



**Tender for**

**SUPPLY, CUSTOMISATION, IMPLEMENTATION AND  
MAINTENANCE OF AN INTEGRATED PORT OPERATION SYSTEM (POS)  
FOR  
VISAKHAPATNAM PORT TRUST**

**TENDER NO: IRNP/IT/Proc/POS/2020-21**

**Date: 12-01-2021**

**Visakhapatnam Port Trust  
Administrative office building  
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## NOTICE INVITING TENDER

**TENDER NO: IRNP/IT/Proc/POS/2020-21**

**Date: 12-01-2021**

Visakhapatnam Port Trust, an autonomous body, under the Ministry of Ports, Shipping & waterways, Govt. of India plans to address both the business and technology needs through a “Commercially available off-the-shelf- product” that provides VPT with a cutting edge in information technology. The port invites bids from experienced and qualified software provider and System Integrator for **SUPPLY, CUSTOMIZATION, IMPLEMENTATION AND MAINTENANCE OF AN INTEGRATED PORT OPERATION SYSTEM (POS)**, VPT is interested to have a POS system implemented and operational at the earliest.

VISAKHAPATNAM PORT TRUST invites **e-Tenders** in two-part system (Part-I Technical Bid and Part-II Price Bid) from eligible bidders in India for the work of ‘Supply, Customization, Implementation and Maintenance of an Integrated Port Operation System (POS) for a period of 6 years (6 Months implementation+ 6 months stability + 5 Years AMC).

Bid documents can be downloaded from the e-Tendering portal ([www.etenders.gov.in](http://www.etenders.gov.in)) on the dates specified in the Schedule of Activities given below by making online requisition & submission through online **mode through website portal available in website for the Cost of bid document drawn in favor of the FA & CAO**, VISAKHAPATNAM PORT TRUST and scanned copy of the same shall be attached with the e-tender.

Schedule of Activities		
S.No	Information	Details
1	Tender Issuing Authority	FA & CAO,VPT
2	Purpose of Tender	<b>SUPPLY, CUSTOMISATION, IMPLEMENTATION AND MAINTENANCE OF AN INTEGRATED PORT OPERATION SYSTEM (POS), VPT.</b>
3	Tender Issue Date	16 -01-2021 15:00Hrs
4	Availability of tender documents	<a href="http://www.etenders.gov.in">www.etenders.gov.in</a>

5	Non Refundable Tender Cost	Non-refundable INR 1500 + 18% GST=1770/- (Rs. One Thousand Seven Hundred and Seventy only) in form online mode only SBI, PORT BRANCH, A/C No. -30387186900,IFSC-CODE: BIN0001740
6	Earnest Money Deposit	Rs.28,00,000/-in the form of Bank Guarantee issued by a Indian Nationalized / Scheduled Bank and drawn in favor of Visakhapatnam Port Trust , payable at Visakhapatnam valid for 12 months from the date of submission of bid
7	Visit to ports	Refer to VPT website
8	Last date and time for submission of queries for clarifications	<p>All the queries/clarification requests should be received on or before 21 01 2021 15:00 HRS, through email only with subject line as follows:</p> <p>"Pre-Bid queries -&lt;Bidder's Name&gt;_POS_VPT".</p> <p>The queries shall be submitted in an excel file as per the format prescribed in Volume I of the tender</p> <p>The Pre-Bid queries to be sent to the following Email Ids: Email ID 1:rnp.krkvpt@gov.in Email ID 2: gkrnp.vpt@gov.in</p>
9	Date, time and venue of pre-bid meeting	<p><b>29 -01-2021 1500Hrs</b></p> <p>Visakhapatnam Port Trust Visakhapatnam Admin Building</p>
10	Last date and time (deadline) for receipt of proposals in response to tender notice	22 -02-2021 15:00Hrs
11.	Last date and time (deadline) for receipt of Bid.	22 -02-2021 15:00Hrs

12.	Date, time and venue of opening of Technical Proposals received in response to the tender notice	24-02-2021 15:00Hrs Visakhapatnam Port Trust Admin Building
13.	Place, time and date of opening of Financial Proposals received in response to the tender notice	To be intimated later
14.	Language	Proposals should be submitted in English only.
15.	Bid validity	Proposals must remain valid up to 180 (One Hundred & Eighty) days from the last date of Submission of the Bid.

The Schedule of Activities outlines the estimated schedule for important action dates and times. If Visakhapatnam Port Trust finds it necessary to change any of the dates prior to the tender closing date, these changes will be reflected in an Addendum to this Tender and posted on the web sites mentioned earlier.

Visakhapatnam Port Trust would like to migrate to New POS solution from present solution, below is the summary of high level requirements:

A. Integrated Port Operation System (POS), the proposed system should be a COTS (**Commercially Available Off-The-Shelf**) **POS product** having features to facilitate the following functional requirements.

- Documentation
- Vessel operations
- Marine Operations
- Cargo Operations
- Railway Operations
- Storage Operations(SS revenue & shed operations)
- Tariff/Billing Management
- Operational, Financial and Statistical Reports
- Online Berthing
- Dry dock services
- Dashboard Implementation
- MIS Reports
- BI reports
- Mobile apps for IOS/android Phones
- SMS/EMAIL services against to operational activities done at VPT

- Validation acknowledgements against to errors
  - API/EDI Integration with other software applications decided by VPT
  - CHATBOT for VPT operations
  - Automation of all port operations with AI, Machine learning and IOT applications..etc.
  - Complaint monitoring tools/ logs based on screens access in the application
  - Other miscellaneous services provided by VPT for VPT stake holders
- B. Independent Port Customer Portal for port users for availing the ports services. Should cover more than 200 services port requires to provide. This portal should be integrated with existing PCS1x, ICEGATE, SAP, UNNATI, SCMTR, NLP and BOT/PPP operator's applications through API/EDI applications based on availability of the connectivity for seam less data exchange. Portal should have all the services of PCS 1x and other mentioned applications should be available if there are any interruption.
- C. Mobile Application for internal operations and Portal users. Mobile application should cover all port operations and a separate mobile application for Port user for getting notifications, alerts and status information from Customer Portal.
- D. Integration with external applications.
- a. SAP ERP
  - b. PCS 1x
  - c. ICEGATE
  - d. NLP portal
  - e. SCMTR
  - f. FOIS.
  - g. RFID Gate
  - h. Unnati Portal
  - i. Weigh Bridge Systems
  - j. Wagon Tippling system
  - k. BOT/PPP operators systems
  - l. Container scanner
  - m. Other systems as per the guidelines of Govt of India/Ministry of shipping...etc.
- E. Post implantation support for a period of 60 months from the date of go live.

Bidder should provide a comprehensive proposal covering the following aspects:

- Company Experience.



- Product features and Road map.
- Technology architecture and scalability features.
- Hardware requirement with sizing for high available and DR implementation
- Information security policy and guide lines.
- Implementation approach of POS, Customer Portal and Mobile Application.
- Migration plan from current POS to new solution with least interruption.
- Go live, Transition plan and Post implementation support.
- Customer References.
- Qualification criteria and required documents.
- Evaluation criteria with required documents.
- Functional feature compliance.
- Any other information bidder feels relevant.

JOINT DIRECTOR

## **1. Instructions to Bidders**

This section specifies the procedures to be followed by Bidders in the preparation and submission of their Bids. Information is also provided on the submission, opening and evaluation of bids and on the award of contract. It is important that the Bidder carefully reads and examines the tender document.

### **2.1 Contacting the VPT.**

- A. No Bidders shall contact the VPT on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded.
- B. If a Bidder tries to directly influence the Purchaser or otherwise interfere in the bid submission and evaluation process and the Contract award decision, its bid may be rejected.

### **2.2 Right to Terminate the Process.**

- A. VPT may terminate the tender process at any time and without assigning any reason. VPT makes no commitments, express or implied, that this process will result in a business transaction with anyone.
- B. This tender does not constitute an offer by VPT. The bidder's participation in this process may result in VPT selecting the bidders to engage towards execution of the contract.

### **2.3 Right to Vary Scope of Contract**

- A. VPT may at any time, by a written order given to the bidder, make changes within the quantities, specifications, services or scope of the Contract as specified.
- B. If any such change causes an increase or decrease in the cost of, or the time required for the bidder's performance of any part of the work under the Contract, whether changed or not changed by the order, an equitable adjustment on mutually agreed terms shall be made in the Contract Price or time schedule, or both, and the Contract shall accordingly be amended. Any claims by the bidder for adjustment under this Clause must be asserted within thirty (30) days from the date of the bidder's receipt of the VPT's changed order.

### **2.4 Rejection Criteria**

Besides other conditions and terms highlighted in the tender document, bids may be rejected under following circumstances:

- A. Bids not qualifying under eligibility criteria.

- B. Bids submitted without or improper EMD or tender fees
- C. Bids received through any platform other than e-tendering platform as mentioned in the tender
- D. Bids which do not confirm unconditional validity of the bid as prescribed in the Tender
- E. If the information provided by the Bidders is found to be incorrect / misleading at any stage / time during the Tendering Process
- F. Any effort on the part of a Bidders to influence the purchaser's bid evaluation, bid comparison or contract award decisions
- G. Bids received by the VPT after the last date for receipt of bids prescribed in the data sheet.
- H. Bids without signature of person (s) duly authorized on the bid
- I. Bids without power of authorization and any other document consisting of adequate proof of the ability of the signatory to bind the Bidders.
- J. Technical Bid containing commercial details or any such hints/ calculations/extrapolations/ records.
- K. Revelation of Prices in any form or by any reason before opening the Commercial Bid
- L. Failure to furnish all information required by the Tender Document or submission of a bid not substantially responsive to the Tender Document in every respect.
- M. Bidders not quoting for the complete scope of Work as indicated in the Tender documents, addendum (if any) and any subsequent information given to the Bidders.
- N. Bidders not complying with the General Terms and conditions as stated in the Tender Documents.
- O. The Bidders not confirming unconditional acceptance of full responsibility of providing services in accordance with the Scope of work, General Terms & Conditions and Service Level Agreements of this tender.
- P. If it is found that firms have tendered separately under different names for the same contract, all such tender(s) shall stand rejected and tender deposit of each such firm/ establishment shall be forfeited. In addition, such firms/ establishments shall be liable at the discretion of the VPT for further penal action including blacklisting.
- Q. If multiple bidders have found and uploaded, separate tenders/ quotations under different names of firms/ establishments but with common address for such establishments/ firms, are managed or governed by the same person/ persons jointly or severally, such tenders shall be liable for penal and legal action

including blacklisting.

- R. If after awarding the contract, it is found that the accepted bid violated any of the directions pertaining to the participation, the contract shall be liable for cancellation at any time during its validity in addition to penal action including blacklisting against the bidders.
- S. Price Bids that do not conform to the Tender's price bid format.
- T. Total price quoted by the Bidders does not include all statutory taxes and levies applicable.
- U. Financial Bids that are less than 50% of the average bid price will be disqualified. The average bid price is computed by adding all Financial Bid values of all the technically qualified bidders and dividing the same by the number of technically qualified bidders.
- V. VPT may not pay the EMD if any bidder will participate with wrong information
- W. VPT may reject the work order if L-1 bidder proved that submitted data is wrong at any point of time and also take necessary action against to the bidder legally

## **2. Evaluation of Bids**

All submitted bids will be reviewed and validated as per this RFP guidelines.

### **3.1 Opening of Bids**

Bids shall be opened either in the presence of bidders or it's duly authorized representatives. The bidder representatives who are present shall sign a register evidencing their attendance. Two representatives per applicant shall be permitted to be present at the time of opening the tender.

- A. Total transparency will be observed and ensured while opening the Proposals/Bids.
- B. VPT reserves the rights at all times to postpone or cancel a scheduled Bid opening.
- C. Bid opening will be conducted in two stage
  - a. In the first stage, Pre-qualification Proposals would be opened. The EMD of the Bidders will be opened on the same day and time, on which the Pre- qualification Proposal is opened.

- b. Technical Proposals of Bidders who pass the Pre-qualification criteria will be opened.
- c. In the second stage, Commercial Proposal of those Bidders who's Technical Proposals qualify, would be opened.
- d. In the event of the specified date of Bid opening being declared a holiday for VPT, the bids shall be opened at the same time and location on the next working day.
- e. In addition to that, if there representative of the Bidder remains absent, VPT will continue process and open the bids of the all Bidders.

