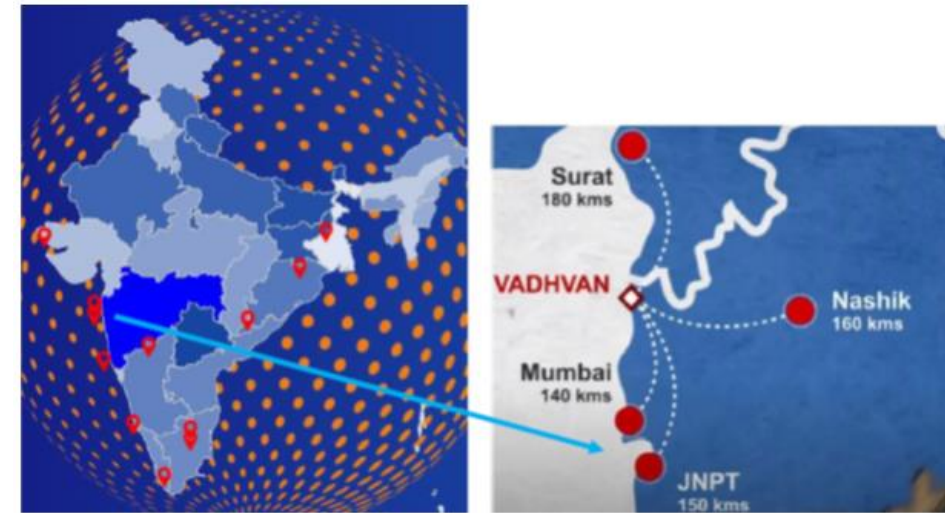


PROJECT BACKGROUND

- The Government of India initiated the ambitious SAGARMALA project which aims at capacity enhancement of all major ports by means of increasing the productivity and efficiency through mechanisation of berths, stackyard and effective evacuation of cargo.
- Development of Vadhavan Port as mega port of JNPT is one such initiative of Government of India. This would facilitate larger contribution of Major Ports in sea borne trade of India.
- Vadhavan Port was conceived by JNPT in 2015 and a Detailed Project Report (DPR) was prepared in 2018. The Government of India gave 'In-Principle' approval to develop the port in 2020.
- Royal Haskoning DHV (RHDHV) has been engaged by JNPT to update the DPR and provide design and detailed engineering for Vadhavan Port.



SALIENT FEATURES OF DEVELOPMENT

- Vadhavan Port is planned to be developed by JNPT (Jawaharlal Nehru Port Trust) and MMB (Maharashtra Maritime Board) as Joint Venture Project with equity share of 74% & 26% respectively.
- The port will be developed in two phases.
- The proposed port is to be developed on landlord model with the port terminals to be developed on PPP basis.
- In this model, basic infrastructure of the port necessitating upfront investment such as, breakwater, reclamation & shore protection bund, rail and road linkages, power, water lines and common infrastructure and services will be developed by the port/ SPV.
- Whereas all cargo handling infrastructure will be developed and operated by the agencies which are awarded concessions through global tender in an open and transparent manner by the port.



Project Cost & Investment requirements -

Berths/ Terminals	Berth/quay length (m)	Ship max draft (m)	Phase 1	Phase 2	Total (Master Plan)	Total Cost (in Cr.)
Container quay (1,000 m each)	1,000	16.5	4	5	9	24194.00
Multi-purpose berths (250 m each)	250	10.5	3	1	4	989.00
Liquid bulk berths	200	9.5	2	0	2	313.00
LPG berth	280	10.5	1	0	1	238.00
Ro-Ro berth	250	11.3	1	0	1	188.00
Concessionaire Cost (Private Investment)						25921.00
Infrastructure Cost by JNPA (Basic cost without IDC/GST/Financial cost)						34746.80

MODE OF IMPLEMENTATION

- Port to be developed on landlord basis.
- Basic Infrastructure to be developed by landlord basis (JNPA/VPPL).(Rs. 44,376/-Crs by SPV with IDC & GST/Financial Cost) Land Acquisition cost Rs.785 crs
- Terminal related infrastructure to be developed by PPP operator.(Rs. 32,040/- Crs private investment with IDC/GST/Financial cost)

Total Cost (without IDC/GST/Financial cost)

Rs. 60,667.80 Cr

Total Cost (with IDC & GST/Financial cost)

