ANNEXURE-2

VISAKHAPATNAM PORT AUTHORITY

ENGINEERING DEPARTMENT

WORK ORDER NO:09 OF E.E(P&D) OF 2024-25

No. IENG/ (E.E(P&D)/DRP/659/Pt.I / **Date:17.10.2024.**

From

The Secretary & Attorney of the Board,
Visakhapatnam Port Authority,
VISAKHAPATNAM – 530 035

To

The Group General Manager,
Ports and Waterways,
RITES Limited,
RITES Bhavan, Plot -1, Sector-29,
GURGAON – 122 001

Sir,

Sub: Setting up of a Major Port Cum Shipbuilding Cum Repair Cluster in Duggirajupatnam in the State of Andhra Pradesh – Engaging M/s RITES for preparation of **Techno Economic Feasibility Report** (TEFR) – Reg.

Ref: 1) VPA's letter no: IENG/EE(P&D)/DUR/2024 dated: 04.10.2024.
2) M/s RITES letter no : RITES/P&WR/BD/VPA/7/2024 dated:08.10.2024.
3) VPA's letter no : IENG/EE(P&D)/DUR/2024 dated: 10.10.2024.
4) M/s RITES letter no : RITES/P&WR/BD/VPA/7/2024 dated:10.10.2024.

Your revised offer for an amount of Rs.16,90,00,000 /-(Rupees Sixteen Crores ninety lakhs only) Plus GST in connection with " Preparation of **Techno Economic Feasibility Report** (TEFR) for setting up of a Major Port Cum Shipbuilding Cum Repair Cluster in Duggirajupatnam in the State of Andhra Pradesh " as per Ministry's directives and as per Terms of Reference (ToR) submitted by you as mentioned below has been accepted. The Present rate of GST is 18%.

a) Terms of Reference for Establishing a Major Port

1. Identify suitable location for development of Port at Duggirajupatnam
2. Conduct traffic surveys in the hinterland of the proposed port and analyze the same for the port facilities to be set up at the identified port location.

3. Based on the traffic data and analysis, traffic projections for the ports in terms of category and volumes for a period of 20 years for the proposed new green field port will be made.
4. Conduct bathymetric surveys at the proposed port location covering a total length of 10 km. along the coastline to determine the draft of the vessel and assessment of capital dredging.
5. Conduct limited topographic survey in the proposed port area.
6. Conduct littoral drift studies for assessment of maintenance of dredging.
7. Collect secondary data on waves, tides, currents and other oceanographic parameters relevant to the study from the nearby ports and other sources.
8. Conduct numerical model studies based on the data / inputs obtained from the above suite investigations for wave propagation, wave penetration and harbour tranquility. Mathematical model studies for morphology, shoreline stabilization siltation, maneuverability, current & tides. Physical / hydraulic model studies for breakwater stability.
9. A tentative layout plan of the port facilities proposed port along with all other ancillary facilities including the approach channels, turning basin based on the wave tranquility as per the standard guidelines in the operational areas, has to be provided.
10. Assess the cargo possible to be handled at the proposed jetties including the total capacity possible to be created with likely commodity-wise distribution of the capacity, the number of vessels likely to be handled, their parcel size etc.
11. Workout the capacity of the berth / jetty in terms of the number of vessels per annum which may be accommodated along with estimated cargo output.
12. Assess the equipment and flotilla support required to be provided at the proposed jetties for handling cargo and vessels.
13. Assess the total area required for the port development, land required for creation of storage facilities, arterial road, railway siding, aggregation and evacuation facilities and other infrastructure required for handling the cargo as per capacity required.
14. Indicate the feasible tentative layout of providing rail / road connectivity between the proposed port location and the existing rail / road networks based on available topo-sheets / satellite imageries.

15. Carry out soil exploration / drilling of boreholes (9 Nos. of marine and 6 Nos. of land) for conceptual design of major marine structures such as jetties / wharfs / berths and breakwaters as per Indian Standard Specification and also to come out with tentative cost of construction of port building and other any other major related facilities proposed.
16. Master plan site selection and assessment of port infrastructure.
17. Carry out initial environmental Impact Assessment, Study for the commodities likely to be handled at the proposed jetties based on secondary data collection.
18. Conduct Coastal Regulation Zone (CRZ) study at the proposed port for a coastal reach of 5 km. length through the approved agency for regulatory clearance to be obtained by the client.
19. Arrive block cost estimate of major items of the works proposed.
20. Assess the economic and financial benefits of the project and calculate EIRR and FIRR for implementation of the project through PPP mode.

b) <u>Terms of offer for Shipbuilding cum repair cluster</u>

1. **Identification of Areas** for establishment of flagship ship building cum repair yard for building and repairs of suitable size of Capesize, Handymax and Panamax vessels, requirement of water front and land area for setting up of land based facilities at Duggirajupatnam or any other suitable location in Andhra Pradesh.
2. To carry out the **market studies** to see the potential for ship building cum repair yard for Indian and Foreign vessels.
3. Preparation of detail Feasibility study for establishment of ship building cum repair yard for various sizes of vessels repair based on the market studies and creation of land side facilities. The preparation of detail inventory of Machineries and equipment's required workshop facilities and other ancillary units and their market rates.
4. Assess the total area required for development of Ship Building Cum repair yard.
5. Conduct necessary studies such as bathymetric, topographic survey and geo-technical investigations.
6. Arrive Block Estimate for the Project.
7. Preparation of Revenue model for project, indicating the likely guaranteed revenues to Port, operator. Calculation of IRR. EIRR, NPV for Port and

Operator, based on various scenario and sensitivity analysis for a period of 30 years.

8. Brief chapter on Likely Environmental Impact during construction, dredging, dismantling of existing structures and during operation of ship repair and likely hazards and how to mitigate the same
9. SWOT and Risk analysis.
10. Details working of Manpower requirement, availability of trained / skill workforce
11. Details of Power requirements, water, STP, storage and disposal of hazards waste shall cover in the Feasibility report.
12. Identify suitable location for development of Port at Duggirajupatnam.

c) Payment Schedule:

Stage 1	On submission of preliminary appraisal report	25%
Stage 2	On completion of field work of Bathymetric/Topographic/ Hydraulic / Traffic surveys.	15%
Stage 3	On completion of Geo-technical investigations	15%
Stage 4	On completion of Model Studies Report	10%
Stage 5	On completion of Draft Feasibility Report	25%
Stage 6	On completion of Feasibility Report	10%

d)Time Schedule:

The TEFR shall be submitted within 6 months from the date of issue of work order, timelines for other deliverables may be submitted.

You are requested to Contact Chief Engineer for further details and start the work accordingly.

You have to enter into an agreement on non-judicial stamp paper worth R.100/- (Rupees one hundred only) immediately.

M/s RITES letters and VPA's letters cited along with this work order shall form part of the contract to be entered by you with the Port Authority.

Yours faithfully,

Secretary
&Attorney of the Board.

Copy to: Chief Vigiliance Officer, VPA for information.
Copy to : FA&CAO for information.
Copy to: TM/Secretary/CME for information.
Copy to: E.E(P&D) for information and necessary action.