



International Container Transshipment Port Maldives – Ihavandhippolhu Atoll in Northern Maldives

Project Information Memorandum

March 2021



Notice to Recipients

Project Information Memorandum

General Notice

This Project Information Memorandum (PIM) has been prepared by the Ministry of Economic Development (MED) of Maldives.

This presentation contains selected information regarding a potential investment opportunity in respect of the public offer for operations of the International Container Transshipment Port Maldives (“The Project”) in Ihavandhippolhu Atoll, located in the north of Maldives. In this respect, MED has hired Maritime & Transport Business Solutions B.V. (MTBS) as its Transaction Advisor.

The sole purpose of this presentation is to inform recipients on the potential investment opportunity.

This presentation is not intended to form the basis of any investment decision or any decision to purchase any equity interests (or other interests), directly or indirectly, in the Project.

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1. General Introduction

Objectives of the Project Information Memorandum

Introduction & Objectives

Introduction

- This Project Information Memorandum (PIM), as prepared by the Ministry of Economic Development (**MED**) of Maldives, presents the International Container Transshipment Port Maldives (**The Project**) Transaction.
- MED has appointed Maritime & Transport Business Solutions (**MTBS**) from the Netherlands as its Transaction Advisor. MTBS is an international finance and strategy advisory firm, specialized in port transactions.
- MTBS provides these transaction advisory services in close cooperation with sub-consultants NIRAS A/S from Denmark and Riyan Pvt. Ltd. from the Maldives.

Objectives

- The primary objective of PIM is to provide an overview of the transaction being offered to potentially interested private sector investors / terminal operators.
- Potential bidders are fully responsible themselves to make their own independent judgement of the market potential and risks associated with this transaction.



1. General Introduction

Objectives of the Project

Economic Growth

The project should achieve considerable medium-long term economic growth for Maldives.

Regional Development

The project should spatially distribute socio-economic development to other parts of Maldives besides the Malé area.

New Job Creation

The project should create new regional jobs for the Maldivian populations outside the Malé area.

Attract Foreign Investments

The project should attract foreign direct investment to help to transform the Maldivian economy.



Economic Diversification

The project should help diversify the Maldivian economy to be more resilient and less dependent on a single industry.

Creating A New Growth Hub

The project should help decongesting Maldives' economic centre in Malé by creating a growth hub in the North.

Human Capital Growth

The project should improve the knowledge and competencies of the Maldivian workforce by means of training and development.

Public-Private Partnerships

The Project should be developed under a PPP structure to build on private expertise and assure industry best practices.

2. Project Context



2. Project Context

The Government of Maldives (GoM) has been exploring strategic port development options across the country with the wish to develop new port infrastructure under a Public-Private Partnership (PPP) arrangement

1. Options identification & evaluation



- First, a **long-list of 17 port development options** across Maldives were evaluated on strategic fit.
- Secondly, **pre-feasibility analysis was done on a short-list of 5 options** with the highest strategic fit.

2. Selection of the preferred option



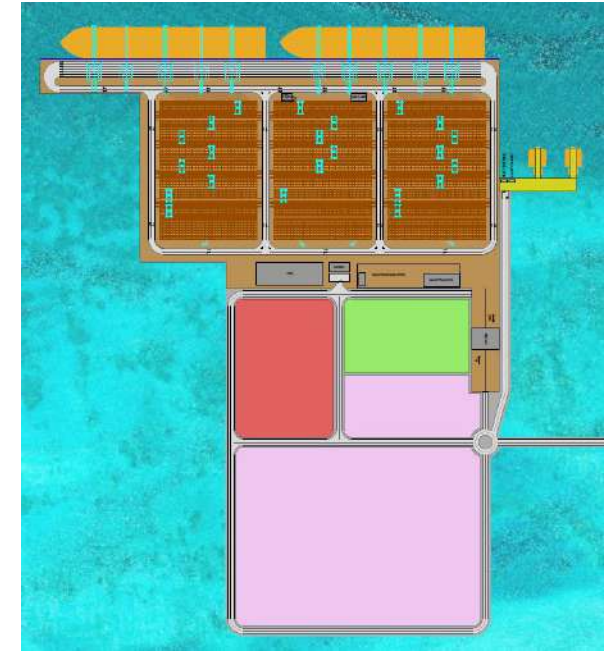
- Based on these preliminary analyses, the Government of Maldives has decided that the preferred development option is an **International Container Transhipment Port** in the **North of Maldives**.

3. Location: Ihavandhippolhu Atoll



- The project is proposed to be developed in **Ihavandhippolhu Atoll** in the **upper north of Maldives** near the **8 Degree Channel**.

4. Feasibility & master planning



- Against this background, a conceptual port master plan has been developed and a detailed feasibility study has been performed for this new port project.
- **The Government of Maldives wants to bring this opportunity to market under a PPP transaction.**

2. Project Context

Target Market – Container Handling – International Transshipment - Opportunities

Transshipment & feeder opportunities

- 1. Proximity to the major East-West route**
 - The new transshipment port ("North Port") in the Ihavandhippolhu atoll **has an ideal position along the main East-West shipping routes.**
- 2. ME/ISC feeder opportunities**
 - Also, proximity to the Far East and feeder markets in the Middle East and the Indian Sub-Continent (ME/ISC) yields **opportunities for relay and inter-lining services.**
- 3. Africa feeder opportunities**
 - At some distance, the Middle East to Africa shipping lane is located. This provides a third shipping lane for which relay and inter-lining services can be provided.
- 4. Domestic feeder opportunities**
 - The new transshipment port in the north of Maldives has synergies with the new international port that will be developed in Gulhifalhu (next to Male) in Central Maldives.

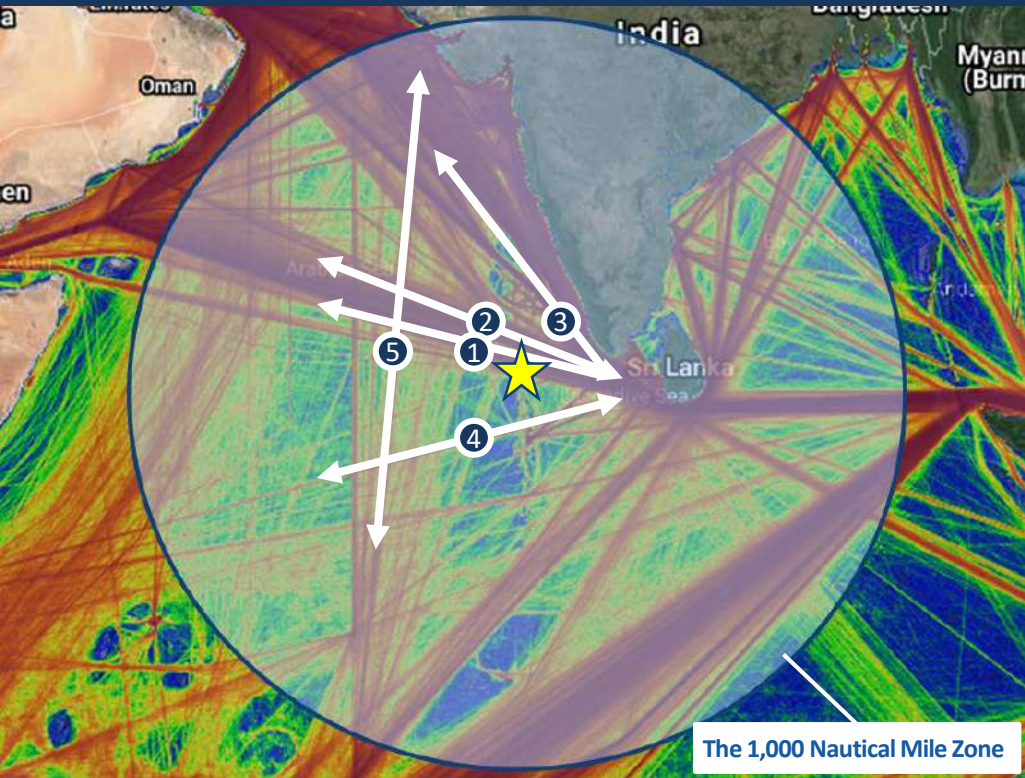
Regions and distances from the Project

Region	Distance	Region	Distance
West Coast India			
Kochi	268 nm	Goa	512 nm
Colachel	279 nm	Mumbai	716 nm
Vizhinjam	261 nm	Hazira	845 nm
Mangalore	375 nm	Mundra	1,005 nm
East Coast India			
Chennai	965 nm	Visakhapatnam	1,234 nm
Sri Lanka			
Colombo	417 nm	Hambantota	525 nm
Galle	465 nm	Trincomalee	694 nm
Seychelles			
Port Victoria	1,266 nm		
Oman			
Salalah	1,251 nm	Duqm	1,165 nm
Maldives			
Kulhudhuffushi	27 nm	Gulhifalhu	175 nm

Source: MarineTraffic.com

The Project is located near heavy traffic container shipping routes

The main Far East–Suez route is only 60 nm (8° Channel; #1) to 82 nm (9° Channel; #2) away. The main Far East – Middle East route lies 180nm away (#3), while the main Colombo-East Africa (#4) and India West Coast – South Africa (#5) are located 125 nm and 230 nm away respectively.



