

TERMS OF REFERENCE

FOR

ENGINEERING DESIGN REVIEW CONSULTANCY SERVICES

K. THILAFUSHI PORT DEVELOPMENT PROJECT

1. Background and Project Overview

Maldives Ports Limited (MPL) is the state-owned enterprise responsible for the administration, management, and development of commercial port infrastructure across the Republic of Maldives. MPL operates under the mandate to ensure safe, efficient, and sustainable port operations that underpin the nation's trade and economic activities.

The Government of Maldives has identified the development of a major commercial port facility at K. Thilafushi as a strategic national priority. K. Thilafushi, located approximately 11 kilometres west of Male' in Kaafu Atoll, currently serves as an industrial island and is designated as the primary location for the new Port of Thilafushi — a facility intended to significantly increase cargo handling capacity, reduce congestion at Male' Commercial Harbour, and serve as a long-term economic hub supporting the Greater Male' Region.

The K. Thilafushi Port Development Project (hereinafter referred to as “the Project”) encompasses feasibility studies, master planning, detailed engineering design, procurement of civil and electromechanical works, and eventual construction supervision. Given the technical complexity, scale, and strategic importance of the Project, MPL requires the engagement of a specialist Engineering Design Review Consultancy firm to provide independent, professional review and commentary on all concept and detail designs, site investigation reports, environmental assessments, and geotechnical studies pertaining to the full scope of port infrastructure.

1.1 Project Objectives

- Develop a world-class, multi-purpose commercial port at K. Thilafushi capable of handling diverse cargo volumes.
- Decongestion of Male' Commercial Harbour and reduction of vessel turnaround time nationally.
- Provide resilient port infrastructure that accounts for coastal dynamics, climate change, and environmental sustainability.
- Ensure all designs comply with international standards including relevant British Standards, Eurocodes, PIANC guidelines, and applicable Maldivian regulations.
- Establish an integrated utility and services framework including MEP, storm water management, and wastewater treatment systems.

1.2 Current Project Stage

At the time of issuance of this Terms of Reference, the Project is at the Feasibility and Design Stage. Key activities in progress or anticipated include:

- Site investigations including in-survey and out-survey testing
- Geotechnical investigations and assessments
- Coastal and hydrodynamic studies
- Conceptual and detailed design development for all port structures and facilities
- Preparation of the Environmental Impact Assessment (EIA)
- Master planning and land use zoning
- Preliminary cost estimation and value engineering

2. Objective of This Terms of Reference

The purpose of this Terms of Reference (TOR) is to define the scope, deliverables, qualifications, and contractual requirements for the procurement of a qualified and experienced Engineering Design Review Consultancy firm (hereinafter “the Consultant”) to be engaged by Maldives Ports Limited.

The Consultant shall function as an independent technical authority, providing structured reviews and commentary on all engineering concepts and detailed designs of all the port structures and facilities included in the Masterplan of K.Thilafushi Port Development Project. The consultancy firm’s expertise will also be required in assessing and reviewing site survey reports, geotechnical investigation reports, Environmental Impact Assessments and any other site survey reports prepared by the Design Contractor engaged in the Project. The Consultant’s role is strictly advisory and review-based; they shall not produce primary designs but shall provide detailed, professional written review comments, technical opinions, and approval recommendations to MPL’s Project Unit.

3. Scope of Services

3.1 Review of Port Buildings and Operational Facilities

The Consultant shall provide independent technical review and commentary on the concept and detailed designs, structural systems, MEP integration, constructability, operational suitability, and cost estimates (BOQ and BOM) for all port buildings and operational facilities within the Project Masterplan. The review shall be carried out by suitably qualified Structural Engineers, Architectural Review Engineers, Electrical Engineers, Mechanical Engineers, MEP/Services Engineers, and Quantity Surveyors to ensure compliance with operational requirements, fire safety requirements, applicable international standards, and port engineering best practices, including review of material specifications and value engineering proposals prepared by the Design Contractor.