### **3.2 Evaluation of Bids**

- A. The bids will be evaluated by the Proposal Evaluation Committee of VPT.
- B. The Proposal Evaluation Committee constituted by the VPT shall evaluate the responses to the tender and all supporting documents / documentary evidence. The Bidders' technical solution will be evaluated as per the requirements and evaluation criteria as spelt out in the tender document.
- C. The Committee may seek inputs from their professional and technical experts in the evaluation process.
- D. VPT reserves the right to do a reference check of the past experience stated by the Bidder. Any feedback received during the reference check shall be taken into account during the Technical evaluation process.
- E. The decision of the Proposal Evaluation Committee in the evaluation of responses to the tender shall be final. No correspondence will be entertained outside the process of negotiation/ discussion with the Committee.
- F. The Proposal Evaluation Committee reserves the right to reject any or all proposals based on any deviations without assigning any reason thereof.
- G. Proposal Presentations: The Tender Evaluation Committee may invite each pre- qualified Bidder to make a presentation to VPT at a date, time and venue decided by VPT. The purpose of such presentations would be to allow the Bidders to present their proposed solutions to the Committee and orchestrate the key points in their Proposals.
- H. Unnecessarily elaborate brochures or other promotional materials beyond those sufficient to present a complete and effective proposal are considered undesirable and may be construed as an indication of the bidder's lack of cost consciousness. VPT's interest is in the quality and responsiveness of the proposal.

### **3.3 Clarification on Bids**

During the bid evaluation, VPT may at its discretion, ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing, and no change in the price or substance of the bid shall be sought, offered, or permitted. VPT is entitled to ask for clarifications as many times as possible from the bidders to the satisfaction of the Technical Evaluation committee.

If the bidder fails to provide the clarification or additional information sought, the information provided in the technical proposal only will be used for evaluation. It is clearly understood that the additional information or clarification on the technical proposal provided by the bidders will not be the basis for affecting any changes in the Commercial Proposal already submitted by the bidders.

### **3.4 Preliminary Examination of Bids**

VPT will examine the bids to determine whether they are complete, whether required EMD has been furnished, whether the documents have been properly signed, and whether the bids are generally in order. Any bids found to be non-responsive for any reason or not meeting any criteria specified in the tender, will be rejected by VPT and shall not be included for further consideration. Any deviations in proposal response may make the bid liable for rejection. Initial Bid scrutiny will be held and bids will be treated as non-responsive, if bids are:

- Not submitted in format as specified in the tender document
- Received without the Letter of Authorization (Power of Attorney)
- Found with suppression of details
- With incomplete information, subjective, conditional offers, and partial offers submitted
- Submitted without the documents requested
- Non-compliant to any of the clauses mentioned in the tender
- With lesser validity period
- All eligible bids will be considered for further evaluation by an Evaluation Committee according to the evaluation process defined in this Bidding document.

### **3.5 Qualification and Evaluation criteria**

VPT would like to have an industry best standard solution to meet their present and future requirements. Will follow the bellow qualification and evaluation criteria for selection best vendor who meets the required qualification criteria. Eligible bidder will be evaluation based on the evaluation criteria.

**4.1****Pre-qualification criteria:**

Bidder should meet the following qualification criteria pertaining to organization experience and proposed Port Operations System (POS). The Minimum Qualifying Criteria for participating in the tender is given below:

#	Criteria	Pre-Qualification Criteria	Required documentary evidence
1.1	Financial Strength	The bidder should have an average annual turnover of at least INR 18 Crores in last 3 financial years (FY 2017-18, 2018-19 and 2019-20) as per CVC guidelines	Certificate from the Statutory Auditor
1.2	Incorporation of the Firm, Legal Entity	<p>The bidder could be</p> <ul style="list-style-type: none"><li>• A company incorporated in India under the Companies Act, 1956 or Companies Act 2013 (as amended till date), and subsequent amendments thereto</li></ul> <p>Or</p> <ul style="list-style-type: none"><li>• An entity registered under LLP Act 2008 and subsequent amendments thereto.</li></ul> <p>Or</p> <ul style="list-style-type: none"><li>• Partnership firms registered under Indian Partnership Act, 1932</li></ul> <p>The bidder should have been operating for the last five years as on the date of publishing of tender notice (including name change/ impact of mergers or acquisitions).</p>	Self-attested Certificate of Incorporation

1.3	Criteria related to Government Regulation	The Bidder shall not be declared ineligible for corrupt & fraudulent practices either indefinitely or for a particular period of time by any State/Central Government/ PSU/ Autonomous Body (Under Any government law) in India as on last date of submission of the Bid.	A self-certified letter signed by the Authorized Signatory of the Bidder as per Annexure
1.4	Black listing	The Bidder must not be debarred/ blacklisted by any Government body/PSU in India as on date of submission of the Bid.	A self-certified letter signed by the Authorized Signatory of the Bidder as per Annexure
1.5	Criteria related to Quality of Service Delivery	The bidder should have been assessed for a Capability Maturity Model Integration (CMMi) Level 3 or above. The assessment should be valid as on the last date of bid submission. In case of expiry of current assessment within nine months, the bidder shall provide a certificate from the Software Engineering Institute (SEI), USA auditor that reassessment for the same or higher level is commenced.	Certification from Software Engineering Institute (SEI), USA
2.1	Implementation Experience for Port or Terminal	The Bidder must have experience of successful Go-Live / completed project	Work Order + Completion



		<p>during the last 5 years (as on the last date of bid submission) in one project having implemented for Port or Terminal. of project value of INR 10 crores and above</p> <p>Or</p> <p>The Bidder must have experience of successful Go-Live / completed project during the last 5 years (as on the last date of bid submission) in Two project having implemented for Port or Terminal. Of each project value of INR 8 crores and above</p> <p>Or</p> <p>The Bidder must have experience of successful Go-Live / completed project during the last 5 years (as on the last date of bid submission) in Three projects having implemented for Port or Terminal Of each project value of INR 5 crores and above.</p>	<p>Certificates from the client;</p> <p>OR</p> <p>Work Order + Certified by the Statutory Auditor;</p> <p>OR</p> <p>Work Order + Phase Completion Certificate (for ongoing projects) from the client. Certified by the Statutory Auditor</p>
2.2	Criteria related to Man- Power Capability of Bidder	The bidder should have a team of at least 200 full time employees on its payroll as on the day of submission of the bid	Copy of PF Returns Or Certified by the Statutory Auditor
2.3	Criteria related to the COTS Product Proposed by the Bidder	The proposed COTS product should have been successfully implemented in at least 5 ports (each of them catering to at least bulk cargo of 15 MMT per annum at	Volume Confirmation letters from customer along with Customer

		least one year in last 3 years) and currently under support as on date of bid submission	completion certificate.
2.4	POS solution	<p>The POS solution should have been successfully implemented in at least 5 ports / terminals covering following over the last TEN years as on last date of bid submission.</p> <ul style="list-style-type: none"> <li>• Marine Operations</li> <li>• Vessel operations</li> <li>• Cargo Operations involving different types of cargo Break-bulk OR Bulk OR Cargo OR Liquid.</li> <li>• Billing</li> <li>• Integration with SAP ERP and other applications</li> </ul>	Customer completion certificate mentioning the modules implemented and ERP.
2.5	Customer Portal	Proposed solution should have at least 3 customers successfully deployed for Port Stake holders, in the past 5 years.	Customer Completion Certificate
2.6	Technology and Open source technologies.	Proposed solution should be built on open source technologies should be able to port on different operating system and browsers, portable on different databases.	Self-Certification
2.7	Source Code	Bidder to agree and confirm that Product source code will be kept in escrow account as per the terms of Port and same should be shared by VPT and L1 bidder	Letter of acceptance.
2.8	Application	Proposed solution should	Self-

	Performance Monitoring	have been integrated with industry standard application performance management solution in terms of application performance and security compliance	Certification
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JOINT DIRECTOR

## 4.2

### Technical Evaluation and Marking criteria:

All Bids which are qualified will be evaluated by technical committee nominated by VPT management as per the technical evaluation criteria mentioned below. During the process of evaluation all bidders are required to present their solution within provided time slot address.

- Proposed solution features and compliance to RFP
- Understanding on requirements and implementation approach.
- Project time lines and methodology.
- Support plan and service levels for 60 months from the date of go live.

### Technical Evaluation and Marking method:

#	Evaluation Criteria	Marks	Required documentary evidence
1	POS COTS Product Credentials and Track Record	300	
1.1	Number of Years ( Age of the Product) Years Greater than 10 or more Years = 100% Greater Than 5 less than 10 years = 50%	100	Copy of customer PO and Completion certificate.
1.2	Number of Installation Ports/Terminal Customer with following Functionality <ul style="list-style-type: none"><li>• Marine</li><li>• General Cargo</li><li>• Yard and Gate Operations</li><li>• Billing.</li><li>• Integration with ERP</li><li>• Integration with PCS1x</li></ul> More than 10 or more Customers = 100% More than 5 or less than 10 Customer = 50%	100	To submit PO Copy with Completion certificate.
1.3	Integration with leading SAP ERP software. Proposed POS solution should have been integrated seamlessly with SAP ERP  5 or more Customers = 100%	50	

	More than 3 or less than 5 Customer = 50%		
1.4	Implementation of Customer Portal or PCS in Ports for external stakeholders with seamless integration POS Solution. Should have two Customer portal or PCS implementations.	50	Customer Order and Completion Certificate.
2	Bidders experience in Implementation and support	300	
2.1	Number of Ports or Terminal where proposed solution is deployed. More than 10 or more Ports/Terminals = 100% More than 5 or less than 10 Ports/Terminals = 50%	100	Customer PO and Completion Certificate
2.2	Number of Port customer with Customer Portal/PCS deployed in last 10 years. 5 or More customer portal/PCS Implementations = 100% 3 or less than 5 customer portal/PCS Implementations = 50%	100	Customer PO and Completion Certificate
2.3	Total Number of Full time SME's with port domain experience with more than 10 Years in working in ports or implementing POS solutions for Ports or Terminals. More than 10 or more Ports/Terminals = 100% More than 5 or less than 10 Ports/Terminals = 50%	50	Self-Certification along with 1 Page Resume
2.4	Total Numbers of Customer (Ports/Terminals) Currently being supported. More than 8 or more Ports/Terminals = 100% More than 4 or less than 8 Ports/Terminals = 50%	50	Customer PO Or Customer certificate
3	Proposed Solution Meeting VPT	400	

	Requirements		
3.1	<p>Proposed solution fitment to VPT requirements : 200 Marks</p> <ol style="list-style-type: none"> <li>1. Approach &amp; Methodology – 50 Marks</li> <li>2. Understanding of Project - 50 Marks</li> <li>3. Proposed Solution Fitment – 50 Marks</li> <li>4. Project Implementation duration in 6 months – 50 Marks</li> </ol>	200	Presentation
3.2	<p>Demonstration of solution across following points</p> <ul style="list-style-type: none"> <li>• Port Customer interface portal</li> <li>• Port partner portal</li> <li>• Port operations team portal</li> <li>• Mobile Applications</li> <li>• Dashboards</li> </ul> <p>Specific scenarios will be provided along with the invite for demonstrations</p> <p>Demonstration of solution across following points</p> <ul style="list-style-type: none"> <li>• End to end demonstration of identified scenarios.</li> <li>• Data exchange between POS and Customer Portal.</li> <li>• Integration between PCS 1x and POS</li> <li>• Mobile Applications</li> <li>• Dashboards and Reports</li> </ul> <p>Specific scenarios will be provided along with the invite for demonstrations</p>	150	Demonstration
3.3	User friendliness of the interface with graphical assistance, etc. Requirement to reduce the number of inputs required to be carried out by the operators	25	Presentation
3.4	Innovative suggestions provided to cater to various needs within the system	25	Presentation

## Final Evaluation

Final selection of tenderer for award of this work will be based on a technical and financial evaluation, with a weightage of 70:30. An Evaluated Technical Score (ETS) will be calculated for each of the eligible tenderer as follows:

$ETS = (TS/100) * 70$  where TS is the Technical Score, which will be rounded to two decimal points

An Evaluated Financial Score (EFS) with reference to the lowest eligible tender will be calculated for each of the eligible tenderer as follows:

$EFS = (LFS/FS) * 30$  where FS is the price of each tenderer and LFS is the price quoted by the lowest eligible tenderer reduced to a score of 40 points. The tenderer whose financial tender is the lowest, would get a score of 1 and would thus be awarded the maximum points of. 30.

The Financial Score will include the price quoted by the tenderer and the NPV of AMC charges for five years after the expiry of warranty period calculated at a discount rate of 10%.

The EFS will be rounded to two decimal points.