Source: MarineTraffic.com

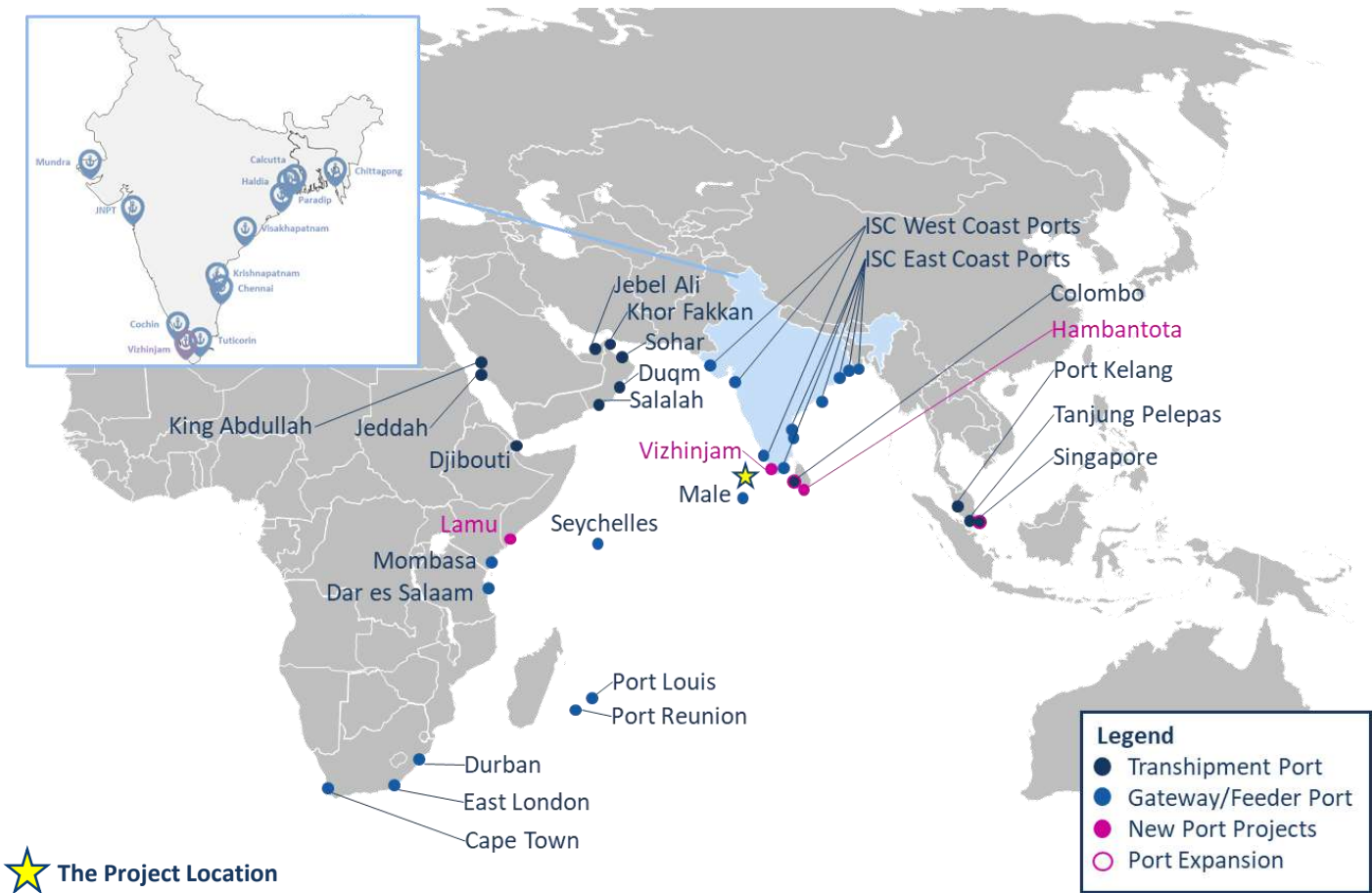
★ The Project Location



2. Project Context

Target Market – Container Handling – International Transshipment – Competition and Volumes

The regional container transshipment market



★ The Project Location

Source: MTBS

Observations

- 11 regional transshipment ports handle about 92 M TEU/pa of which 75% comprises transshipment boxes and 25% gateway boxes.
- The direct competitor to the North Port is Colombo, mainly for feeding in the Arabian sea (India West Coast) and Bay of Bengal (India East Coast). Currently, the Port of Colombo is characterized by congestion, but various expansions are planned.

No.	Port	Total (TEU)	%	TSH (TEU)	%	O/D (TEU)	%
1	Singapore	36,599,000	40%	31,539,852	34%	5,059,148	6%
2	Tanjung Pelepas	8,961,000	10%	8,393,328	9%	567,672	1%
3	Port Kelang	12,316,000	13%	7,546,864	8%	4,769,136	5%
4	Colombo	7,047,000	8%	5,543,080	6%	1,503,920	2%
5	Salalah	3,385,000	4%	3,195,687	3%	189,313	0%
6	Sohar	800,000	1%	80,000	0%	720,000	1%
7	Djibouti	810,000	1%	172,053	0%	637,947	1%
8	Jebel Ali	14,954,000	16%	8,079,165	9%	6,874,835	7%
9	Khor Fakkan	600,000	1%	120,000	0%	480,000	1%
10	Jeddah	4,117,000	4%	1,979,605	2%	2,137,395	2%
11	King Abdullah	2,302,000	3%	1,821,097	2%	480,903	1%
Total TEU		91,891,000	100%	68,470,730	75%	23,420,270	25%

Source: MTBS based on Dymamar



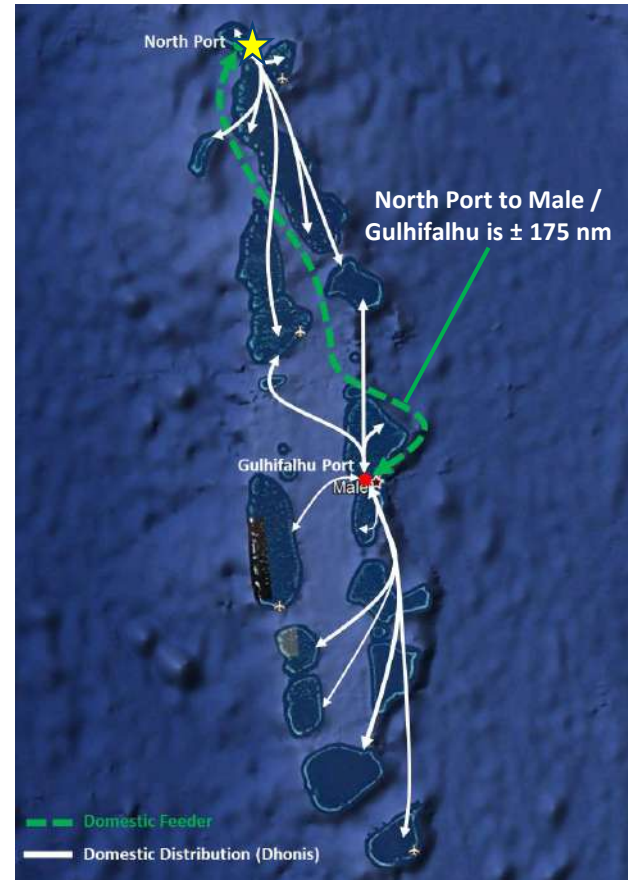
2. Project Context

Target Market – Container Handling – Gateway Containers – Opportunities

Gateway Market & Domestic Feeder Opportunities

- The new container port in the North of the Maldives (“North Port”) will primarily focus on facilitating transshipment containers, but there is also **potential for facilitating a part of the Maldivian gateway containers**.
- The current gateway container port in Maldives is the **Malé Commercial Harbour** that soon will be replaced by a new International port in Gulhifalhu (an island in the proximity of Malé in the same Atoll).
- Currently, **4 liner services are scheduled to/from Male**:
 - 2 feeder services: Male (MDV) – Colombo (LKA)
 - 1 feeder service: Male (MDV) – Cochin (IND).
 - 1 relay service: Singapore (SGP) – Dar es Salaam (TZA).
- Having a new container transshipment port in the North of Maldives could divert (a part of) these liner services to the North Port. From the North Port most volumes will be transshipped towards Malé/Gulhifalhu.
- This way, in particular the feeder role of Colombo can be shifted towards the new transshipment port in the North.

