stage:**
  - Determine a regulatory regime - Produce the draft mandate, structure, key regulations and action plan for establishing a Maldives Ports Authority to regulate the port.
  - Analyze the different options for port management and recommend the best option for Thilafushi Port.
  - Present the outputs to the policy makers and key stakeholders in the form of reports and presentations.



6. On a day to day basis, the consultants will work closely with and be supported by the staff of Ministry of Economic Development (MED), the Ministry of National Planning and Infrastructure (MNPI) and any other designated agencies on behalf of GoM.

The GoM will establish a technical team of advisors from within the government to guide the consultants.

#### **IV. Key Deliverables**

7. The consultants shall deliver the following outputs during the consultancy:

- Project Formulation Stage
  - Inception Report.
  - Review of the existing studies on the development of the Male' port.
  - Meet with relevant stakeholders in the public and private sector.
  - Submit initial survey report, including bathymetric survey report. Final survey report can be submitted at the end of data collection. Raw data for all surveys should be submitted.
  - A feasibility report that should at minimum include the following details:
    - updated demand analysis, with traffic and volume forecasts for various scenarios
    - liner interviews
    - the preliminary layout of the port and Thilafushi logistics zone
    - the infrastructure, superstructure, equipment and other services at the port
    - the requirements for ancillary infrastructure at Thilafushi
    - the high level capex estimates
    - the financial analysis and financial models (including editable excel files)
    - economic, social and environmental analysis
    - a record of the stakeholder meetings and documents used
    - an executive summary of the report

The feasibility study should also take into account the following:

- Phasing the development of Thilafushi Port
- The other port projects in Maldives which will be carried out concurrently
  - Feasibility of setting up light manufacturing, packaging and processing factories near the port for export and import substitution
  - Feasibility of small-scale transshipment services
  - Feasibility of international and local bunkering services



- Requirements for the ancillary infrastructure and services, such as electricity, water, Ro-Ro ferries, roads etc.
  - High level CAPEX estimates of the port, cargo / container handling equipment, the integrated developments, land reclamation and the ancillary infrastructure
  - Financial feasibility of the project as including, net present value, internal rate of return and payback period.
  - Social and environmental implications of the port project.
  - Overall macroeconomic economic implications of the port project, including the impact on GDP, government budget and external accounts.
  - Detailed project report for submission to funding agency as per the requirements of the funding agency.
  - Financial model developed in Microsoft Excel, including the assumptions and linkages used, which should be able to illustrate various scenarios. The files should be editable.
  - Slide show presentations for policy makers and key stakeholders.
- Master Planning and Design stage
    - Conceptual masterplan for the whole of Thilafushi and Gulhifalhu.
    - Environmental Impact Assessment (EIA) report for the project. (compiled in partnership with a local EIA consultant registered at Maldives Environmental Protection Agency)
    - Geotechnical report, final survey report, numerical modelling and other required engineering studies to finalize the design parameters.
    - Preliminary design for Thilafushi Port and logistics zone.
    - 3D rendering of the port and Thilafushi logistics zone.
    - Detailed design, technical drawings and technical specifications for Thilafushi Port and logistics zone.
    - Technical requirements for the equipment and facilities required for the port and logistics zone.
    - BOQ and detailed cost estimates for the project.
    - Financial analysis report for the project (forecast revenue, CAPEX, OPEX, profit, cashflow, NPV, IRR, Payback period) and the related models developed in Microsoft Excel.
  - Procurement Stage
    - Master Procurement plan.



- Tender documents for the project in accordance with the requirements of the funding agency.
  - Contracts for the project.
  - Assistance to the Government in reaching to potential internationally leading contractors for the project if requested by the Government.
  - Assistance to the Government in the selection of contractors.
- Post Contracting Stage
    - Draft mandate, structure, key regulations and action plan for establishing a Maldives Ports Authority to regulate the port.
    - Recommendations on options for port management.
    - Slide show presentations for policy makers and key stakeholders.

## **V. Specialists Required**

8. The assignment will be handled by a consultancy firm/consortium which has expertise in the following areas at minimum:
  - Port and Logistics
  - Financial Analysis
  - Structural Engineering (specialized in port/maritime design)
  - Geotechnics
  - Economic and Social Impact Analysis
  - Environmental Impact Analysis
  - Master Planning
  - Transaction Advisory
9. It is the firm's responsibility to access the required inputs of key professionals in the required area.
10. All professionals deployed on this assignment shall be proficient in English and should have proven adequate academic and professional background. The following factors would be looked at in evaluating the team members:
  - All team members should have a degree in a related field, preferably at the post graduate level.
  - All international team members should have minimum 10 years of experience in the field, special consideration would be given to experience in similar projects and experience in the areas related to port development and management.
  - All Maldivian team members should have minimum 5 years of experience in the field.





- One member should be assigned as a team leader. The team leader should have a minimum of 15 years of experience in the field and should have experience in conducting similar consultancies.
- All professionals engaged should disclose any potential conflict of interest in performing the task.

## VI. Contents of Proposal and Submission

11. Interested international parties are requested to submit an Expression of Interest (EOI) to the Government of Maldives. The EOI should include the following information at minimum.
  - The profile of the firm / consortium partners.
  - Information and nature of similar assignments carried out by the firm / consortium partners within the past ten years.
  - A brief methodology and approach to work plan should be submitted. Work plan should identify the split between on-site and off-site engagement.
  - The duration of the exercise and how the time would be split between the four stages of the consultancy. **The exercise should be completed within a maximum of six months.**
12. The Government encourages international firms to submit proposals in partnership with Maldivian consultancy firms and this has been reflected in the evaluation criteria.

## VII. Evaluation Criteria

13. Proposals will be reviewed in accordance with the following criteria:

Proposed approach and methodology - 10 marks

Experience of the firm/consortium working on similar projects - 70 marks

Applicant's experience working within South Asia region - 10 marks

Participation of Maldivian consultancy firm – 10 marks