Rs. 77,201.00 Cr

Landlord, PPP and External Agency Components

Landlord Components	PPP Components - Phase 1	External Agencies Components
Breakwater	Container Terminals (1,2,3,4)	External Road Connectivity to Port – NHAI
Dredging, Reclamation upto +5.0m CD and Shore protection bund	Multipurpose Terminal	Rail Connectivity to Port – DFCC
Approach Trestles, Tug Berth, Internal roads	LPG Terminal	External Utilities – MJP, MSETCL - Water and Power supply to the port
Utilities – Water, firefighting and Power supply, Drainage and Sewage	Liquid Bulk Terminal – Jetty 1 & 2	
Buildings - Admin Building, Port user building, Port Operations Building, Other landlord port buildings, Gate Complex, etc.	RORO Terminal	
4	In-port rail yard	

Landlord Tender Packages

Packages	Description
Package 1	Marine Civil Works Breakwater, Pipeline service trestle for Island jetties, Trestle to breakwater head, Approach road bridge for ITV movements and TUG berths
Package 2	Dredging, Reclamation upto +5.0 m CD and Shore Protection Works
Package 3	Onshore Civil Works and Utilities Buildings, Pavements/Internal roads, Flyover, Underpass and Utilities
Package 4	External Road Connectivity to Port – NHAI
Package 5	Rail Connectivity to Port – DFCC
Package 6	External Utilities – MJP, MSETCL Water and Power supply to the port

PPP Packages

PPP Packages	PPP Components - Phase 1
Package A	Container Terminal 1
Package B	Container Terminal 2
Package C	Container Terminal 3
Package D	Container Terminal 4
Package E (750m long berth)	Multipurpose Terminal
Package F	LPG Terminal
Package G	Liquid Bulk Terminal (2 no.)
Package H	RORO Terminal

Package 1 – Marine Civil Works (Timeline: April 2023 – June 2027)

□ Package 1A – Breakwater

- All the design requirements have been already defined, but residual engineering works are still to be carried out by the contractor
- Review, adoption and ownership of the design by the contractor in consultation/ approval by CWPRS/ Engineer
- Interface with other contractors will be appropriately covered in the contract
- To be developed based on FIDIC Yellow book

□ Package 1B – Tug berth and Approach Trestles

- To be based on FIDIC yellow book

Package 2 - Dredging, Reclamation upto +5.0 m CD and Shore protection works (Timeline: April 2023 – Sep 2026)

- Will be based on FIDIC blue book (Dredging and Reclamation works).
- Phasing of works.
- FIDIC standard conditions of the contract with additional particular/special conditions based on JNPT's requirement.

Package 3 - Onshore Civil Works and Utilities (Timeline: Aug 2024 – March 2026)

- ❑ Buildings – Landlord Port Buildings
- ❑ Pavement/ Internal roads, Flyover, Underpass
 - Equipment's – Weighbridges, OCR portal scanners, Railway scanners, security barriers
- ❑ Utilities
 - Firefighting
 - Internal water and power supply
 - Drainage and Sewage
- ❑ The above packages can be based on FIDIC yellow book

Package 4 – External Road Connectivity to Port (Timeline: April 2023 – March 2026)

- ❑ Dedicated road provided to the port with no local interventions
- ❑ 34 km long 8 lane road connecting the port to NH 48
- ❑ 2 junction arrangements provided connecting to , Mumbai – Vadodara expressway and NH 48
- ❑ Connectivity include:
 - 33 minor bridges,
 - a major bridge across over Surya river
 - and ROB for rail crossing
 - 24 underpasses

Package 5 – Rail Connectivity to Port (Timeline: April 2023 – March 2026)

- ❑ 12 km long -Two rail lines connecting the port with IR and DFCC at New Palghar station
- ❑ Common in-port rail yard to cater container traffic and other traffic
 - For Phase 1 – 3 clusters of rails provided. Each group comprises of 6 lines for loading/unloading of container rakes and one line as- sick line and separate yard for other cargoes.
 - Marshalling yard with ROR is proposed at New Palghar station.

Package 6 - External Utilities – MJP, MSETCL (Timeline: April 2023 – March 2026)

- ❑ **Package 6A – External Water Supply**
 - Water supply from the identified source to port site
 - Work would be taken up by MJP
- ❑ **Package 6B – External Electric Supply**
 - Electric supply from the identified source to port site
 - Work would be taken up by MSETCL

Package PPP – Container Terminal (Timeline: June 2025 – June 2027)

□ Container Berth

- 1,000 m long and 47.5m wide
- Deck structure supported on piles with underdeck shore protection works.
- The dredge depth is -19.5mCD
- Berth is designed to cater 24,000 TEU vessels