Maldives Connectivity and Distribution



Source: MTBS based on Google Earth

Attracting Shipping Lines and Domestic Distribution

- The North Port is to be operated in the most efficient way possible to attract shipping lines to the port. It will do so by:
 - **Maximising its operational performance** with sufficient quay cranes and yard equipment. This will result in adequate service levels, minimal turnaround times and maximum berth availability for the largest container vessels.
 - Implementing **state-of-the-art** infrastructure, superstructure and equipment.
 - **Strategic partnering with globally acknowledged private sector operators** to ensure operational excellence and build on their inhouse knowledge, expertise and experience in the market.
- The new port also aims to attract some of the **direct container calls to Maldives for gateway boxes**, after which most of the containers are to be transported towards the country’s main distribution hub in Malé/Gulhifalhu.
- The container volume to be transported between the North Port and Gulhifalhu Port is expected to be sufficiently large to **justify implementing a dedicated domestic feeder service**.

2. Project Context

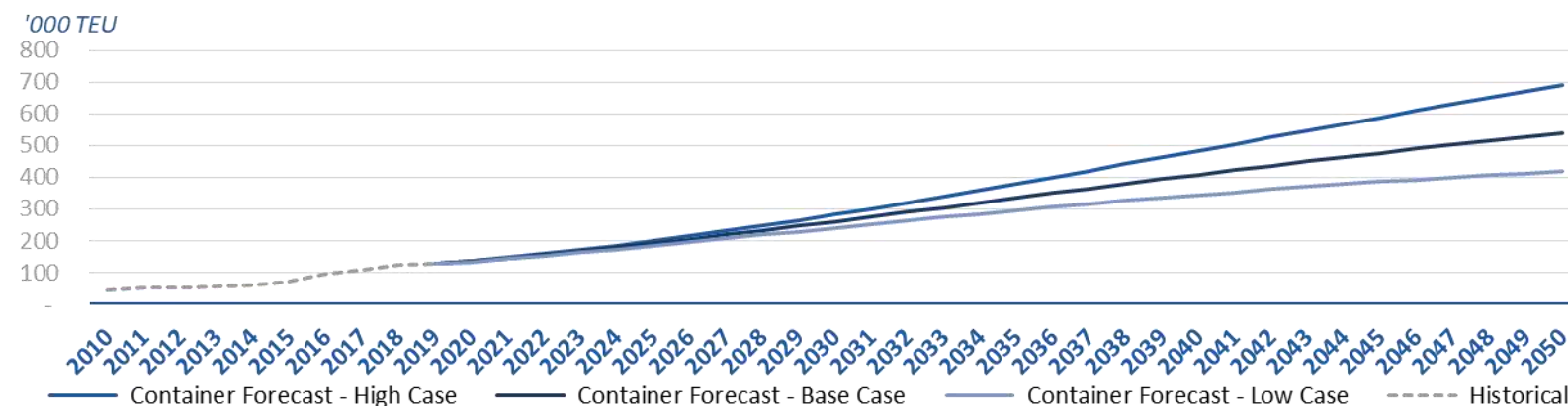
Target Market – Container Handling – Gateway Containers – Maldives Container Volumes

Maldivian Gateway Container Projections

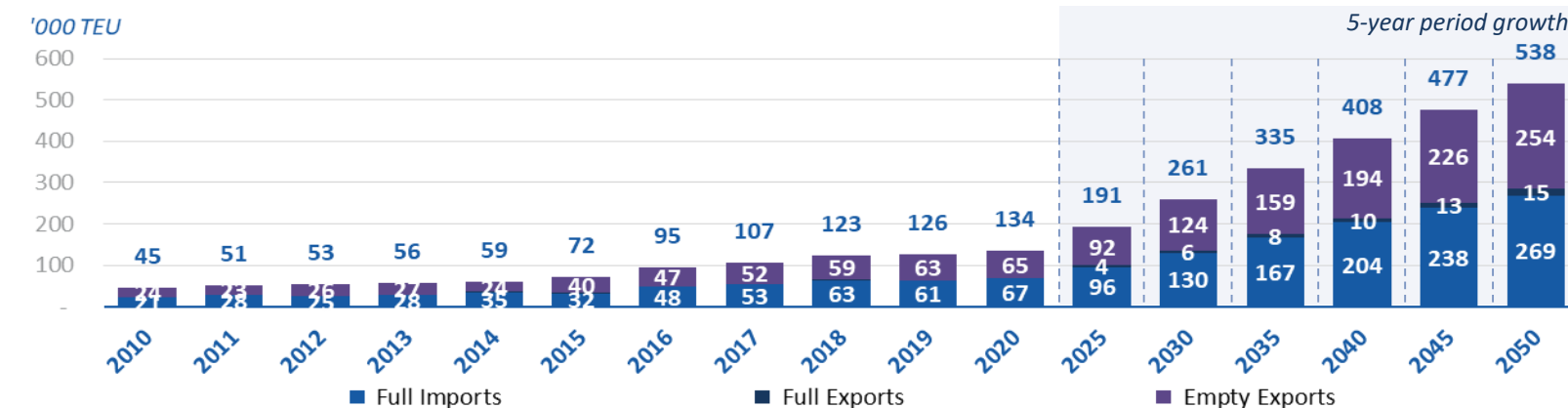
- The table and figure show the Maldives container demand forecasts scenarios and growth rates up to 2050.
- Total Maldivian container demand is projected to increase from 126,000 TEU in 2019 to a volume between 418,000 TEU in the Low Case and 692,000 TEU in the High Case. The Base Case projection reaches 538,000 TEU in 2050.
- Because Maldives is an island nation with limited domestic production for export purposes:
 - 4-6% of the export flows is expected to be full containers.
 - 99-100% of the import flows comprises full containers.
 - 4 weekly (208 annual) liner services are expected to be required to facilitate all demand.

Period CAGRs*	High Case	Base Case	Low Case
CAGR 2010-2020	11.5%	11.4%	11.3%
CAGR 2020-2030	7.7%	6.9%	6.1%
CAGR 2030-2040	5.5%	4.6%	3.7%
CAGR 2040-2050	3.7%	2.8%	2.0%
CAGR 2020-2050	5.6%	4.8%	3.9%

Maldives Gateway Container Forecast up to 2050 – All Scenarios*



Maldives Gateway Container Forecast up to 2050 – Base Case Scenario*



Source: MTBS based on Maldives Ports Limited (MPL) Data, World Data and the IMF World Economic Outlook October 2019; *The Impact of COVID-19 has not yet been considered in the projections; The most recent year of actual data is 2019.



3. Project Context

Conclusions on the Target Markets

International Container Transshipment and Feeder Services

1. The North atoll of Maldives is **close to the major shipping routes**, including the main East-West routes and with proximity to Far East and Middle East routes as well.
2. The **main feeder destinations for the New North Port will be the West Coast of India, Pakistan and Seychelles for cargo from the Far East.**
3. Maldives can have **a marginal role for cargo destined for Europe and the US East Coast** (from the Indian West Coast and Sri Lanka); which is currently performed by other ports.
4. The **Port of Colombo will be the main and direct competitor** for a future container transshipment port in the Northern Maldives. Currently, **the port of Colombo is characterized by congestion**, but **various port expansions are planned** including the expansion of the East and West container terminals in South Port Colombo.
5. The new transshipment port in North of Maldives provides **strategic investment opportunities for shipping lines and affiliated terminal operators**:
 - a. That are **not yet well-established in the region** and require strategic presence.
 - b. That are looking for **a close alternative transshipment hub to the Port of Colombo.**
 - c. That require a transshipment hub that is **well-positioned along the main East-West route and well-located for feeder services markets to the Indian West Coast.**

Gateway Container Market and Domestic Feeder Services

- From the Maldivian domestic container demand projections, it can be concluded that **considerable demand growth potential exists for the Maldives** that cannot be facilitated by the current container handling facilities that are situated in Malé and Hulhumalé (Central Maldives).
- For this reason, **a New International Port in Gulhifalhu will be developed to handle these new gateway containers** that are currently primarily supplied by feeder vessels from the Port of Colombo.
- **The Government of Maldives envisions to internalise this feeder flow in Maldives** by the establishment of a new transshipment hub in Northern Maldives and to combine this with targeting the international transshipment market.