3.2 Review of Utilities, Services, and Operational Infrastructure

The Consultant shall review and provide technical commentary on all utility and service infrastructure designs associated with the Project Masterplan. Service Engineers, Mechanical and Electrical Engineers, Civil Engineers, Marine Engineers, and Quantity Surveyors shall be deployed as required for the review of these systems and associated cost estimates.

The Consultant shall review all detailed civil, structural, electrical, mechanical, plumbing, fire protection, drainage, and operational designs and verify compliance with applicable international port standards, PIANC guidelines, Eurocodes, British Standards, and relevant industry best practices. The Consultant shall also review and comment on BOQs/BOMs, and material specifications associated with all service infrastructure works.

3.3 Review of Marine Structures and Quay Infrastructure

The Consultant shall review and provide technical commentary on the design and costing of all marine structures associated with the Project Masterplan.

The Consultant shall deploy Senior Marine / Quay Wall Engineers, Coastal / Hydrodynamic Engineers, Structural Engineers, Geotechnical Engineers, and Quantity Surveyors for these reviews. The review shall include assessment of structural integrity, geotechnical assumptions, coastal hydrodynamic conditions, wave and tidal loading, berthing and mooring loads, constructability, durability, corrosion protection systems, and compliance with international maritime and port engineering standards including PIANC guidelines. The Consultant shall also review associated BOQs/BOMs.

3.4 General Technical Review Requirements

The Consultant shall also review and comment on any additional structures, utilities, systems, surveys, investigations, testing programs, or supporting infrastructures required for the successful implementation of the Project.

The Consultant shall review all surveys, investigations, and testing carried out by the Design Contractor including geotechnical investigations, hydrographic surveys, bathymetric surveys, topographic surveys, environmental studies, or any other surveys that were required for the completion of detailed design of structures included in the project.

In general, the Consultant shall provide a multi-disciplinary team of suitably qualified experts to independently review, comment on, and advise MPL regarding all engineering designs, technical submissions, specifications, calculations, and cost estimates prepared by the Design Contractor through the Planning and Design stage of the Project lifecycle. The Consultant shall additionally deploy a FIDIC Contract / Procurement Specialist to review all contract documentation, Employer's Requirements, and procurement frameworks associated with the Project, ensuring compliance with applicable FIDIC conditions and international best practice in design-build and EPC contracting. The FIDIC Specialist shall advise MPL on contractual risks, interface management provisions, and dispute resolution mechanisms. The Consultant shall further deploy a Port Operations / Planning Consultant to review the operational logic and layout efficiency of all masterplan elements, including cargo handling flow, berth utilisation, vessel traffic management, and terminal capacity assumptions, to ensure the proposed port design is operationally viable and aligned with industry benchmarks.

4. Key Deliverables

The Consultant shall produce and submit, as a minimum, the following deliverables during the engagement period. All deliverables shall be submitted in both electronic (PDF and editable format) and hard copy as directed by MPL.

#	Deliverable	Discipline
D-01	Inception Report & Review Methodology Statement	All Disciplines
D-02	Design Compliance Assessments	Architect/ Civil Engineer/ Structural Engineer
D-03	Cost Reviews	Quantity Surveyor
D-04	Survey and Investigation Reviews	EIA specialist/ Geotech Engineer/ Surveyor

#	Deliverable	Discipline
D-05	Design Review Register Tracker	All Disciplines
D-06	Final technical recommendation	All Disciplines
D-07	Monthly Review Status Reports	All Disciplines
D-08	Quarterly Briefing Report for Executives	All Disciplines

5. Qualifications and Experience Requirements

5.1 Firm-Level Requirements

- Minimum fifteen (15) years of experience in providing independent engineering design review and technical advisory services for large-scale port, marine, or coastal infrastructure projects.
- Demonstrable experience in reviewing designs for at least three (3) similar port or marine infrastructure projects of comparable scope in the past ten (10) years.
- Proven capability in reviewing multi-disciplinary designs covering marine structures, civil infrastructure, port buildings, utilities, and environmental assessments simultaneously.
- Experience in reviewing geotechnical investigation reports and EIA documents for coastal and marine projects.
- Experience working in island, coastal, or Small Island Developing States (SIDS) contexts is highly desirable.
- ISO 9001 Quality Management System certification or equivalent.
- Firms that have prepared or are currently preparing primary designs for this Project are not eligible to submit.
- Financial capability to sustain the 8-month engagement (audited financial statements for the last three years to be submitted).