Total Evaluated Score will be  $TES = ETS + EFS$

The Tenderer with the highest total evaluated score (TES) will be considered for the award of contract. If more than one Tenderer gets the same total evaluated score, VISAKHAPATNAM PORT TRUST reserves the right to award the work to the tenderer who scores higher in the technical evaluation.

**<FINANCIAL ADVISOR &  
CHIEF ACCOUNTS  
OFFICER>**

## **Section 2: Request for Proposal Terms of Reference**

### **1. Introduction to Visakhapatnam Port Trust**

Visakhapatnam Port Trust is one of the 12 major ports of the country. The port was established in the year 1933. It is under the administrative control of Ministry of Shipping, governed by the Major Port Trusts Act, 1963 and Indian Ports Act, 1908. VPT transformed itself into a mega major port with a capacity to handle more than 125 million tonnes per annum, it is capable of handling all types of cargoes including iron ore, coal, crude oil, petroleum products, LPG, fertilizers, dry cargoes, liquid cargoes and containers. The cargo throughput at this port in the just ended fiscal 2019-20 is 72.72 million tonnes – the highest ever handled in the history of port and also 65.30 Million Tonnes during the year 2018-19. The port has 27 berths (21 are inner harbor berths, 6 are out harbor berths), 6 cranes, 5 forklifts, 31 Flotilla, 18 Locomotives, 13.14 lakh sq. mtrs. Storage space for cargo, 80 Kms. roads, 200 kms railway trackTrack length and about 7,000 personnel, 12,500 pensioners etc. Its earnings amounted to Rs.1264 crores in 2019-20. Bidders are advised to visit the website <http://www.vizagport.com> for more details on the enterprise, its establishments, services, performance, and other related details. Bidders may interact with relevant personnel for getting better understanding of the organization, before bidding.

The Port has ambitious plans to enlarge the application of Information Technology to its various activities. A few among them one to switch over to paperless work as a part of ease of doing business initiation taken by Govt of India and digitization of operational services for the stakeholders for transparency and efficiency of the Port sector in India from the existing system through a complete work flow automation programme, upgradation of existing POS Application Software with all AI, machine learning and IoT solutions for all port operations existing in VPT and in particular GIS/GPS based systems, estate management, maintenance planning, facilitating real time applications by inducting mobile computing, security systems particularly access control and intrusion detection, cloud services, IoT operations, Artificial intelligence solutions for various operational activities, DR services... etc.

As a part of its programme to enlarge the area of the Information Technology application to the Port operation systems, it intends to undertake the Application Software solutions covering Port Operations (contains Vessel operations, cargo operations), Railway Operations, Finance (Scale of rates approved by TAMP&VPT management) , Materials & HR Management, Project Management and Asset Management for increasing the performance and transparency in the VPT operations and services providing for its stakeholders by 24\*7\*365.



Commodity wise cargo handled at VPT for the financial year 2019-20( In Thousand Tonnes)

#	Commodités	2019-20
1	P.O.L.	18914
2	Iron Ore & Pellets (Export)	14386
3	Thermal coal (Export)	821
4	Coking coal	7446
5	Steam coal	9268
6	Fertilisers – Finished	2059
7	Raw materials – Dry	899
8	Container cargo -Tonnage TEUs('000)	8649 (504)
9	Other cargo	10280
<b>Total</b>		<b>72722</b>

No. of vessels handled with cargo during 2019-2020 financial year

Container	DRYBULK (Mech)	Dry Bulk (Coven)	Liquid bulk	Break bulk	Total
292	277	605	766	72	2012

## 1.1

### Present Port Operation System

Visakhapatnam Port Trust implemented Port Operating Management System (VPOMS) during 2012 with the major functionalities come under the system are:

- a. Shipping operations management
- b. Berth Planning
- c. Cargo storage management
- d. Railway operations management
- e. Lease/ License management
- f. Marine operations management
- g. Port Community System/EDI interface
- h. Integration with Weighbridge application
- i. Integration with RFID Application
- j. Billing for all the services
- k. Tariff Management

- l. Portal for port users to obtain services
- m. Interfacing with payment systems
- n. Auto berthing policy
- o. AS is study of existing POS application and to be documentation for VPT
- p. MIS reports

The present VPOMS is deployed in Windows 2008 Server and VPT plans to migrate to a new futuristic system with most user-friendly approach and should be able to adapt any technology updates either in supporting operating systems and supporting software, whichever will release at latest to prevent cyber-attacks and technical constraints for stakeholders and user friendly to adapt the proposed solution to browse from any user interface browser. Reporting system to generate the required management reports as and when required.

#### i. **Scope of Work (SOW)**

Visakhapatnam Port Trust would like to migrate to New POS solution from present solution, bellow is the summary of high level requirements:

- A. Integrated Port Operation System (POS) The proposed system should be a COTS (**Commercially Available Off-The-Shelf**) **POS product** having features to facilitate the following functional requirements.
- Documentation
  - Vessel operations
  - Marine Operations
  - Cargo Operations
  - Railway Operations
  - Storage Operations(SS revenue & shed operations)
  - Tariff/Billing Management
  - Operational, Financial and Statistical Reports
  - Online Berthing
  - Dry dock services
  - Dashboard Implementation
  - MIS Reports
  - BI reports
  - Mobile apps for IOS/android Phones
  - SMS/EMAIL services against to operational transactions done at VPT
  - Validation acknowledgements against to errors
  - API/EDI Integration with other software applications decided by VPT
  - CHATBOT for VPT operations
  - Automation of all port operations with AI, Machine learning and IOT

- applications..etc.
  - Other miscellaneous services/miscellaneous bills provided by VPT for VPT stake holders
- F. Independent Port Customer Portal for port users for availing the ports services. Should cover more than 200 services port requires to provide. This portal should be integrated with existing PCS1x, ICEGATE, SAP, UNNATI, SCMTR, NLP and BOT/PPP operator's applications through API/EDI applications based on availability of the connectivity for seam less data exchange. Portal should have all the services of PCS 1x and other mentioned applications should be available if there are any interruption.
- G. Mobile Application for internal operations and Portal users. Mobile application should cover all port operations and a separate mobile application for Port user for getting notifications, alerts and status information from Customer Portal.
- H. Integration with external applications.
- a. SAP ERP
  - b. PCS 1x
  - c. ICEGATE
  - d. NLP portal
  - e. SCMTR
  - f. FOIS.
  - g. RFID Gate
  - h. Unnati Portal
  - i. Weigh Bridge Systems
  - j. Wagon Tippling system
  - k. BOT/PPP operators systems
  - l. Container scanner
  - m. Other systems as per the guidelines of Govt of India/Ministry of shipping...etc.
- I. Post implementation support for a period of 60 months from the date of go live and stability period of the project

Bidder should provide a comprehensive proposal covering the following aspects:

- Company Experience.
- Product features and Road map.
- Technology architecture and scalability features.
- Hardware requirement with sizing for high available and DR implementation
- Information security policy and guide lines.

- Implementation approach of POS, Customer Portal and Mobile Application.
- Migration plan from current POS to new solution with least interruption.
- Go live, Transition plan and Post implementation support.
- Customer References.
- Qualification criteria and required documents.
- Evaluation criteria with required documents.
- Functional feature compliance.
- Any other information bidder feels relevant.

Facility for capturing all DryBulk / Break Bulk / Liquid Bulk /RO-RO operations with respect to Import/Export/Transshipment/Stuffing/ Destuffing /Storage operation with validations and checks even for other services from the POS application through Excel, doc,text, Pdf..etc.

## Applications

### i. **Contents of Tender document:**

Tender Document consists of: **Technical Bid**

- i. Instructions to Tenderers
- ii. Letter of Application
- iii. Form of Tender
- iv. Form of Agreement
- v. Memorandum
- vi. General Conditions of Contract
- vii. Scope of Work
- viii. Forms
- ix. Annexures

### **Price Bid**

- i. Price Schedule

## ii. Preparation of Tender:

- a. Bids shall be submitted online on VPT e-Procurement website ([www.etenders.gov.in](http://www.etenders.gov.in)) platform.
- b. The participating bidders in the tender should register themselves free of cost on e-Procurement platform (<http://www.etenders.gov.in>).

Bidders can log-in to e-procurement platform in Secure mode only by signing with the Digital signature certificates. Digital Signature Certificates can be obtained from one of the Authorised Certifying Authority, such as SIFY ([www.safescrypt.com](http://www.safescrypt.com)) / Tata Consultancy Services ([www.tcs.ca.tcs.co.in](http://www.tcs.ca.tcs.co.in)) / ncode ([www.ncode solutions.com](http://www.ncode solutions.com)) etc., The bidders who are desirous of participating in e-procurement shall submit their bids as per the standard formats available at the site ([www.vpttenders.gov.in](http://www.vpttenders.gov.in))

- c. The bidders should scan and upload copies of Document in support of registration as Contractor and Payment towards EMD & Transaction fee. The bidders shall sign on all the documents, uploaded by him, owning responsibility for their correctness / authenticity.
- d. TRANSACTION FEE: All the participating bidders shall pay a transaction fee (non-refundable) in on-line transaction for Rs.1770 /-, **Through RTGS/NEFT/Bank Transfer** on SBI, Visakhapatnam Port Branch, A/c No.30387186900, IFSC code – SBIN0001740 towards transaction fee.
- e. E.M.D. Rs /- to be paid **Through RTGS/NEFT/Bank Transfer** on SBI, Visakhapatnam Port Branch, A/c No.30387186900, IFSC code – SBIN0001740 towards transaction fee.
- f. After uploading the documents, original receipts in respect of Transaction Fee and EMD are to be submitted by the Bidders to the Tender Inviting Authority, so as to reach on or before date of opening of Technical Bid. Failure to furnish the original hard copies in respect of Transaction Fee and EMD on or before the date of opening of Technical Bid will lead to summarily rejection of bid. The copies of uploaded documents and originals of the same for verification shall be submitted by the successful bidder before award of work. The VPT shall not hold any risk on account of postal delay. Similarly, if any of the certificates, documents, etc., furnished by the tenderer are found to be false / fabricated / bogus, the successful Bidder will be suspended from participating in tenders on e-Procurement platform for a period of three years.
- g. The VPT will not hold any risk and responsibility of non-visibility of the scanned and uploaded documents.
- f. The documents that are uploaded online on VPT e-Procurement website ([www.etenders.gov.in](http://www.etenders.gov.in)) will only be considered for Bid evaluation.
- g. Any other condition regarding receipt of tenders in conventional method appearing in the tender documents may please be treated as not applicable.

- h. The bidder shall authenticate the bid with his digital signature certificate for submitting the bid electronically on e-procurement platform and the bids not authenticated by digital signature certificate of the bidder will not be accepted on the e-Procurement platform.
- i. The successful bidder found defaulting in submission of hard copies of uploaded certificates documents, with in the stipulated time i.e before concluding the agreement or if any variation is noticed between the uploaded documents and the hard copies submitted by the successful bidder, the successful bidder will be suspended from participating in tenders on e-Procurement platform for a period of three years.
- j. The tender shall be submitted 'on online' in TWO BID SYSTEM' in the form of scanned copy , Copies towards payment of Transaction Fee and EMD and documents as specified in the Tender shall be submitted on 'online' Technical Bid (Cover-I). Price should be quoted in 'online' BOQ (Cover-II) (Commercial Bid).

The forms to be submitted are given below:

#	Form	Title	Additional documents/ enclosures
1	I	Letter of Application	Tenderer's covering letter as per Form I and containing a summary of the salient features of the Tender
2	II	Tenderer's Particulars	With supporting documentary proof wherever required. Certificate of incorporation, Power of attorney for signing tender document, Permanent Account Number & GST Number.
3	III	Minimum Qualification Criteria 1.1 to 1.4 of Section 4.1 Minimum Qualification Criteria	Documentary evidence required for Qualification Criteria
4	IV	Terms of acceptance	Acceptance of Contract Terms Confirmation of No deviation.

**super scribed “Technical Bid”** shall contain:

#	Form	Title	Additional documents/ enclosures
1	I	Minimum Qualification Criteria 2.1 to 2.8 of Section 4.1 Minimum	Documentary evidence required for Qualification Criteria
2	II	Technical Evolution Criteria: Section 4.2	Documentary evidence required for Qualification Criteria

1. Technical Bid of the Tender document published by Visakhapatnam Port Trust with **each page signed for acceptance of the terms and conditions** and Technical Specification filling the details wherever required.
2. Additional technical details regarding the product including technical literature or other documentation, which supports and provides detailed responses to the Technical Requirements.
  - Company Experience.
  - Product features and Road map.
  - Technology architecture and scalability features.
  - Hardware requirement with sizing for high available and DR implementation
  - Information security policy and guide lines.
  - Implementation approach of POS, Customer Portal and Mobile Application.
  - Migration plan from current POS to new solution with least interruption.
  - Go live, Transition plan and Post implementation support.
  - Customer References.
  - Qualification criteria and required documents.
  - Evaluation criteria with required documents.
  - Functional feature compliance.
  - Any other information bidder feels relevant.
3. Any other details, which would highlight the salient features of the proposed solution.