3. Project Scope

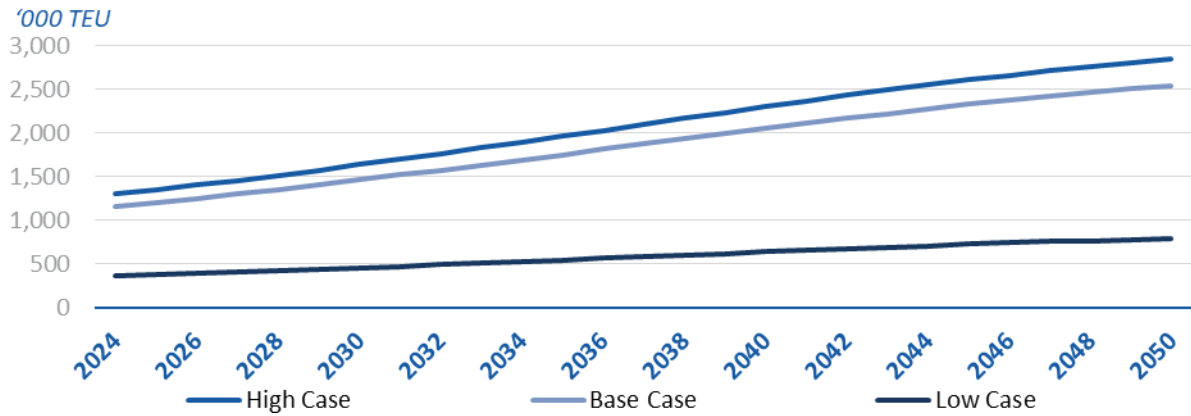


3. Project Scope

Market

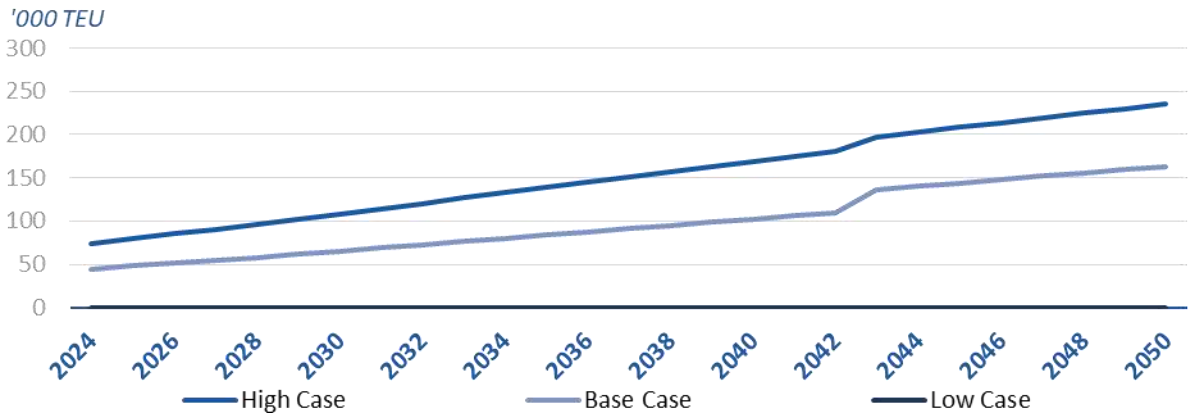
Transshipment Market Potential Projections up to 2050

- After a comprehensive liner service and transshipment terminal analysis in the Indian Ocean region, three transshipment container projections have been formulated for the International Container Transshipment Port Maldives:
 - Vary between 360,000 (Low Case) and 1,298,000 TEU (High Case) in 2024.
 - Vary between 791,000 (Low Case) and 2,848,000 TEU (High Case) in 2050.
 - Reach about 1,158,000 TEU in 2024 and 2,541,000 TEU in 2050 in the Base Case.
- All scenarios are based on the assumptions that 1 (Low Case), 2 (Base Case) or 3 (High Case) feeder services from the Port of Colombo are re-routed towards the International Container Transshipment Port Maldives.



Gateway Market Potential Projections up to 2050

- The gateway container projection for the International Container Transshipment Port Maldives is expected to vary:
 - Between 0 (Low Case) and 74,000 TEU (High Case) in 2024.
 - Between 0 (Low Case) and 235,000 TEU (High Case) in 2050.
 - 45,000 TEU in 2024 and 160,000 TEU in 2050 in the Base Case.
- In the **Low Case**, it is assumed that all direct liner services will be handled by the New International Port of Gulhifalhu.



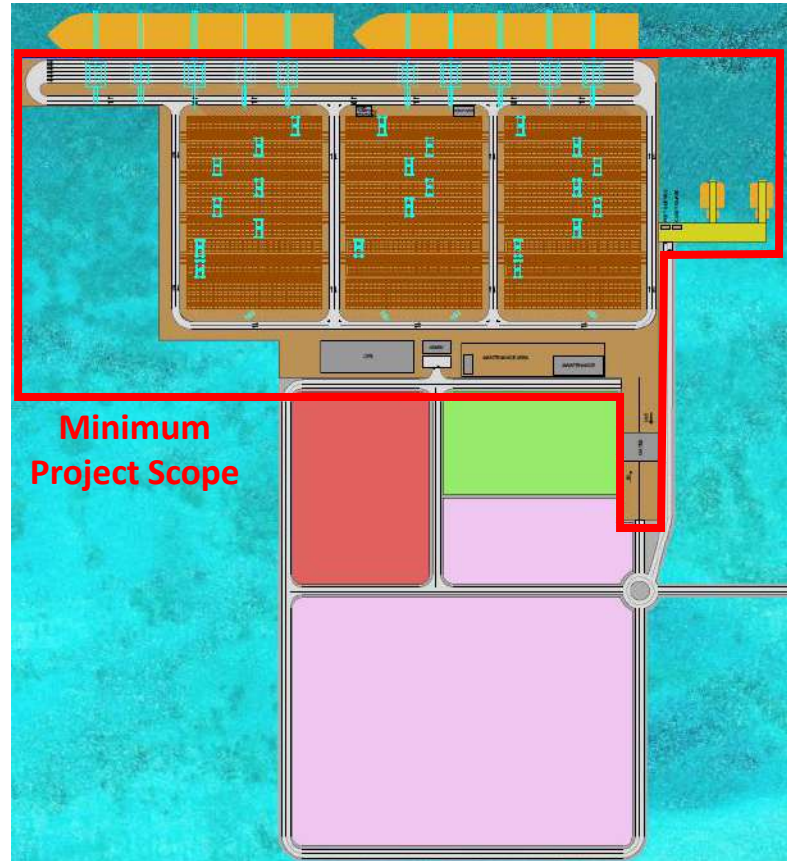
3. Project Scope

Port Conceptual Design

Phased Port Development

- The minimum scope of the Project is the “International Port” and “Port Service Area”. These are included in the project investment requirement.
- The minimum scope is to be developed in 2 phases.
- Phase 1 construction planned to start in 2021; operations in 2024.
- Phase 2 expands the international port quay and yard area, constructs a domestic port and relocates the port services area.
- The expansion’s construction is proposed to trigger when Phase 1 has 85% utilisation (est. in 2030).
- All zones outside the “minimum scope” are optional; the investor is free to propose development as required.