5.2 Key Personnel Requirements

Position	Minimum Qualification	Minimum Experience
Lead Review Engineer / Team Leader	MEng/MSc Civil, Structural or Port Engineering; Chartered Engineer; PMP or equivalent	20 years; minimum 5 years leading multi-disciplinary design reviews on comparable port projects
Senior Marine / Quay Wall Review Engineer	MSc Coastal, Maritime or Structural Engineering; Chartered Engineer	15 years; specialist quay wall, fender design, and marine structure design review experience
Senior Structural / Buildings Review Engineer	BEng/MEng Structural or Civil Engineering; Chartered Engineer	15 years; experience reviewing port buildings, cargo facilities, and industrial structures
Geotechnical Review Engineer	MSc Geotechnical or Civil Engineering; Chartered Engineer	12 years; specialist geotechnical investigation review and ground improvement experience in coastal contexts

Position	Minimum Qualification	Minimum Experience
Survey Review Specialist	BEng Civil/Geomatics or equivalent; professional survey membership preferred	12 years; experience reviewing hydrographic, topographic, and bathymetric surveys
MEP / Services Review Engineer	BEng/MEng Mechanical or Electrical Engineering; Chartered status preferred	12 years; port or industrial MEP design review experience
Environmental / EIA Review Specialist	MSc Environmental Engineering or Environmental Science; Chartered or equivalent	12 years; EIA review experience for marine and coastal infrastructure projects
Pavement & Roads Review Engineer	BEng Civil Engineering; Chartered Engineer preferred	10 years; heavy-duty port pavement and road design review experience
Resident Review Coordinator	BEng Civil or Project Management degree; PMP or PRINCE2	10 years; to be based in Maldives or willing to be on-site for key review milestone meetings
Coastal / Hydrodynamic Review Engineer	MSc Coastal Engineering, Maritime Engineering, or equivalent; Chartered Engineer	12 years; specialist experience in coastal hydrodynamic modelling, wave analysis, shoreline dynamics, and coastal structure design review in island or tropical contexts
FIDIC Contract / Procurement Specialist	Degree in Civil Engineering, Law, or Quantity Surveying; FIDIC Accredited Adjudicator, NEC or equivalent; Chartered Engineer or equivalent professional standing	12 years; demonstrable expertise in FIDIC Yellow Book, Silver Book, and MDB Harmonised Conditions; experience advising on contract documentation, Employer's Requirements, and claims management on infrastructure projects
Electrical Engineering Review Specialist	BEng/MEng Electrical Engineering; Chartered Engineer (IET or equivalent); preferred experience in IEC and BS 7671 compliance	12 years; specialist experience in reviewing HV/LV power distribution, port electrical infrastructure, shore-to-ship power, lighting, and SCADA systems
Mechanical Engineering Review Specialist	BEng/MEng Mechanical Engineering; Chartered Engineer (IMechE or equivalent)	12 years; port or industrial mechanical systems design review experience, including cargo handling equipment, HVAC, fire suppression systems, and marine mechanical plant
Port Operations / Planning Consultant	Degree in Port Management, Maritime Studies, Civil Engineering, or equivalent; membership of PIANC, ICHCA, or equivalent professional body preferred	15 years; demonstrable experience in port masterplanning, cargo throughput analysis, berth utilisation assessment, terminal layout optimisation, and operational readiness review for multi-purpose commercial ports

6. Reporting and Communication

The Consultant shall operate under the direct supervision and reporting line of the Head of Project Management Section, MPL. The following reporting and communication arrangements shall apply:

- The Consultant shall submit Monthly Review Status Reports by the 5th working day of each subsequent month, detailing documents received for review, comments issued, and outstanding design responses.
- Quarterly Executive Briefing Reports shall be submitted to MPL Senior Management summarising design review progress, key technical concerns, and status of comment resolution.
- All formal design review comment sheets shall be issued within ten (10) working days of receipt of design documents from MPL, unless otherwise agreed in writing.
- A formal Technical Review Meeting shall be held bi-weekly between the Consultant's key personnel and MPL's Project Management Section to discuss review progress and comment resolution.
- The Consultant shall maintain a Design Review Register tracking all documents received, review status, comments issued, and designer responses.
- The Consultant shall participate in design workshops, technical meetings with the Design Consultant, and site visits as required by MPL.
- All correspondence, reports, and technical documents shall be in English.
- The Consultant shall maintain a shared project document management system approved by MPL.

7. Contract Arrangements

Item	Details
Contract Type	Lump Sum with Reimbursable Expenses (Time-Based Schedule of Rates for ad-hoc review services)
Contract Duration	08 Months from the date of Commencement
Governing Law	Laws of the Republic of Maldives
Contract Framework	
Language	English
Payments	Monthly, based on approved invoices and certified deliverables
Performance Security	5% of Contract Value – Bank Guarantee from a licensed Maldivian bank
Extension Option	MPL reserves the right to extend the engagement by up to 12 months subject to mutual agreement

8. Submission Requirements

Firms interested in responding to this TOR shall submit a Technical and Financial Proposal comprising the following:

8.1 Technical Proposal

- Company profile and organizational overview
- Understanding of the assignment, proposed review methodology, and approach to multi-disciplinary design review and comment management
- Relevant project experience with references (at least three comparable engineering design review projects)
- Proposed team structure and CVs of all key personnel
- Work plan and schedule for the 08-month engagement including proposed design review programme
- Quality assurance approach, document management methodology, and comment tracking system

8.2 Financial Proposal

- Schedule of monthly retainer fees per discipline / key personnel
- Schedule of ad-hoc / time-based rates for additional review services
- Schedule of reimbursable expense items and travel provisions
- Total financial proposal in MVR — clearly separating retainer and reimbursables

8.3 Supporting Documents

- Certificate of Incorporation / Business Registration
- Valid tax compliance certificate
- Audited financial statements for the past three (3) years
- ISO 9001 (or equivalent) certification
- Professional indemnity insurance certificate or commitment to obtain

9. Evaluation Criteria

Proposals will be evaluated using a Quality and Cost Based Selection (QCBS) methodology with the following weighting:

Criterion	Sub-Criteria	Weight
Technical (80%)	Firm Experience & Track Record in Design Review	25%
	Proposed Team – Qualifications & Review Experience	30%
	Review Methodology, Approach & Work Plan	15%
	Understanding of Assignment	10%
Financial (20%)	Financial Proposal	20%
TOTAL		100%

10. General Conditions and Notes

- MPL reserves the right to reject any or all proposals without assigning reasons.
- MPL is not obliged to accept the lowest cost proposal.
- All information provided in this TOR and responses thereto are confidential and shall not be disclosed to third parties.
- Joint ventures or consortia are permitted provided a lead entity is clearly identified and all members are jointly and severally liable.
- Sub-contracting of key roles specified in Section 5.2 is not permitted without prior written approval from MPL.
- The Consultant must declare any conflict of interest with the Design Consultancy, contractors, designers, or suppliers engaged on the Project. Firms involved in producing primary designs for this Project are ineligible.
- MPL will bear no costs associated with the preparation or submission of proposals.
- Canvassing of MPL staff or Board members will result in automatic disqualification.

11. Contact Information and Submission

Organization	Maldives Ports Limited
Address	MPL Building, Bodufalhi Magu, K. Male' 20121, Republic of Maldives
Email	tender@port.mv
Deadline for Queries	20th July 2026 13:00 GMT+5
Proposal Submission Deadline	23rd July 2026 13:00 GMT+5

— End of Terms of Reference —