4. Preliminary Project Plan indicating the programme of work and resource planning chart for the works indicated in the Tender.
5. Any required information such as reference materials, manuals and other documents included in the Tender should be clearly labeled or otherwise identified and referenced in a clear and consistent manner throughout the Tender.

**Pricing Information shall NOT be included in the Technical bid.** Tenderers shall ensure that NO pricing information of any type is shown in their technical bid. The Tenderer shall note that the Form of Tender annexed in Technical Bid is for their information and the amount tendered for shall not be indicated in this Form of Tender in the Technical bid.

**Inclusion of pricing in any place may result in rejection of the Tender.**

### iii. **Signing of Tenders**

The original tender format and accompanying documents must be written in indelible ink and shall be signed by the person(s) duly authorized to sign on behalf of the tenderer. Written power of attorney accompanying the offer shall indicate such authorization. The person(s) signing the offer shall sign all pages of the offer except for unamended printed literature. The name and position held by each signatory must be typed or printed or sealed below the signature.

The tender should be written legibly and free from interpolations, erasures or overwriting or conversions of figures. Correction where unavoidable, should be duly attested by the signature(s) of the tenderer(s) with dates. The rates should be written in words as well as in figures.

#### **5.1**

#### **Incomplete or part tender:**

Tender must be submitted for executing all works involved and any tender for doing a portion of the work with responsibility for carrying out the remaining works by the tenderers other contractors, will be liable for outright rejection.

#### **5.2**

#### **Receipt of tender:**

The Covers & documents mentioned in **4 (Preparation of Tenders)** must be received by the FA&CAO at his/her office in Visakhapatnam Port Trust, Port Admin Building, not later than the time specified in the NIT.

Tenders received through post shall be accepted provided the same reaches FA&CAO, Visakhapatnam Port Trust prior to the expiry of the stipulated time. The tenders submitted by the bidder without uploading the same in the portal will be summarily rejected.

No oral, e -mailed, telephone or facsimile Tenders will be accepted.



### 5.3

#### Opening of tender:

The bidder should submit the following information through etenders website only. i.e, (i) the EMD and Cost of Tender documents, (ii) Minimum Qualifying Criteria Documents and (iii) Technical Document including Technical bid shall be opened in front of the Representatives of the Tenderers present in the office of the FA&CAO, Visakhapatnam Port Trust at the time and date stipulated in the NIT through in etenders website only.

The price bids shall be submitted through the **e-tender portal** only. **No hardcopies of price bids are to be submitted by the tenderer.** Notice will be given to the qualified Tenderers for participating in the price bid opening electronically.

### 5.4

#### Earnest Money Deposit (EMD):

1. EMD in any form other than what is specified in NIT will NOT be accepted. The Tenders of the firms who have not furnished the required Earnest Money Deposit will not be taken into consideration at all and such Tenders will be rejected and returned to the Tenderers.
2. Bidder registered under MSME are exempted to submit EMD, same shall submit the valid registration document.
3. Earnest Money Deposit of unsuccessful tenderers will be refunded without interest through a/c payee cheque or ECS, as promptly as possible.
4. The Earnest Money Deposit shall be forfeited if a tenderer withdraws his offer during the validity period of tender.
5. The EMD may not return if bidder will submit any wrong information in the tender. VPT's decision will be final
6. The EMD of successful tenderer will be refunded on submission of Bank guarantee for performance security as per the tender clause and executing the agreement as per tender clause.
7. A separate Bank Guarantee has to be furnished by the contractor for the proper completion of the AMC period. The Bank Guarantee for the installation and warranty will be released only after submission of the bank guarantee towards full AMC period and on completion of the claim period of the BG towards supply, implementation and warranty.

The EMD of a successful tenderer will also be forfeited if the tenderer fails to

1. Sign the agreement
2. Furnish the Performance Security Deposit.

#### **5.5 Alternate Tenders:**

The Tenderer shall note that no alternative Tender conditions or alternative proposal for whole or part of the work will be acceptable.

#### **5.6 Tender Clarifications:**

Prospective tenderers requiring further information or clarification of the tender documents may notify the FA&CAO in writing or through Fax or e-mail at the mailing address indicated in the NIT, at least **one day** before the **Pre-Bid** meeting.

#### **5.7 Amendments:**

Amendments if any shall be part of the tender documents and will be notified in the e-tendering portal, VPT website mentioned earlier in the tender. The same will be binding on tenderers. FA&CAO may, at his/her discretion, extend the deadline for the submission of the tenders. Tenderers are advised to view the above-mentioned websites regularly to ensure that the Tenderer has not missed any amendment issued by Visakhapatnam Port Trust.

#### **5.8 Pre-Bid Meeting:**

A pre-bid meeting will be held at the time indicated in the NIT at Visakhapatnam Port Trust, administrative office building, 1<sup>st</sup> floor, board room, Visakhapatnam, 530035. To offer clarifications required, if any, on the Tender documents. The Tenderers are advised to examine the Tender document carefully and if there be or appear to be any ambiguity or discrepancy in the documents, or any clarifications needed in filling the Tender documents, these shall be referred to the FA&CAO, in writing well in advance by way of mail/fax/email or through virtual meetings ...etc. so as to reach him/her before the date fixed for the pre-bid meeting. It is to be noted that no queries seeking clarifications will be entertained after the pre-bid meeting. Regardless of the statements made at the meeting, Tenderers are cautioned that Tender requirements will only be changed if the change is notified in websites mentioned earlier.

Prospective tenderers are advised to attend the pre-bid meeting since no excuse for ignorance of clarifications/amendments given by the Tender Committee in the pre-bid meeting shall be accepted. Clarifications on the pre-bid queries and amendments, if any, will be posted in the web sites where the tender documents were published. Any offer having deviation from Visakhapatnam Port Trusts Terms & Conditions after those are frozen in the pre-bid meeting, may render the offer unacceptable to Visakhapatnam Port Trust.

**5.9****Alteration of Tender documents:**

The forms of tender, schedules, conditions of contract, etc., shall not be defaced or detached from the Tender documents. No alteration shall be made in any of the Tender documents and the Tenderer shall comply strictly with the terms and conditions contained in the Tender document.

All communications concerning this Tender must be directed only to the FA&CAO Visakhapatnam Port Trust. Any oral communications will be considered unofficial and non-binding. Tenderers should rely only on written statements or mails issued by the FA&CAO of the Visakhapatnam Port Trust.

#### **5.10 Contractual Obligation**

All Tenderers who submit a Tender in response to this tender shall understand, acknowledge and agree that the Visakhapatnam Port Trust is not obligated thereby to enter into an agreement or contract with any Tenderer and, further, has absolutely no financial obligation to any Tenderer.

#### **5.11 Contract Acceptance**

A Tender submitted in response to this tender shall be considered a binding offer. Acknowledgement of this condition shall be indicated by signature of an officer of the Tenderer legally authorized to execute contractual obligations and shall be conveyed by submitting a signed Form of Tender as per the enclosed format.

#### **5.12 Agreement**

The successful Tenderer shall enter into a Contract Agreement, to be prepared and completed at the cost of the Contractor, in the form annexed to these Conditions with such modification as may be necessary within two weeks from the date of issue of the Lol/Work order whichever is earlier. The Contractor shall prepare the agreement on Andhra Pradesh stamp paper of Rs.200/- in 1 (ONE) original. The duly signed original will be with the VPT and the selected tenderer receiving the photocopy. The contract shall be valid till all contractual obligations are fulfilled.

#### **5.13 Validity**

All prices and any other significant factors contained in the Tender shall be valid for acceptance for a period of 180 calendar days from the date of opening of Tenders. Notwithstanding the above, it is obligatory for the tenderer to keep the validity for another 90 days for which request in writing by the FA & CAO before the expiry of the original validity period would be sufficient intimation and shall be acknowledged by the tenderer.

#### **5.14 Exit Clause**

Visakhapatnam Port Trust shall have the option to terminate the contract at any time during the tenure of the contract without assigning any reasons whatsoever and/or without payment of compensation to the successful bidder by giving notice of THIRTY (30) days, in writing to the successful bidder of its intention to do so. The decision of Visakhapatnam Port Trust in terminating the contract will be final and binding on the contractor.

#### **5.15 Rejection of any or all Tenders:**

Any Tender not conforming to the foregoing instructions will not be considered. It is not obligatory on the part of the Board of Trustees, Visakhapatnam Port Trust to accept the lowest tender. They reserve the right to accept a tender in full or in part and /or reject any or all tender(s) without assigning any reason without any liability. No representation whatsoever will be entertained on this account.

**5.16 Right to modify:**

Visakhapatnam Port Trust reserves the right to modify any terms, conditions and specifications of the Tender document and to obtain revised price bids from the Tenderers with regard to changes in tender document clauses.

**5.17 Confidentiality:**

All recipients of the Tender documents for the purpose of submitting a tender shall treat the contents of the document as private and confidential. The "Instructions to Tenderers" shall form part of the Contract.

**6. Evaluation Process & Eligibility Criteria:****6.1 Evaluation Process**

Visakhapatnam Port Trust will scrutinize the Tenders received in terms of the minimum qualifying criteria set out as part of the NIT in the Tender documents. The tenders of those who successfully fulfill the criteria will be evaluated. The eligibility of each Tenderer will be evaluated based on the information furnished by the Tenderers in the Tender document.

Tenderers must remain available during the evaluation period to respond to requests for clarifications, if any. The request for clarification and the response shall be in writing and no change in the price or substance of the Tender shall be sought, offered or permitted. If Tenderer receives a request for clarification, he shall provide a written response to Visakhapatnam Port Trust within the time frame specified therein. Failure to respond within this timeframe may render the tender liable for rejection.

Visakhapatnam Port Trust will conduct an exercise of verification of information provided by the Tenderer. During such exercise, if the ground realities are found to be inconsistent with claims made by the Tenderer, or in case, discrepancies are found in the information submitted, the Tender will be rejected and EMD of the bidder may not return by VPT. VPT's decision will be final. Visakhapatnam Port Trust will not enter into any correspondence with the tenderer except to seek clarification when necessary. The decision of the Visakhapatnam Port Trust to accept or reject any tender will be final.

Visakhapatnam Port Trust reserves the right to investigate the references and the past performance of any tenderer with respect to its successful performance of similar projects, compliance with specifications and contractual obligations, its completion of service on schedule, and its lawful payment of Suppliers, sub-contractors, and workers.

Any attempt by a Tenderer to improperly influence the Employer of VPT during the evaluation process will result in the rejection of the Tender.

## **6.2 Preliminary Evaluation:**

The tenders of the bidders, who have submitted EMD and the Cost of tender documents in order, will be opened electronically and considered for further evaluation as per the MQC.

### **Technical Evaluation**

1. The bidders who are qualified as per the Minimum Qualifying Criteria will be technically evaluated further to see the technical responsiveness of their bids.
2. The bidders may submit the technical merits of solution, specifications, approach & methodology, equipment & architecture, deviation from the specified bid requirements, suitability of the facilities offered, quality, function and operation of the system along with the technical bid.
3. The bidder has to fill and submit POS General Features (Form XVII) and POS Technical features (Form XVIII) along the technical bid.
4. The bidder has to fill and submit Customer Portal General Features (Form XVII) and Customer Portal Technical features (Form XVIII) along the technical bid.
5. The bidder has to fill and submit Mobile General Features (Form XVII) and Mobile Technical features (Form XVIII) along the technical bid.
6. The bidders may be asked to demonstrate their product to confirm the suitability of the same as per VPT requirements. The bidder may also provide access to the demo version of the product.
7. The bidder may be able to give technical presentation on product, If VPT instructed to show the features of proposed POS application for VPT

### **Price Bid**

1. The Contract Price (and payment schedule) is linked to the service rendered by the successful bidder.
2. It is assumed that Bidders shall have read the Technical support requirements and other sections of the Bid Documents to ascertain the full scope of the requirements associated with all areas prior to filling in the rates and prices.
3. Prices must correspond to items of the scope and quality defined in the Technical Requirements or elsewhere in the Bid Documents.
4. If Bidders are unclear or uncertain as to the scope of any area / line item, they shall seek clarification in accordance with the Instructions to Bidders in the Bidding Documents prior to submitting their bid.
5. The quoted rates and prices shall be comprehensive and shall be deemed to cover the full scope of the Requirements complete in all respect, as well as overhead, profit and shall include all incidental and contingent expenses and risks of every kind necessary to complete and maintain the whole of the works in accordance with the Contract.
6. Prices shall be fixed and firm for the duration of the Contract. No price variation/

adjustment or any other escalation will be entertained. The basic rate quoted in the tender shall hold good and shall be binding on the tenderer, notwithstanding any increase in the prices of services, materials and labour or in the freights or levy of other charges whatsoever and the tenderer shall not be entitled to claim any increase over the rates quoted by him during the period of currency of the contract except taxes and duties as introduced / modified by Govt. from time to time.