Phase 1 Layout: 1,850,000 TEU/pa Capacity (2024)



Minimum
Project Scope

International
Port

Port Service
Area

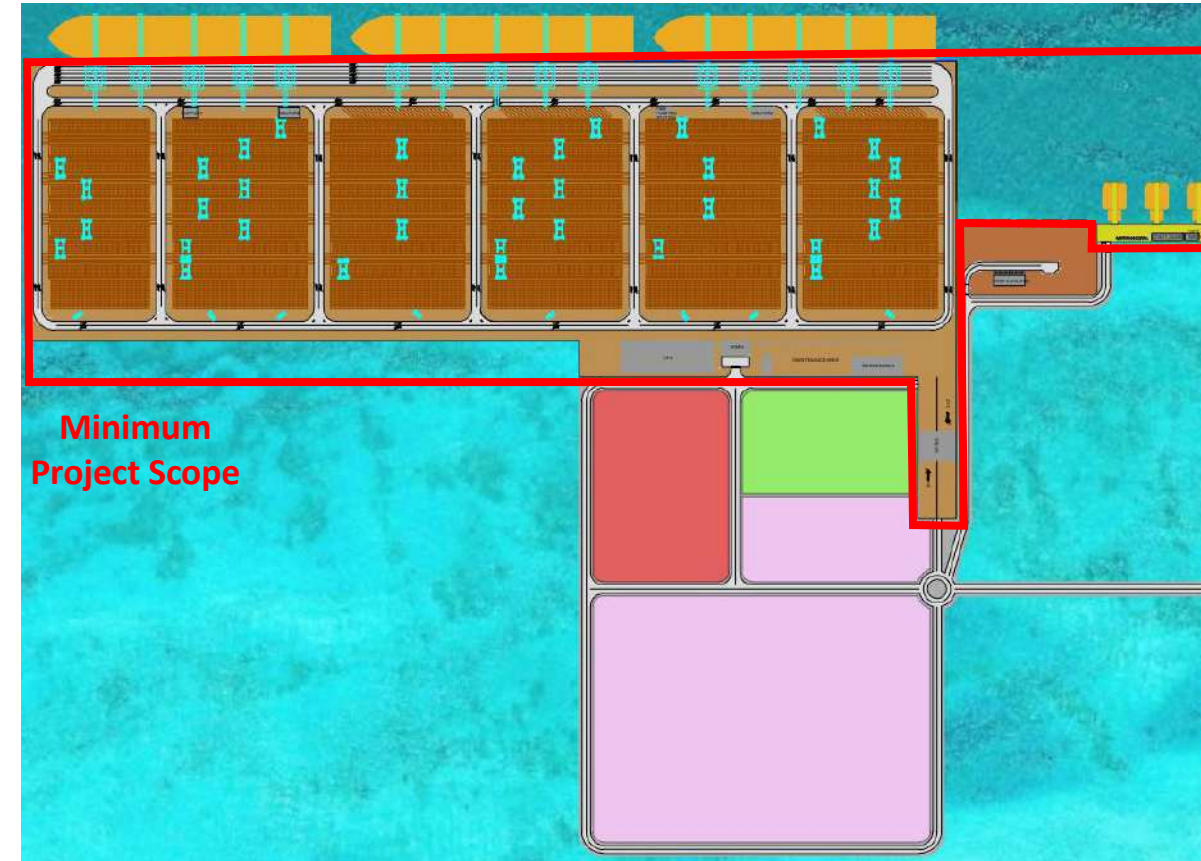
Auxiliary Facilities
Zone

Accommodation
Zone

Logistics Park

Domestic Port
(Phase 2 Only)

Phase 2 Layout: 3,430,000 TEU/pa Capacity (2033 start operations)



Minimum
Project Scope

International
Port

Port Service
Area

Auxiliary Facilities
Zone

Accommodation
Zone

Logistics Park

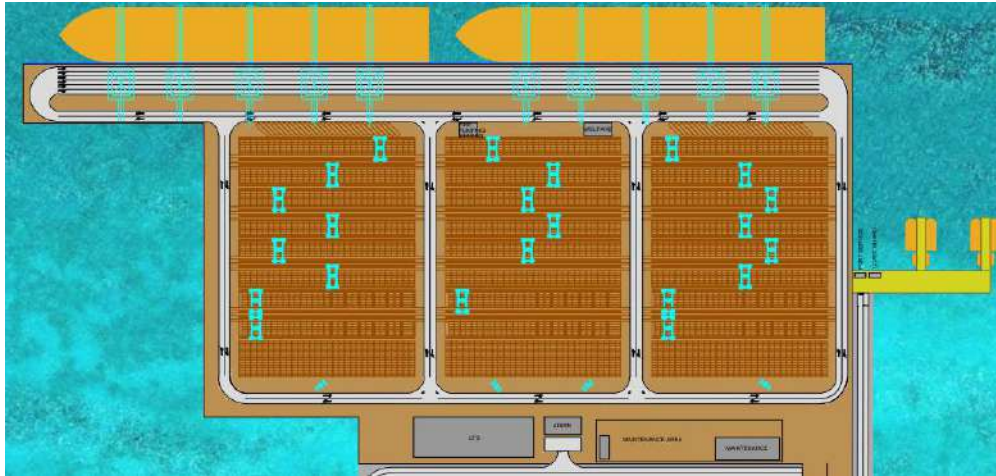
Domestic Port
(Phase 2 Only)



3. Project Scope

Port Capacities

Phase 1 | area 33.0 ha | quay length: 900 m | period 2024-2032

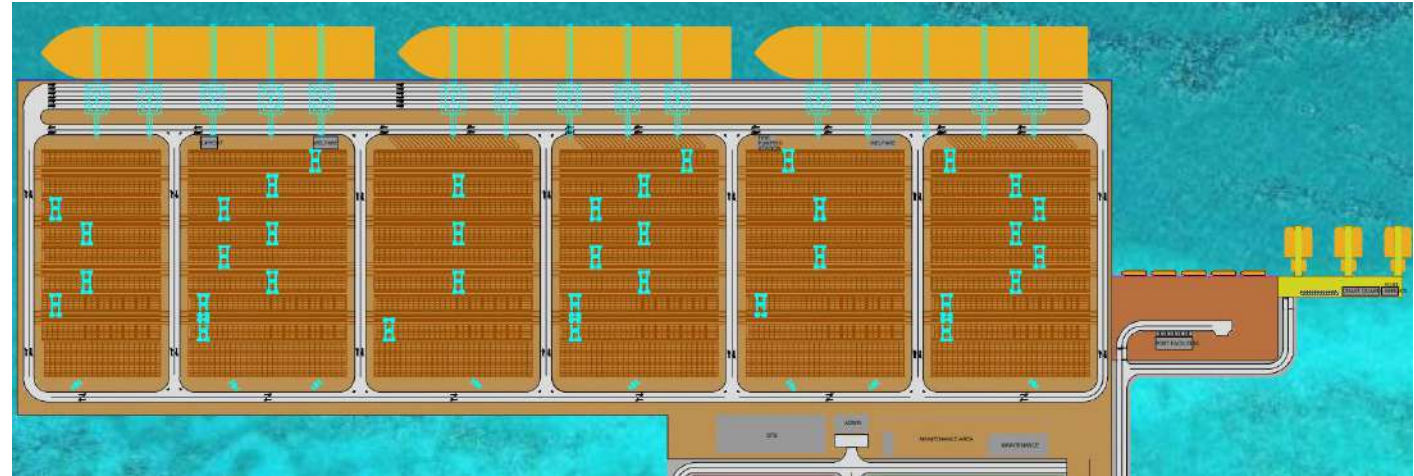


Operational Equipment Fleet Minimum Requirements

Operational Equipment Fleet	Phase 1	Phase 2
STS Gantry Cranes	10	15
Rubber Tired Gantry Cranes	22	36
Reach Stackers	2	3
Empty Handlers	4	8
Tractor Trailers	50	76
Trailers	10	17

→ This equipment fleet requirement is an estimation; **bidders are free to propose their own preferred operational set-up and fleet requirements**

Phase 2 | area 56.0 ha | quay length: 1,320 m | period 2033-2050



Full, Empty and Reefer Yard Storage Capacities

Yard Components	Phase 1	Phase 2
Full ground slots (RTG blocks; TEU)	4,212 (Incl. 432 reefers)	8,052 (Incl. 864 reefers)
Full static capacity (RTG blocks; TEU)	21,060 (Incl. 2,160 reefers)	40,260 (Incl. 4,320 reefers)
Empty ground slots (TEU)	1,350	2,580
Empty Static capacity (TEU)	9,450	18,060
Total container yard static capacity (TEU)	30,510	58,320
Total throughput Capacity (TEU/pa)	1,850,000	3,430,000

3. Project Scope

Project development minimum scope

The minimum technical scope of the project are the **green areas**; extra technical score can be earned (during RFP stage) by including **golden area(s)** in the technical proposal too

International Port Area	Port Service Area	Auxiliary Facilities Area	Accommodation Area	Logistics Area	Domestic Port Area	Others
Minimum Scope for Technical Scoring	Minimum Scope for Technical Scoring	Optional/Extra Scope for Technical Scoring	Optional/Extra Scope for Technical Scoring	Optional/Extra Scope for Technical Scoring	Optional/Extra Scope for Technical Scoring	Optional/Extra Scope for Technical Scoring
<ul style="list-style-type: none"> • Dredging (access channel, turning basin, berth pocket) • Reclamation and ground improvements • Quays • Apron • Full stack • Reefer stack • Empty stack • Equipment parking • Maintenance area • Utilities • Gate complex • Main admin building • General parking • Customs inspection Area • CFS 	<ul style="list-style-type: none"> • Quays • Apron • Service building • Gate complex • Utilities <p>↓</p> <div> <p>The international port and port service area should be self-sufficient and therefore needs its own utilities, including:</p> <ul style="list-style-type: none"> • Electricity • Potable water • Wastewater treatment • Sewage • Drainage • IT & Communication </div>	<ul style="list-style-type: none"> • The construction of the auxiliary facility area would be a strategic decision to be made by the investor. • Area reclamation and ground improvements for own utilities. • Bunkering services (if proposed) 	<ul style="list-style-type: none"> • The construction of the Accommodation zone would be a strategic decision to be made by the investor. • Area reclamation and ground improvements for housing and real estate. 	<ul style="list-style-type: none"> • The construction of the logistics area would be a strategic decision to be made by the investor. • Reclamation and ground improvements for logistics. • It would likely be classed as a free zone (i.e. a custom-bound district) to encourage its use and increase local employment in the area. 	<ul style="list-style-type: none"> • The construction of the domestic port would be a strategic decision to be made by the investor • Reclamation and ground improvements for domestic port. • Quays • Apron • Admin Building • Gate Complex • Utilities 	<ul style="list-style-type: none"> • Reclamation and ground improvements for a causeway to local town. • Road connections outside the international port and port service area.

Minimum Scope: Bidders should include at least these two project development components in their technical proposal

Optional Scope: Bidders have the opportunity to also include the development of any (or multiple) of these five areas in their technical proposals for which **extra technical score can be attributed during RFP Stage**. This will be subject to negotiations with GoM



3. Project Scope

Phase 1 Investment Requirements

The total investment requirement of developing the international port and port service area is estimated to accumulate to USD 466.3 Million (M).

Investment Requirement	Unit	Phase 1 Construction	International Port Area	Port Service Area	Auxiliary Facilities Area	Accommodation Area	Logistics Area	Domestic Port Area	Others				
Infrastructure (I) Investments	M USD	129.5	Included in Phase 1 investment requirement	Minimum Scope Investments	Not included in Phase 1 investment Requirement								
Superstructure (S) Investments	M USD	112.9											
Equipment (E) Investments	M USD	172.4											
Contingencies on I&S	M USD	51.5	Optional Scope Investments										
Investment Requirement	M USD	466.3								The International Port and Port Service Areas should be self sufficient: investors should develop their own utilities as part of Phase 1			

*Infrastructure and Superstructure (I&S) Investment requirements include 20% contingencies; contingencies on Equipment is considered negligible.

Infrastructure included in Phase 1 CAPEX

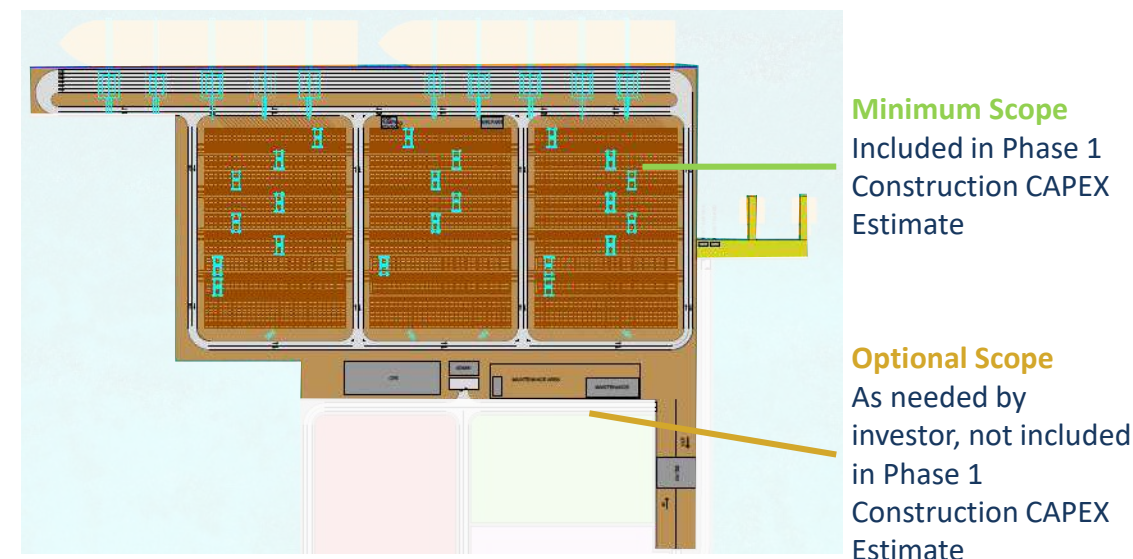
- **Nautical works:** dredging (berth pocket and access channel); reclamation.
- **Civil works:** Revetment; quay structures.

Superstructure included in Phase 1 CAPEX

- **Buildings:** Admin building, CFS/customs building, etc.
- **Supporting facilities:** Pavement, fences, gates, M&E, etc.
- **Other:** Reefer racks, weighbridges, etc.

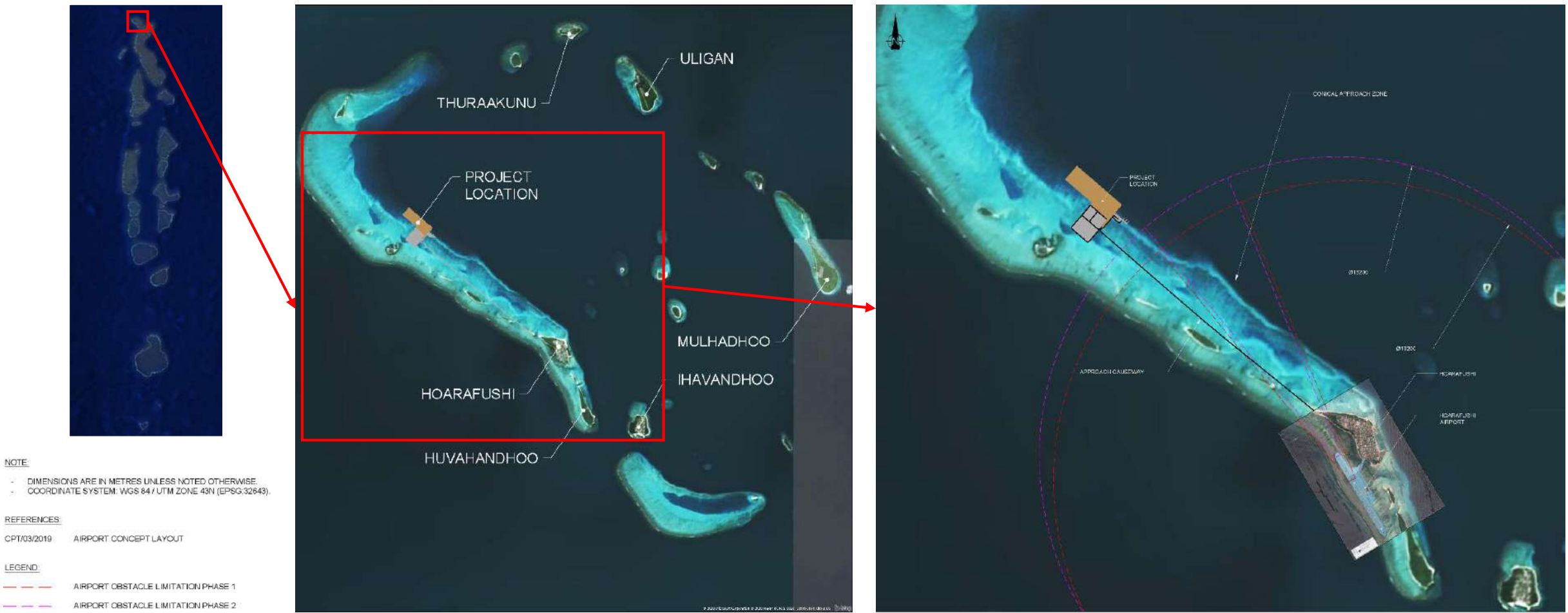
Equipment included in Phase 1 CAPEX

- **Terminal equipment:** STS cranes, RTGs, reach stackers, empty handlers, tractors, trailers, forklifts and staff vehicles.
- **Marine equipment:** Tugboats and Speedboats.
- **Other equipment:** Aids to Navigation and VTMS.