7. The Price bid **Schedule C** is for arriving at the change request charges for evaluation. The payment will be limited to the approved effort days for the change.
8. Prices shall be quoted in Indian Rupee to a maximum of two significant places of decimals.
9. The tenderer shall be entirely responsible for payment of all taxes, duties and other such levies arising out of this contract.
10. Deduction shall be made from payments to the tenderer towards Income Tax, etc if applicable, as per the law and rules of the Government in force at the time of payment(s).
11. The bidder shall submit the price bid only through the e-tender portal.

### **Price Bid Evaluation**

Final selection of tenderer for award of this work will be based on a technical and financial evaluation, with a weightage of 70:30. An Evaluated Technical Score (ETS) will be calculated for each of the eligible tenderer as follows:

$ETS = (TS/100) * 70$  where TS is the Technical Score, which will be rounded to two decimal points

An Evaluated Financial Score (EFS) with reference to the lowest eligible tender will be calculated for each of the eligible tenderer as follows:

$EFS = (LFS/FS) * 30$  where FS is the price of each tenderer and LFS is the price quoted by the lowest eligible tenderer reduced to a score of 40 points. The tenderer whose financial tender is the lowest, would get a score of 1 and would thus be awarded the maximum points of. 30.

The Financial Score will include the price quoted by the tenderer and the NPV of AMC charges for five years after the expiry of warranty period calculated at a discount rate of 10%.

The EFS will be rounded to two decimal points.

Total Evaluated Score will be  $TES = ETS + EFS$

The Tenderer with the highest total evaluated score (TES) will be considered for the award of contract. If more than one Tenderer gets the same total evaluated score, VISAKHAPATNAM Port Trust reserves the right to award the work to the tenderer who scores higher in the technical evaluation.



## 6. MEMORANDUM

We hereby tender for the execution for Visakhapatnam Port Trust of the work specified in the underwritten memorandum within the time specified in such memorandum at the rates specified therein and in accordance in all respects with the specifications, designs, reports, messages and instructions in writing referred to in the Clauses of Conditions of the Contract and with such materials as are provided for and in all respects in accordance with such Conditions / Instructions to Tenderers.

General Description: Design, development, implementation and Customization and Maintenance of an Integrated Port Operation System (POS)

Earnest Money : Rs. XXXXX (Rupees in words)

Period of Support: For a period of 6 years (6 months implementation+ 6 months stability + 5 years AMC).

Performance Security: BG for 10% of the Onetime charges including taxes whatever applicable on L1 bidder price and duties of tender for the project implementation and warranty.

CONTRACTOR :

DATE :

ADDRESS :

## **7. General Conditions of Contract**

### **7.1 Definitions and Interpretation**

In the Contract (as hereinafter defined) the following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires

#### **7.1.1 Definitions**

##### **1. Contract elements**

- a. "Contract"** means the Contract /Agreement for the supply of goods and provision of services entered into between the VPT and the Contractor, as recorded in the Contract Form signed by the parties together with the Contract Documents and appendices referred to therein.
- b. "Contract Documents"** means the documents specified in the Form of Contract/ Agreement (including any amendments to these Documents).
- c. "Contract Agreement"** means the agreement entered into between the VPT and the Contractor using the Form of Contract Agreement contained in the Tender Documents and any modifications to this form agreed to by the VPT and the Contractor.
- d. "Contract Price"** means the price defined in the Contract/ Agreement payable to the Contractor for the full and proper performance of its contractual obligations.
- e. "Tender Documents"** means to the collection of documents issued by the VPT to instruct and inform potential Contractors of the processes for Tendering, selection of the winning Tenderer, and contract formation, as well as the contractual conditions governing the relationship between the VPT and the Contractor.
- f. "Tender"** means the Contractor's priced offer to the VPT for the execution and completion of the Works and the remedying of any defects therein in all accordance with the provisions of the Contract, as accepted by the Letter of Acceptance - Work Order.
- g. "Bill of Quantities"** means the priced and completed Bill of Quantities", forming part of the Tender.

**h. "Specification"** means the specification of the Works included in the Contract and any modification thereof or addition thereto made or submitted by the Contractor and approved by the VPT.

**i. "Letter of Acceptance"** means the formal acceptance by the VPT of the Tender.

## **2. Entities**

**a. "Employer"** means Visakhapatnam Port trust: viz. Board of Trustee, Visakhapatnam Port Trust, Visakhapatnam or their successors and assigns, acting through its FA&CAO or any other officer so nominated by the Visakhapatnam Port Trust.

**b. "Project Manager"** means the person appointed by the VPT to perform the duties delegated by the VPT.

**c. "contractor"** means the person(s), firms or company (ies) who's Tender to perform the Contract has been accepted by the VPT and is named as such in the Contract/ Agreement and the legal successors in title to such person.

**d. "Contractor's Representative"** means any person nominated by the Contractor and named as such in the Contract /Agreement and approved by the VPT to perform the duties delegated by the Contractor.

**e. "Subcontractor,"** including vendors, means any person to whom any of the obligations of the Contractor, including preparation of any design or supply of any Information Technologies or other Goods or Services, is subcontracted directly or indirectly by the Contractor with the consent of the VPT and the legal successors in title to such person of VPT.

## **3. Scope**

**a. "Information System,"** also called "the **System**," means all the Information Technologies, Materials, and other Goods to be supplied, installed, integrated, and made operational, together with the Services to be carried out by the Contractor under the Contract.

**b. "Subsystem"** means any subset of the System identified as such in the Contract that may be supplied, installed, tested, and commissioned individually before Commissioning of the entire System.

**c. "Information Technologies"** means all information processing and communications-related hardware, Software, cables, supplies, and consumable items that the Contractor is required to supply and install under the Contract.

**d. “Goods”** means all hardware, cables, software, tools, equipment, machinery, and / or other materials, and other tangible or intangible items that the Contractor is required to supply or supply and install under the Contract.

**e. “Services”** means all technical, logistical, management, and any other Services to be provided by the Contractor under the Contract to supply, install, customize, integrate, and make operational the System.

**f. “Project Plan”** means the document to be developed by the Contractor and approved by the VPT, based on the requirements of the Contract and the Preliminary Project Plan included in the Contractor’s Tender. The “Agreed and Finalized Project Plan” is the version of the Project Plan approved by the VPT. Should the Project Plan conflict with the Contract in any way, the relevant provisions of the Contract, including any amendments, shall prevail.

**g. “Software”** means that part of the System, which are instructions that cause information processing Subsystems to perform in a specific manner or execute specific operations.

**h. “System Software”** means Software that provides the operating and management instructions for the underlying hardware and other components.

**i. “Application Software”** means Software formulated to perform specific business or technical functions and interface with the business or technical users of the System.

**j. “Standard Software”** means Software purchased off the shelf or standard products of software vendors, which provides specific functionalities.

**k. “Custom Software”** means Software specifically developed under this Contract to meet the Technical Specifications described in this Contract.

**l. “Source Code”** means the database structures, dictionaries, definitions, program source files, and any other symbolic representations necessary for the compilation, execution, and subsequent maintenance of the Application / Custom Software). Source code should be provided for VPT at end of the contract period irrespective of IP of L1 bidder / customization of VPT operations also take place for during design time. Hence, VPT also have a right on source code of proposed POS application

**m. “Materials”** means all documentation in printed or printable form and all instructional and informational aides in any form (including audio, video, and text) and on any medium, provided to the VPT under the Contract. Materials contains User Manuals, configuration documentation, Process flow documentation, administrator level documentation as per the standards of IT companies of CMM level 3 or above

**n. “Intellectual Property Rights”** means any and all copyright, moral rights, trademark, patent, and other intellectual and proprietary rights, title and interests

worldwide, whether vested, contingent, or future.

a. **"Works"** means the customization and implementation of Port Operation System and the related Works or either of them as appropriate.

#### 4. **Activities**

- a. **"Delivery"** means the transfer of the Goods/ submission of deliverables from the Contractor to the VPT.
- b. **"Installation"** means that the System or a Subsystem as specified in the Contract is ready for Commissioning.
- c. **"Pre-commissioning"** means the testing, checking, and any other required activity that are to be carried out by the Contractor in preparation for Commissioning of the System.
- d. **"Commissioning"** means operation of the System or any Subsystem by the Contractor following Installation, which operation is to be carried out by the Contractor, for the purpose of carrying out Operational Acceptance Test(s).
- e. **"Operational Acceptance Tests"** means the tests specified in the Technical Requirements and Agreed and Finalized Project Plan to be carried out to ascertain whether the System, or a specified Subsystem, is able to attain the functional and performance requirements specified in the Technical Requirements and Agreed and Finalized Project Plan.
- f. **"Operational Acceptance"** means the acceptance by the VPT System (or any Subsystem(s) where the Contract provides for acceptance of the System in parts) from the end users of operations.

#### 5. **Place and time**

- a. **"Project Site(s)"** means the place(s) for the supply and installation of the System at Visakhapatnam Port Trust Offices and Docks.
- b. **"Commencement Date"** means the 15th day of issue of work order.
- c. **"Time for Completion"** means the time for completing the execution and complying with and fulfilling the requirements on Completion of the Works or as extended calculated from the Commencement Date.

- d. **“Contract Period”** is the time period during which this Contract governs the relations and obligations of the Employer and Contractor in relation to the implementation of the proposed Information System.
- e. **“Defect Liability Period”** (also referred to as the “Warranty Period”) means the period of warranty given by the Contractor commencing at date of the Operational Acceptance Certificate of the System during which the Contractor is responsible for defects with respect to the System and for remedying it at the cost and risk of the Contractor. .
- f. **“The Post-Warranty Services Period”** means the period following the expiration of the Warranty Period during which the Contractor is obligated to provide Software licenses, maintenance, and/or technical support services for the System, either under this Contract or under separate contract(s).

**6. Language of Tender:**

The tender submitted by the tenderer and all correspondence and documents relating to the tender shall be written in English. Any printed literature furnished by the tenderer written in any other language, must be accompanied by an English translation. For the purpose of interpretation of the tender documents, the English translation shall prevail.

**7. Governing Law**

The Contract shall be governed by and interpreted in accordance with the laws of India. Disputes, if any, shall be within the local territorial jurisdiction of courts of law in Visakhapatnam, Andhra Pradesh.

**8. Work to be in Accordance with Contract**

The Contractor shall execute and complete the Works and remedy and any defects therein in strict accordance with the contract and its General Conditions of Contract, Special Conditions of Contract, and Functional and Technical Specifications and Bill of Quantities to the satisfaction of the Project Manager.

**9. Project Manager**

The employer shall appoint and notify the Contractor or successful bidder in writing of the name of the Project Manager. The Project Manager shall have the authority to represent the VPT on all day-to-day matters relating to the System or arising from the Contract. All notices, instructions, orders, certificates, approvals, and all other communications under the Contract shall be given by the Project Manager, except as otherwise provided for in this Contract.

All notices, instructions, information, and other communications given by the Contractor to the Employer under the Contract shall be given to the Project Manager, except as otherwise provided for in this Contract.

### **Project Manager's Duties and Authority**

- i. The Project Manager shall carry out the duties specified in the Contract.
- ii. The Project Manager shall exercise the authority specified in or necessarily to be implied from the Contract. The requisite approval shall be deemed to have been given by the Employer for any such authority exercised by the Project Manager.
- iii. Except as expressly stated in the Contract, the Project Manager shall have no authority to relieve the Contractor of any of the obligations under the Contract.

### **Project Manager's Authority to Delegate**

The Project Manager may from time to time delegate to the Assistants any of the duties and authorities vested in the Project Manager and he may at any time revoke such delegation. In either case, the Contractor shall be suitably notified in writing.

### **Supplementary Instructions/ specifications**

The Project Manager shall have authority to issue to the Contractor, from time to time, such supplementary instructions/ specifications as shall be necessary for the purpose of the proper and adequate execution and completion of the Works and the remedying of any defects therein. The Contractor shall carry out and be bound by the same.