3. Project Scope

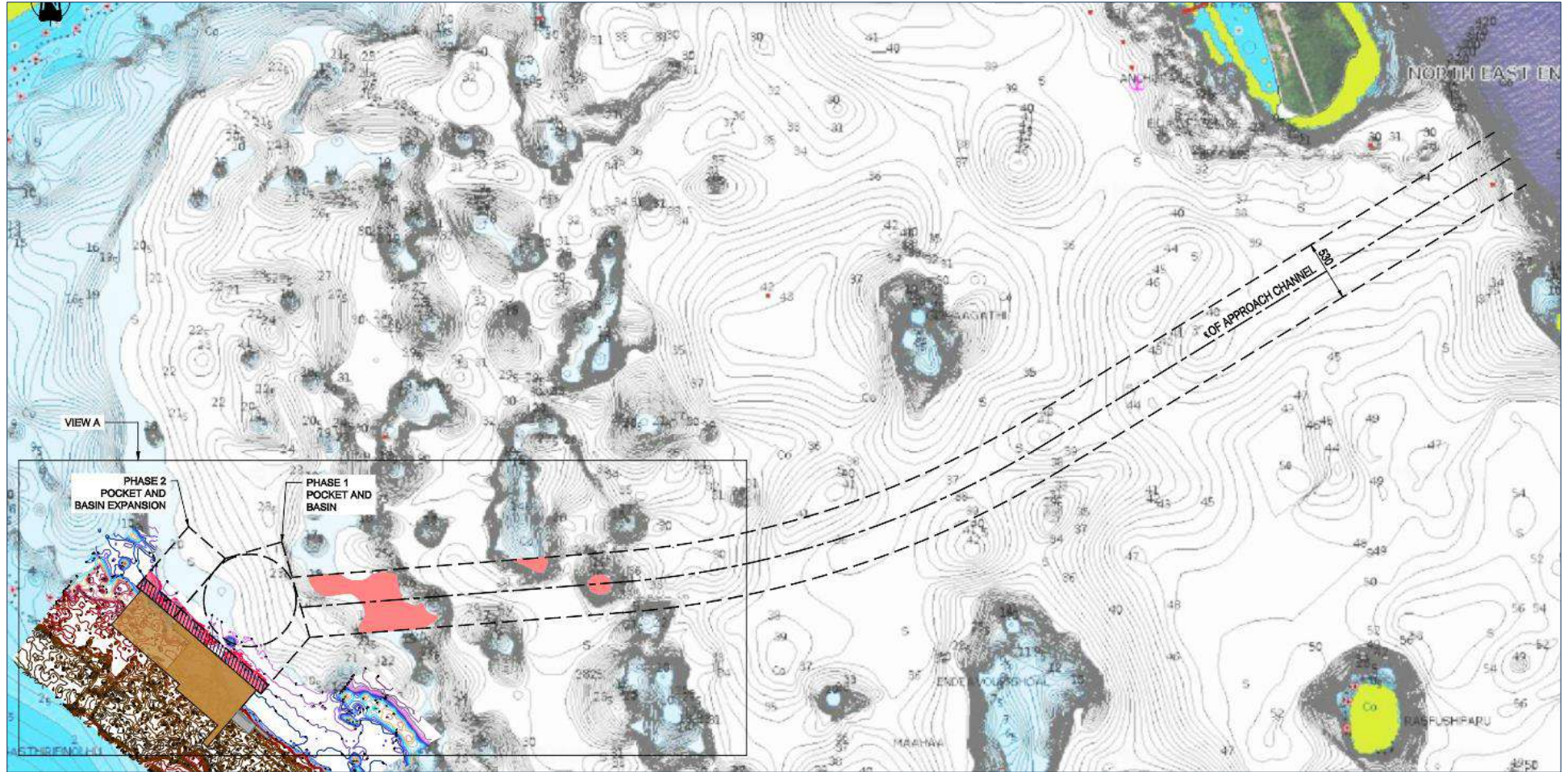
The port location has been selected considering elements, amongst others, airport approach clearance, ability to connect to community and proximity to shipping lanes, good nautical accessibility and abilities to expand.



3. Project Scope

Nautical accessibility

- The dredging of the access channel, berth pocket and turning circle is part of the minimum scope of this project.
- The access channel shall have a width of 525m at the Atoll entrance.
- The access channel **minimum width will be 366m**, which allows two-way navigation.
- The access channel shall have a clear **depth of CD -20.2m** (-20.9m MSL). Dredging requirements are highlighted as red marked areas.
- **Ample anchorage options** to the north or south of the approach channel.
- Assuming an average approach speed of 12 knots from the entrance, the **estimated transit time is just below 35 minutes**.



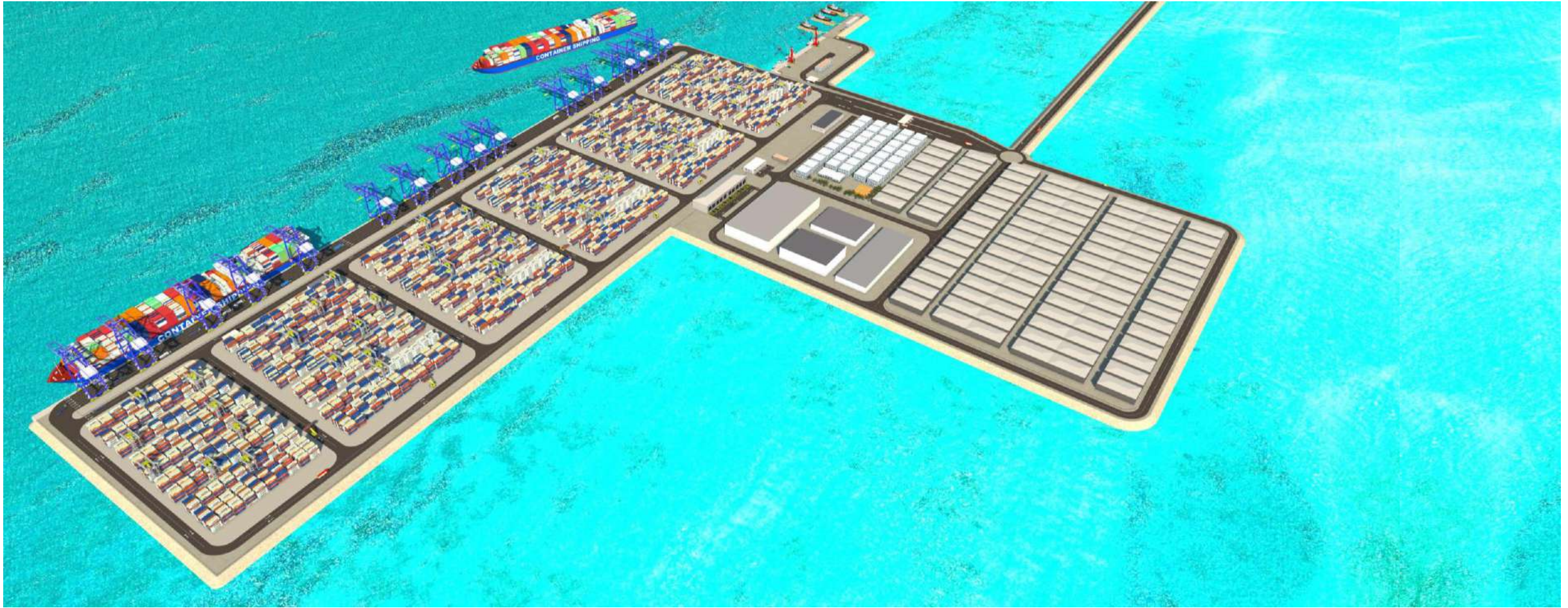
3. Project Scope

3D Impressions



3. Project Scope

3D Impressions



3. Project Scope

3D Impressions



3. Project Scope

3D Impressions



3. Project Scope

3D Impressions



3. Project Scope

3D Impressions



4. The Business Opportunity



4. The Business Opportunity

Key reasons for investing in this Port Development Project



The port's strategic location in Southern Asia near the main East-West route and near feeder markets make it a strategic asset for liner network optimisation