### **Appointment of Assistants**

The VPT may appoint any number of persons to assist the Project Manager in carrying out his duties. He shall notify to the Contractor the names, duties and scope of authority of such persons.

### **10. Contractor's General Responsibilities**

The Contractor shall, with due care and diligence, design (to the extent provided for by the Contract), execute and complete the Works during the technical support period and remedy any defects therein in accordance with the provisions of the Contract and with the skill and care expected of a competent provider of information technologies, information systems, support, maintenance, training, and other related services in accordance with the best industry practices. The Contractor shall provide all superintendence, resources required and all other things, whether of a temporary or permanent nature, required in and for such design, execution, completion and remedying of any defects, so far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract. In particular, the Contractor shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.

The Contractor shall acquire in its name all permits, approvals, and/or licenses from all local,

state, or national government authorities or public service undertakings that are necessary for the performance of the Contract.

The Contractor shall comply with all laws in force in the Country. The Contractor shall indemnify and hold harmless the VPT from and against any and all liabilities, damages, claims, fines, penalties, and expenses of whatever nature arising or resulting from the violation of such laws by the Contractor or its personnel, including the Subcontractors and their personnel.

**11. Approval for appointment of Contractor's Representative :**

If the Contractor's Representative is not named in the Contract, then within fourteen (14) days of the Effective Date, the Contractor shall appoint the Contractor's Representative and shall request the VPT in writing to approve the person so appointed. The request must be accompanied by detailed curriculum vitae for the nominee, as well as a description of any other System or non-System responsibilities the nominee would retain while performing the duties of the Contractor's Representative. If the VPT does not object to the appointment within fourteen (14) days, the Contractor's Representative shall be deemed to have been approved. If the VPT objects to the appointment within fourteen (14) days giving the reason therefore, then the Contractor shall appoint another on replacement within fourteen (14) days of such objection.

**Role of Contractor's Representative:**

The Contractor's Representative shall have the authority to represent the Contractor on all day-to-day matters relating to the System or arising from the Contract. The Contractor's Representative shall give to the Project Manager all the Contractor's notices, instructions, information, and all other communications under the Contract.

All notices, instructions, information, and all other communications given by the VPT or the Project Manager to the Contractor under the Contract shall be given to the Contractor's Representative except as otherwise provided for in this Contract.

**Co-ordination of the Project Team:**

The Contractor's Representative and staff are obliged to work closely with the VPT's Project Manager and staff, act within their own authority, and abide by directives issued by the VPT that are consistent with the terms of the Contract. The Contractor's Representative is responsible for managing the activities of its personnel and any subcontracted personnel.

**Contractor's Employees**

The Contractor shall provide on this project for the execution and completion of the Works and the remedying of any defects therein only such technically qualified, skilled and experienced personnel as required for execution of work



**VPT at Liberty to Object**

The VPT shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person provided by the Contractor who, in the opinion of the VPT, misbehaves, or is incompetent or negligent in the proper performance of his duties, or whose presence on Site is otherwise considered by the Project Manager to be undesirable, and such person shall not be again allowed upon the Works without the consent of the VPT. Any person so removed from the Works shall be replaced by an equally qualified and experienced person as soon as possible.

**12. Escalation Matrix**

On commencement of the contract the tenderer shall submit an escalation matrix with the details including official name, address, phone number, e-mail address, etc, which will form part of SLA (Service Level Agreement).

**13. Service Level Agreement (SLA)**

The successful bidder shall enter into an SLA within two weeks from the date of issue of operational acceptance of the system.

**14. Sub-Contracting**

Contractor shall not sub-contract any part or whole of the services/work.

**15. Severability**

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity, or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

**16. Non waiver**

No relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, nor shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

**17. Confidentiality:**

The Contractor shall treat the details of the Contract as private and confidential, save in so far as may be necessary for the purpose thereof, and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the previous consent in writing of the VPT.

**18. Notification of the Award of Contract**

The successful Tenderer will be notified that their offer has been accepted and the basis on

which, the tender has been accepted through 'Notification of the award of contract'.

**19. Contract Documents**

All documents forming part of the Contract (and all parts of these documents) are intended to be correlative, complementary, and mutually explanatory. The Contract shall be read as a whole. The Contract constitutes the entire agreement between the VPT and Contractor with respect to the subject matter of Contract and supersedes all communications, negotiations, and agreements (whether written or oral) of parties with respect to the subject matter of the Contract made prior to the date of Contract.

**20. Custody and Supply of Specifications and Documents**

The documents shall remain in the sole custody of the Project Manager, but one copy thereof shall be provided to the Contractor free of charge. The Contractor shall make at his own cost any further copies required by him.

**21. Commencement of Work/Support Service**

The Contractor shall commence the service/work from the date specified in the Letter of Intent or Work Order. The Contractor shall execute the performance guarantee as per clause 7.23 the tender.

**22. Operational Acceptance Tests**

The Operational Acceptance Tests (and repeats of such tests) shall be the primary responsibility of the VPT, but shall be conducted with the full cooperation of the Contractor during Commissioning of the System, to ascertain whether the System conforms to the Technical Requirements and meets the standard of performance quoted in the Contractor's Tender, including, but not restricted to, the functional and technical performance requirements. The Operational Acceptance Tests during Commissioning will be conducted as specified in the Technical Requirements and/or the Agreed and Finalized Project Plan as per the user departments of VPT. The detailed test matrix covering all features shall be submitted by the contractor.

**23. Issue of Operational Acceptance Certificate**

The Project Manager shall issue an Operational Acceptance Certificate in the specific format or notify the Contractor in writing of any defect or deficiencies or other reason for the failure of the Operational Acceptance Tests.

The Contractor shall remedy any defect and/or deficiencies and/or other reasons for the failure of the Operational Acceptance Test notified by the Project Manager. Once such remedies have been made by the Contractor, the VPT shall retest and issue Operational Acceptance Certificate or shall notify the Contractor of further defects, deficiencies, or other reasons for the failure of the Operational Acceptance Test. The procedure shall be repeated, as necessary, until an Operational Acceptance Certificate is issued.

**24. Failure to Achieve Operational Acceptance**

If the System or Subsystem fails to pass the Operational Acceptance Test(s) then the VPT may consider terminating the Contract. If the System (or Subsystem[s]) fails to achieve Operational Acceptance, due to reasons attributable to the Contractor, the VPT may consider termination of the Contract and forfeiture of the Contractor's performance security in compensation for the extra costs and delays likely to result from this failure.

**25. Force Majeure:**

In the event of the contractor / Visakhapatnam Port Trust being prevented from fulfilling its obligation in full or in part arising out of this contract, due to any Force Majeure event like acts of God (flood, earthquake etc.) or war, civil commotion, strike etc, the affected party shall forthwith, but in no case later than 24 hrs from the commencement of such event, intimate the other party as to the commencement of such event and continue to intimate after every 7 days during continuance of such event. The affected party shall, upon cessation of such event, promptly inform the other party and shall commence its obligation in part or in full arising out of this contract, which was kept suspended due to such events of "Force Majeure".

**26. Delay in making the system up & running during Technical Support period  
- Liquidated Damages**

If the Contractor fails to render the service within the permitted resolution time or any extension of the time for resolving the issues/delivery of the service, or fails to perform the service, then liquidated damages @1% of the annual rate per week or part thereof of the item as per the contract, will be applicable subject to a limit of 10% of the contract value of the item/work, beyond which the VPT will engage a third party to get the issue resolved or service rendered. The expenditure of the VPT in this regard will be recovered from the contractor's next bill, failing which the claim will be settled from the BG.

Such damages will be deducted from any money due to the contractor. The payment of such damages shall not relieve the contractor of his obligations to complete the works/services or from any other of his obligations or liabilities under this contract. This shall not limit, however, any other rights or remedies the VPT may have under the Contract.

In the event that the contractor is delayed or prevented from performing its obligations under this contract due to failure, delay or negligence on the part of the VPT, the contractor shall be excused and shall have no liability or obligation and is entitled to an extension of time to perform its obligations. Unless otherwise agreed, the period of the extension will be equal to the amount of time for which the contractor is delayed or prevented from performing its obligations due to such failure, delay or negligence on the part of the employer.

If the contractor failed to deliver the operational screens/ operational provisions within the tender period, VPT have right to impose a penalty based on the criticality / essentiality of

such operations. VPT have free hand to impose the penalty up to 10 % of the total cost of the project with inclusive of taxes applicable at the time of imposing penalty.

Competent authority of VPT may have all rights to increase the penalty or also wave off the penalty imposed by VPT based on the conditions and damage occur for VPT .

## **27. Resolution of disputes:**

In the event of any dispute in the interpretation of any of the clauses of this Agreement, it is hereby agreed to settle the dispute amicably by mutual discussions/negotiations. In the event of failure of mutual negotiations/discussions, the matter can be referred to Arbitration as provided here in below.

All disputes between the parties shall be referred to the award of two arbitrators (one to be nominated by the "Contractor" and one by "VPT" or in case of said arbitrators not agreeing, then to the award of an Umpire to be appointed by the said Arbitrators) in writing before proceeding on the reference. The decision of the arbitrators or in the event of their not agreeing, of the Umpire appointed by them shall be final and binding on all parties to the contract and the provision of the Arbitration and Conciliation Act, 1996 and the rules there under and any statutory modification thereof shall be deemed to apply to such reference and deemed to be incorporated in the Contract. Joint Arbitrators/ Umpire may from time to time with the consent of parties shall extend the time for making and publishing the award. The Joint Arbitrators/Umpire will be bound to give claim wise detailed and speaking award and it should be supported by reasoning. The Arbitration proceedings shall take place in Visakhapatnam only

## **28. Alterations, Additions and Omissions**

### **Variations**

The Project Manager shall make any variation of the form, quality or quantity of the Works/Service or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion, be appropriate, he shall have the authority to instruct the Contractor to do and the Contractor shall do any of the following:

- A. Increase or decrease the quantity of any work/service included in the Contract,
- B. Omit any such work/service (partially or fully),
- C. Change the character or quality or kind of any such work/service,
- D. Execute additional Work/service of any kind necessary for the completion of the Works/services,

No such variation shall in any way vitiate or invalidate the Contract, by the effect, if any, of all such variations shall be valued, provided that where the issue of an instruction to vary the

Works is necessitated by some default of or breach of Contract by the Contractor or for which he is responsible, any additional cost attributable to such default shall be borne by the Contractor.

### **Valuation of Variations**

All variations referred above and any additions to the Contract Price, which are required to be determined, shall be valued as follows:

- A. At the rates and prices set out in the Contract if, in the opinion of the Project Manager, the same shall be applicable.
- B. If the Contract does not contain any rates or prices applicable to the varied Work, the rates and prices in the Contract shall be used as the basis for valuation so far as may be reasonable, failing which after due consultation by the VPT with the Contractor, suitable rates or prices shall be agreed upon between the VPT and the Contractor.
- C. In the event of disagreement, the VPT shall fix such rates or prices as are, in his opinion, appropriate and shall notify the Contractor accordingly.

## **29. Performance Security**

The successful tenderer will be required to furnish Bank Guarantee towards Performance Security for 10% of the total Contract price including taxes & duties on a stamp paper of value Rs.200/- within 7 days from the date of LOI / Work order of the Tender by means of Bank Guarantee.

The Bank Guarantee should be valid till the satisfactory completion of One Year warranty period from date of operational acceptance and the same has to be extended for a further period as required by the VPT. Any expenditure in this regard will be borne by the Contractor. The Proforma of Bank Guarantee for Performance Security is given as **Form XII**.

The Port Trust may at their option Claim the Performance Security either in full or part if the contractor fails to carry out the work or perform or observe the conditions of contract. The Port Trust will also be at liberty to deduct from Security Deposit or from any sums of money due or that may become due under this contract with the contractor. This is without prejudice to the rights of the Trust under the terms of the Contract.

A separate Bank Guarantee from a Nationalized/Scheduled Bank having branch in **Visakhapatnam**, for 10% of the total AMC charges for five years and 6 months implementation, 6 months stability period, including taxes & duties has to be furnished by the

contractor for the proper completion of the AMC period, on a stamp paper of value Rs.200/-, on receipt of order for AMC, but before the completion of the warranty period of the installation. The Bank Guarantee for the installation and warranty as per (a) above will be released only after submission of the bank guarantee towards AMC.

The Bank Guarantee should be valid till the completion of the Go-live. Any expenditure in this regard will be borne by the Contractor. If the contractor fails to perform the Go-live successfully/ terminates the contract before the Go-live period, this B.G towards the performance of go-live will be forfeited.

### **30. Period of Validity of Performance Security**

The Performance Security towards the support period shall be valid until the Contractor has executed and completed the Services/Works. The validity of the performance security can be extended mutually

### **31. Claims under Performance Security**

Prior to making a claim under the performance security the VPT shall, in every case, notify the Contractor stating the nature of the default in respect of which the claim is to be made.

### **32. Payment**

The Contract rates shall be firm and fixed and not subject to any alteration.

### **33. Terms of Payment:**

Payment will be made by the VPT according to the following schedule and procedures:

The Contractor's request for payment shall be made to the VPT in writing, accompanied by an invoice for the goods or services actually delivered, installed or operationally accepted. No payment made by the VPT herein shall be deemed to constitute acceptance by the VPT System or any Subsystem(s).

All statutory levies such as GST etc. and all amounts due to the Employer will be deducted from the amount due to the Contractor and the balance will be paid. Payment will be made through online as far as possible and contractor will be required to provide information on Bank details.

### **34. Payment Schedule:**

The types of payments covered in this contract are as follows:

**POS Software Supply/Installation incl.Licences of necessary supporting softwares**

<b>Key milestone</b>	<b>Activities to be completed</b>	<b>Payment</b>	<b>Documents</b>
(i) POS/CUSTOMER PORTAL/MOBILE Software Supply/Installation incl. Licence	Receipt of Software and necessary licenses in good condition and successful installation	40%	Delivery Certificates, OEM documents and SRS approved by the Project Manager with duly signed manner
(ii) Implementation including training	Customization and Successful testing of the application	20%	i) Installation certificate & Acceptance Report issued by Project Manager. ii) User Manuals iii) Delivery of training material in hard and soft copies. iv) Training Completion Certificate by Project Manager.
(iv) Operational Acceptance (OA)	Operational Acceptance of POS by VPT.	20%	OA Certificate by Project Manager after duly agreed by user departments

(v) Warranty services - completion	Satisfactory support during warranty period.	Balance 20% towards the Software Supply/ Installation incl. License.	i) Defects Liability Certificate by Project Manager. ii) Submission of Performance security for the AMC for 5 years 6 months if Visakhapatnam Port Trust desires to continue.
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**Post Go-live Warranty Maintenance for one year.**

<b>Key milestone</b>	<b>Activities to be completed</b>	<b>Payment</b>	<b>Documents</b>
Warranty services - completion	Satisfactory support during warranty period.	100%	i) Defects Liability Certificate by Project Manager. ii) Submission of performance security for the AMC for 5 years , 6 months implementation and 6 months stability.if Visakhapatnam Port Trust desires to continue.



### Post Implementation services –Change Request

Key milestone	Activities to be completed	Payment	Documents
Implementation of Change Request	Operational Acceptance	At the end of each Quarter	i) Documentation of Changes ii) Training if applicable iii) OA Certificate by Project Manager

**Note: need to define Man day rate for CR along with tender bid submission document (same applicable for entire project period)**

### Post Implementation services – AMC/ATS

Key milestone	Activities to be completed	Payment	Documents
AMC Support / ATS Services for the Quarter.	Satisfactory Completion of AMC Support / ATS Services for the Quarter.	Pro rata for every quarter	i) Quarterly reports of calls attended / resolution. ii) Performance certificate by Visakhapatnam Port Trust
Post Warranty (AMC) Completion	Satisfactory support during the AMC period	Release of Performance Security	Defects Liability Certificate by Project Manager.

Following documents shall be submitted by the Contractor to the Project Manager at each stage of payment as applicable.

- A. Invoice (showing Work Order ref., service description, quantity, unit price, amount, tax, total amount, etc.) for the payments along with a covering letter mentioning the proper description of the services rendered and duration of work.
- B. Performance Certificate from the Project Manager of Visakhapatnam Port Trust certifying satisfactory services along with the

detailed activity report / supporting document(s).

- c. Operational Acceptance certificate (as per **Form- XI**) for the activities / Change Requests if any, duly signed and stamped by Visakhapatnam Port Trust officials.

**35. Taxes and Duties**

The basic rate quoted in the tender shall hold good and inclusive of all taxes and duties at the time of bidding on the tenderer, notwithstanding any increase in the prices of materials and labour or in the freights or levy of other charges whatsoever and the tenderer shall not be entitled to claim any increase over the rates quoted by him during the period of currency of the contract except taxes and duties as introduced / modified by Govt. from time to time which shall be considered on production of documentary proof.

**36. GST**

GST as per the rates ruling at the time of raising of invoices shall be applicable. Any changes in the GST tax structure will be applicable as and when notified by the Govt. from time to time. All the GST return shall be submitted in time by the Contractor. If any ITC (Input Tax Credit) lost due to non-filing of return will be recovered from the Contractor.

**37. Income Tax**

Deduction of Income Tax shall be made by the Employer from each Payment to the Contractor at the rates specified by the Central Government under the provisions of IT Act on the gross amount of the Contractor's Bill for payment.

**38. Labour**

**39. Independent Contractor**

The Contractor shall be an independent contractor performing the Contract. The Contract does not create any agency, partnership, joint venture, or other joint relationship between the parties to the Contract. Subject to the provisions of the Contract, the Contractor shall be solely responsible for the manner in which the Contract is performed. All employees, representatives, or Subcontractors engaged by the Contractor in connection with the performance of the Contract shall be under the complete control of the Contractor and shall not be deemed to be employees of the Employer, and nothing contained in the Contract or in any subcontract awarded by the Contractor shall be construed to create any contractual relationship between any such employees, representatives, or Subcontractors and the Employer.

**40. Engagement of Staff and Labour**

The Contractor shall, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The tenderer is also required to have their own transport for movement of their men and material inside/outside the port premises. Visakhapatnam Port Trust will not provide any vehicle or manual assistance to the tenderer in this regard. The tenderer should follow Workmen's Compensation Act for providing insurance coverage to their employees.

**41. Indemnity**

The tenderer shall indemnify Visakhapatnam Port Trust during the various stages of execution of the contract, regarding damages or loss of or injury to or death of persons/ properties belonging to:

- Third parties
- Visakhapatnam Port Trust's facilities and goods

**42. Compliance of relevant Acts, Ordinances etc.**

The tenderers/contractor will strictly adhere to all rules and regulations as laid down by the Govt. of India, State Government Authority, Local Authority, Statutory Bodies and Visakhapatnam Port Trust in this connection.

The contractor shall be required to comply with all relevant acts and laws including the Minimum Wages Act, 1948, Employer's Liability Act, 1938, Industrial Dispute Act, 1947, Indian Contract Act, Workmen's Compensation Act, The Contract Labour (Regulation & Abolition) Act, 1970 etc. or statutory amendment and the modifications thereof or any other laws relating thereto and the rules made there under from time to time.

It will be the duty of the contractor to abide by all the provisions of the Acts, Ordinances Rules, Regulations, By-laws, procedures as are lawfully necessary in the execution of the works. Contractor will be fully responsible for any delay, damage, etc. and shall keep Visakhapatnam Port Trust indemnified against all penalties and liabilities of any kind for non-compliance with or infringement of any kind, for non-compliance with or infringement of any such Act, Ordinance, Rules, Regulations, By-laws, procedures etc.

The aforesaid Regulations shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

**43. Care of the Works**

Though the ownership of the System is vested with the Employer upon their delivery, the Contractor shall take full responsibility for the care and custody of the System or Subsystems till the issue of Operational Acceptance.

**44. Responsibility to Rectify Loss or Damage**

If any loss or damage happens to the Works, or any part thereof, or materials or

Plant for incorporation therein, during the period for which the Contractor is responsible for the care thereof, from any cause whatsoever, the Contractor shall, at his own cost, rectify such loss or damage so that the Works conform in every respect with the provisions of the Contract to the satisfaction of the Project Manager. The Contractor shall also be liable for any loss or damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations under Defects Liability.

If it fails, VPT may impose a penalty against to the damage. VPT have free hand to impose penalty not more than 10% of L1 bidder value including taxes whatever applicable at that time.

#### **45. Damage & loss to private property & injury to workmen**

The Contractor will at their own expenses, reinstate and make good up to the satisfaction of Visakhapatnam Port Trust and pay compensation for any injury or loss or damage accrued to any property or rights whatsoever, including property and rights of Visakhapatnam Port Trust or Agents or servants or employees of Visakhapatnam Port Trust, the injury, loss or damage arising out of or in any way in connection with the execution or purported execution of the contract(s) and further, the Contractor will indemnify Visakhapatnam Port Trust against all claims enforceable against Visakhapatnam Port Trust or any Agents, servant or employees of Visakhapatnam Port Trust or which would be so enforceable against Visakhapatnam Port Trust where Visakhapatnam Port Trust is a private person, in respect of any such injury including injury resulting to death, loss or damage to any person whomsoever or property including all claims which may arise under the Workmen's Compensation Act or otherwise. covid-19 insurance coverages on part of contractors of workers working in the premises of VPT for discussions/meetings/Implementation/Support/Training

If it fails, VPT may impose a penalty against to the damage. VPT have free hand to impose penalty not more than 10% of L1 bidder value including taxes whatever applicable at that time

#### **46. Limitation of liability**

Subject to the responsibilities, liabilities and warranties expressly mentioned in the General Conditions of Contract, neither party be liable for any indirect, incidental, consequential, special or punitive loss or damage whatsoever and howsoever arising, including but not limited to loss of profits or revenue, loss of data, even if the party shall have been advised of the possibility thereof and the total aggregate liability of either party under the contract shall not exceed the total charges payable by the employer under the contract, for the work, which gives rise to the liability.

#### **47. Undertakings**

An undertaking that no payment or illegal gratification has been made to any person/authority connected with the Tender process so as to influence the

tender process and have not committed any offence under The Prevention of Corruption Act, 1988 in connection with the tender, has to be furnished in Form XIII.

Disclosure of payment made/ proposed to be made to the intermediaries in connection with the tender has to be made in Form XIV shall be given.

An undertaking that no changes have been made in the tender document downloaded has to be furnished in Form XV.

#### **48. Integrity Pact**

The Integrity Pact duly signed shall be placed in **Inner Cover II**, Technical Bid.

The Tenderer have to execute an “Integrity Pact” (IP) as per the format in of this tender document. Integrity pact shall cover the tender throughout its various phases and it would be deemed as a part of the contract. The Tenderer should sign and submit the “Integrity Pact” to be executed between the Tenderer and Visakhapatnam Port Trust along with the Tender in a separate envelope super scribing “Integrity Pact”. Tenders not accompanied with IP will be rejected.

The IP would be implemented through the following Independent External Monitor (IEM) for this tender.

<Person Name and address details of IP SPOC>

#### **49. Time of Completion**

The entire work of Supply, Customization and Implementation should be completed within a period of 6 months from the commencement date mentioned in the Lol/work order. The Go-live of functionalities as mentioned under SoW shall be implemented within a period of 6 months from the date of issue of the work order.

#### **50. Procedure for support during warranty period:**

If during the Warranty Period any defect should be found, the Project Manager should give the Contractor a notice stating the nature of the defect together with all available evidence. The Contractor, on receiving the notice shall at its sole cost, repair, replace, or otherwise make good such defect and prevent the recurrence of such defects as well as any damage to the System or other sub systems caused by such defect.

#### **51. Extension of Warranty Period.**

If the System or Subsystem cannot be used by reason of such defect, the

Warranty Period for the System shall be extended by a period equal to the period during which the System or Subsystem could not be used by the Employer because of such defect.

## **52. Recommendations of H/W and S/W**

The contractors should provide necessary recommendations and configurations for the procurement of Hardware, Operating Systems and other System Software required for the smooth deployment of the application in a cloud based environment within 3 weeks of signing the agreement.

The recommendation should contain details about:

- a) Various Servers (Application/Database etc), Operating Systems, Database, Backup and Storage requirements for both Production and Quality environments.
- b) Backup Infrastructure Requirements.

The recommendations should meet the present working conditions, available resources and able to extend the support with latest changes in the software or hardware with free of cost by the L1 bidder make sure that there is no technical constraints should be arise for the trade/ stake holders at any point of time within the tender period

## **53. Technical Architecture:**

Software Provider should validate VPT's existing technical infrastructure and recommend an appropriate solution to meet VPT's business requirements in the implementation of the POS system. Software Provider shall also monitor the archiving strategy, control and security aspects during implementation.