5. Project Structuring



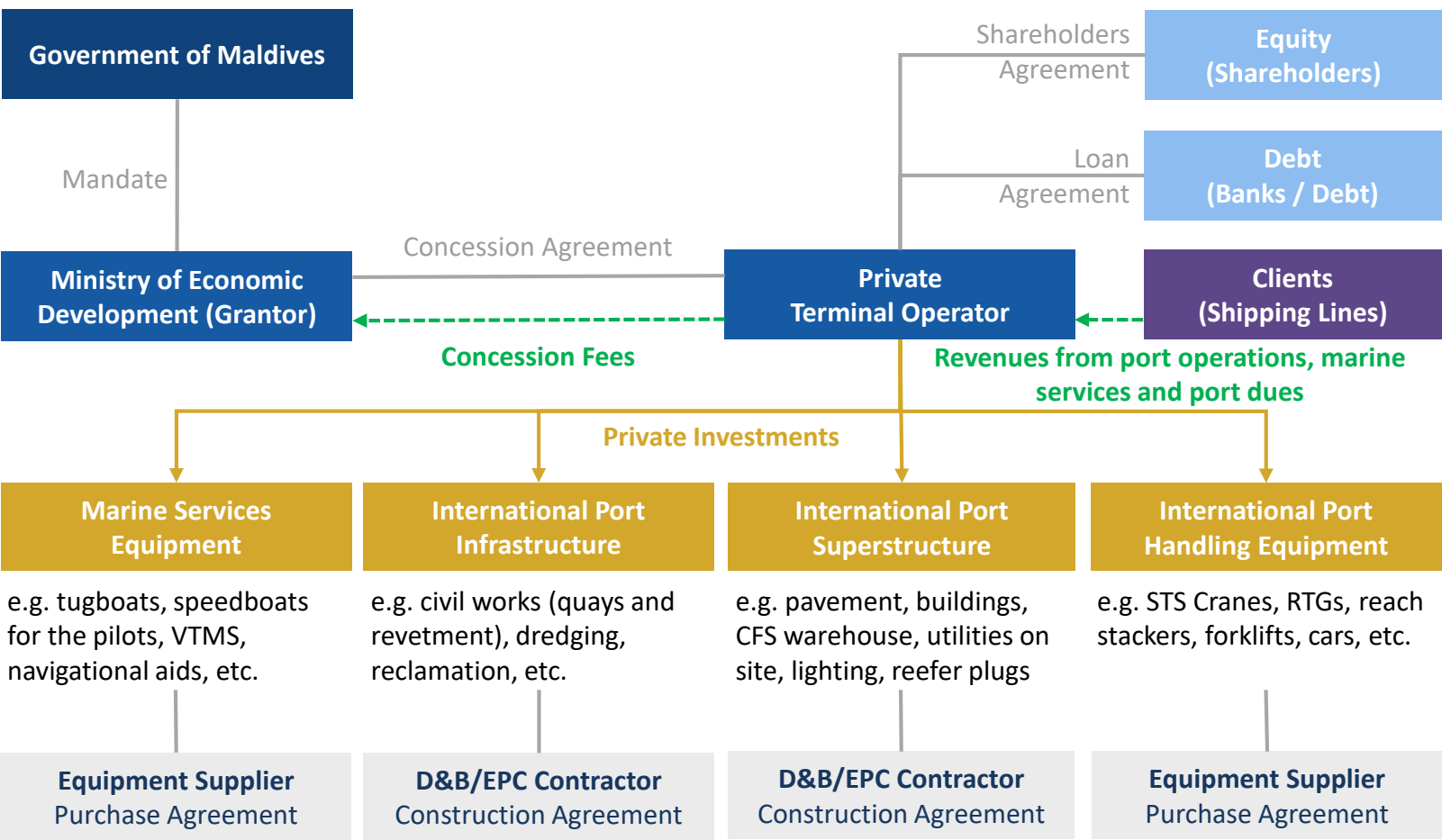
5. Project Structuring

A BOT PPP implementation structure is envisioned. Under this structure, the private investor enjoys substantial freedom in the port’s design and development pace.

Project Structuring

- The International Container Transshipment Port Maldives is envisaged to be implemented through a **Build Operate Transfer (BOT) structure**.
- Under a BOT, all port development responsibilities are allocated to the private sector. In return, the private sector has substantial freedom in terms of:
 - Final design decisions.
 - Operational setup.
 - General port nautical infrastructure.
 - Development pace and phasing.
 - The expansion is currently proposed to be triggered when Phase 1 reaches 85% capacity utilization.
- Under a BOT, **all revenues are collected privately**, meaning:
 - Port dues and marine services revenues
 - Container handling and storage revenues
 - Other terminal revenues (e.g. CFS, container cleaning and weighing, pre-trip inspection, VGM certification, reefer electricity charges, etc.)
- **A 30-year PPP agreement** (3 years construction; 27 years of operations (**tentatively 2021-2050**)).

The Build Operate Transfer (BOT) Structure for the International Container Transshipment Port Maldives



6. Transaction Procedures



6. Transaction Procedures

Transaction Scope, Structure and Strategy

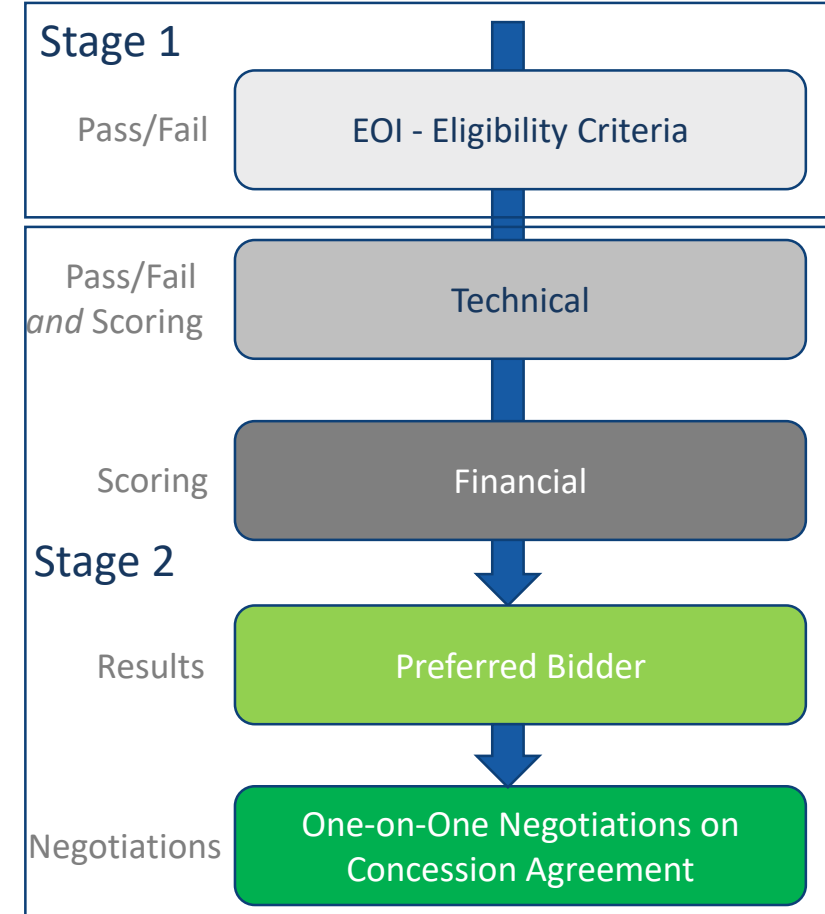
Scope

- The **scope of the transaction includes** the development, construction, financing, operation, maintenance and transfer of the International Container Transshipment Port Maldives, located in Ihavandhippolhu Atoll.
- This **new facility should be able to** handle world's largest container vessels.
- The International Container Transshipment Port Maldives should be **self-sufficient**.
- The **main goal of the transaction strategy is to** receive successful bids and eventually reach a signed Concession Agreement and financial close.

Structure

- This transaction will be structured as **an open two-stage competitive tender procedure**.
- This two-stage approach has **four objectives**:
 - **Receive market feedback** during EOI.
 - Evaluate the bidders based on the established eligibility criteria and **create a short-list of bidders**.
 - The bidders who pass the eligibility criteria will receive a RfP and Draft Concession contract to **insert their business plan offer** during the proposal stage.
 - Bids are **evaluated on their technical score. If the minimum technical threshold is met, the financial score is also evaluated**.
- The selection process applied during the proposal stage results in **the selection of a preferred bidder** that reaches the highest combined score based on the technical and financial evaluation.
- After selecting the preferred bidder, **one-on-one negotiations commence** between the Government of Maldives and preferred bidder, aimed at finalising the terms of the Concession Agreement.

Strategy



Thank you

Address Wijnhaven 3^e
P.O. Box 601
3011 WG Rotterdam
The Netherlands

Telephone +31 (0)10 286 59 40

Email Info@mtbs.nl