Software Provider has to recommend the IT architecture design including hardware, and operating system for the implementation keeping in view the Usage & complexity of the implementation, communication infrastructure available at VPT and Data Archival & Storage requirements. The recommended architecture should also provide for scalability, disaster recovery, test and production environments.

## **Section 3: Requirements and Scope of Work.**

### **1. VPT Automation requirement for Software Solution and Implementation.**

The Scope of Work covers Supply, Customisation, Implementation of Integrated Solution for Port Operation System, covering Customer Portal for Port Users,

Port Operating System, Mobile Application, integration with external system, Warranty support for 1 Year and post implementation support for 5 years 6 months (AMC).

The proposed solutions should have the feature to facilitate the following functional requirements:

1. Port Operations Solution: POS solution should address all VPT requirements, to be configured as per the organization business processes.
  - a. Documentation
  - b. Vessel operations
  - c. Marine Operations
  - d. Cargo Operations
  - e. Railway Operations
  - f. Storage Operations(SS revenue & shed operations)
  - g. Tariff/Billing Management
  - h. Operational, Financial and Statistical Reports
  - i. Online Berthing
  - j. Dry dock services
  - k. Dashboard Implementation
  - l. MIS Reports
  - m. BI reports
  - n. Mobile apps for IOS/android Phones
  - o. AS is study of existing POS application and to be documentation for VPT
  - p. SMS/EMAIL services against to operational activities done at VPT
  - q. Validation acknowledgements against to errors
  - r. API/EDI Integration with other software applications decided by VPT
  - s. CHATBOT for VPT operations
  - t. Automation of all port operations with AI, Machine learning and IOT applications..etc.
  - u. Ticket tracking tool for customer support issues
  - v. Other miscellaneous services provided by VPT for VPT stake holders
2. Customer Portal: Proposed Customer Portal should be able to deploy on Internet in a secure way to port users to manage their services, requests and payments.
  - a. Multiple logins for each port user.
  - b. Maker and checker facility for users
  - c. Two factor authentication.
  - d. All Services required for Ports users ( Close to 180 Services)

- e. Mobile Application for Status, Notifications and Updates.
- 3. Mobile Application:
  - a. Mobile Application (Andriod/loS ...etc mobile Operating systems)
  - b. API integrations for FOIS, RFID, Weigh bridges, terminal operators of VPT, SCMTR, Unnati Portal, PCS1x ...etc.
- 4. Integration within and External Applications
  - a. RFID Integration
  - b. Weighbridge Application integration
  - c. PCS/EDI Integration
  - d. SAP Integration
  - e. Operational, Financial and Statistical Reports
  - f. Integration of Water meters/ electricity meters
  - g. Web Services enabled POS application for administrators for stake holders
- 5. Application Performance Monitoring.

### **Estimated number of users:**

It is estimated that VPT users will grow 10% year on year. Initial estimated users are:

- 1. Customer Portal: 300 concurrent user
- 2. POS Users: 200 Concurrent users
- 3. Mobile Server users
  - o Portal users: 200 Concurrent users
  - o POS user: 150 Concurrent users.

Bidder should provide perpetual use license agreement, without any restriction on number of users or any restriction on volume of cargo or cargo types.

### **Proposed solution Roadmap:**

The Proposed POS solution Roadmap should be feasible to support Artificial Intelligence and Machine Learning to build intuitive intelligence for estimated completions/time/costs and prediction of activity status etc. Also, to support Robotic Process Automation for business process automations.

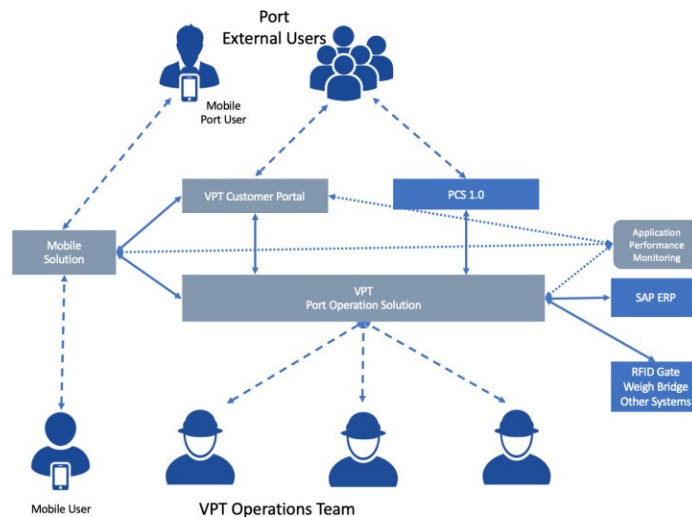
### **Technology Architecture:**

Proposed solution should be built on open source technology stack, should support all browsers. Solution should be able to port on any database can be deployable with Docker and Kubernetes.

### **Application Deployment Plan:**

Following is the high level deployment plan.





### Performance & Availability:

- Proposed solution to be monitored by an independent Application Monitoring solution for performance related to System Resources, Response times and internal application performance diagnostics for application management and performance tuning.
- All application to be deployed with high availability and load balancing for highest uptimes and best performance.
- All applications should have DR configuration done for Production environments with lowest RTO and RPO.

### Port Operating System Requirement.

#### Port Operating System Scope of Work:

##### Documentation

Facility for capturing all DryBulk / Break Bulk / Liquid Bulk /RO-RO operations with respect to Import/Export/Transshipment/Stuffing/ Destuffing /Storage operation with validations and checks even for other services from the POS application through Excel, doc, text, Pdf..etc.

### Marine& Vessel Operations:

- Customized Workflows configuration feature is required on the proposed transaction of the application to facilitate the approval hierarchy with defined users.
- Creation of vessel profile uniquely identifying them (IMO number of the vessel) and storing the same in the port's database.
- Uploading the vessel profile through PCS or Manual Creation
- Registering each voyage of the vessel by authorized Steamer Agents through PCS. A Vessel Identification Number (VCN) shall uniquely

identify each voyage should be generated from POS application and forwarded to PCS1x application. Capturing the date and time of arrival at outer anchorage either by interfacing with the VTMS of the port or through data entry at the Radio / Signaling station.

- e. Updation of the ETA of the vessel, Arrival/Departure Recording, Berthing / Unberthing Recording, Vessel Delay Recording, Shipping Programme, Pilotage Recording, Towage Recording, Service Recording, Resource Requisition etc.
- f. Filing of application for allotment of berth by authorized Steamer Agents / Vessel Agents through the PCS or Traffic Section of the port.
- g. Capture of berth allotment and berthing schedule online and distribute them electronically and publishing through the port website or using Mobile Application.
- h. Viewing the up to date status of the applications filed and Berthing schedule with amendments thereof for the authorized users
- i. Provision to traffic team to have dashboard with auto prioritize the vessels in validation with latest Berth requests received through PCS 1x and Cargo loading / unloading status information updated in the proposed mobility application by ground team of operations.
- j. Viewing the status of the vessel at any time during the stay at the port.
- k. Provision to view the status of all VCN (open/closed) with details such as VCN, Vessel Name, Last activity etc.
- l. Granting of the Port Entry/ Clearance for the vessel with provision for verification of documents.
- m. Capture of Pilotage and towage information for inward, outward and shifting operations.
- n. Capture of the time of each movement of vessel like berthing, unberthing, shifting etc and any significant delays to a vessel's activities in the Port right from the arrival at outer roads of the port till its sailing shall be recorded.
- o. Providing other services rendered to the ship like fresh water supply, bunkering, non- standard services, shore supply, telephone etc.
- p. Declaration of dangerous cargo on board the vessel
- q. Submission of PANS(ISPS requirements) through PCS
- r. Mobilizing the resources (craft, tugs, pilots, berthing/ mooring crew etc.) required for inward/ outward / shifting pilotage and berthing / unberthing operations.

- s. Mobile Application for pilotage and other offshore activities recording
- t. Provision to capture the restricted / released vessel information by the competent MMD / PHO, Customs in validation with vessel profile records for approval / reject decisions by the traffic team.
- u. Provision to capture the flotilla masters and its activities recording with billing validations against the service availed users.
- v. Provision to capture the masters / look up values of the transaction pages throughout the application.
- w. Provision for avoiding redundancy of the application
- x. Provision for uploading documents of check list verified by VPT traffic department for berthing the vessel in POS application only
- y. Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost
- z. Other services requested by VPT during the time of design of POS application

## **Cargo Operations**

### **Import**

Receipt of IGM and its amendments/deletions/cancellations if any from Customs electronically through PCS.

1. Manual entry /Uploading provisions to capture IGM details.
  - a. Tally / Draft Survey / Ullage Recording of cargo
  - b. Planning for storage at the sheds or yards
  - c. Allocation of Shed / Yard on licence basis inside Wharf area and its extension / vacation.
  - d. Receipt of cargo at the storage location – updating the storage plan
  - e. Capture of Bill of Entry(BE) from Customs through PCS
  - f. Manual entry provisions for Bill of Entry details
  - g. Capture of Agent's Delivery Order (DO) through PCS
  - h. Capture Customs clearance – Out of charge (OOC) electronically
  - i. Manual entry provisions for OOC details
  - j. Release of cargo, cross verifying with DO and OOC
  - k. Delivery of multiple parcels against one release order.
  - l. Change of Ownership of cargo
  - m. Calculation and billing of Demurrage charges wherever applicable.
  - n. Interim invoice generation.

- o. Holding of cargo release till payment of port charges
- p. Inter-carting of cargo
- q. Delivery of cargo from the hook point directly /storage area.
- r. Provision to capture the internal shifting movements of the cargo through the mobility application.
- s. Provision for sharing the necessary data with other agencies/terminal operators/Govt department/ other ministries through
- t. Provision for capturing container scanner details in to POS application
- u. Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request.
- v. Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost
- w.

### **Export**

- a) Exchange of message for Shipping Bills (SB) from Customs electronically through PCS.
- b) Manual entry provisions for Shipping Bill details
- c) Preparation of Shipping / Packaging List
- d) Storage planning for export cargo
- e) Vehicles entry against SB
- f) Admission of cargo against SB/Customs Permission
- g) Receipt of export cargo at storage location against SB/Customs Permission
- h) Calculation and billing of Demurrage charges wherever applicable.
- i) Interim invoice generation.
- j) Preparation of Loading / Discharge sequence.
- k) Loading tally / Draft Survey /Ullage recording and preparation of loaded list
- l) Preparation of EGM.
- m) Back to town for shut out cargo.
- n) Provision to capture the long-term storage (Open / closed) area, Special agreements through contracts management.

- o) Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request.
- p) Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

### **Transshipment**

- a) The system should have provision to support transshipment Operations of all types of bulk/break bulk cargo.
- b) The system should have facility to capture Voyage, Container and Billing/Invoice data for the purpose of assessing and reporting Terminal /Port performance, Delays, Cargo Container handled, Vessels handled etc.
- c) Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request
- d) Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

### **Gang booking and Gang Allocation**

- The POS should have a provision to request for Resources / Equipment with job wise details in the request and autosuggestion / allocation in validation with predefined configurations and allocation also should be done in the proposed POS application only accordingly bills also should be adjusted in POS application only.
- Gang request for the operations raised by stake holder and gang allocation also should be done in the proposed POS application only. Accordingly bills also adjust through POS application only.
- Shipping (CHD deployment/ equipment utilization) incentive has to be incorporated without any material intervention
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request

### **Cruise Operation**

- a) Facility to capture all cruise vessel related data
- b) Bunkering/Ship Store Operation
- c) Provision to capture special service request From Cruise vessel operating agents ( The screens and features will be finalized during the process study phase of the project)
- d) Provision to capture Garbage / Sludge / Waste removal from vessel.
- e) Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request
- f) Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

### **Water Supply**

- a. Application for fresh well water
- b. Approve or reject with reason the application for fresh well water
- c. Recording the details of water meter connecting form mentioning quantity of fresh well water, vessel's name, water meter No. and its previous reading
- d. Recording the details of fresh well water also supplied by water tanker on payment of Port Trust charges through water Supply Section within port(payment collection will be done via ERP)
- e. Recording the details of daily water supply duty slip
- f. Generate water receipts to be signed by Chief Officer of the vessel
- g. Bill/Invoice of water supplied to the vessel based on standard charges
- h. Bill/invoice for water supply to the port users and quarters
- i. Provision for integration through API/EDI with other applications without any Change Requests (CRs)
- j. Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost
- k. Provision for sharing necessary data between proposed POS

application and other Applications through API& EDI integration as and when VPT will request

**Bunkering:**

- a. Application for bunkering in port
- b. Accept or reject with reason the application
- c. Calculating and raising invoice for license fee/wharfage
- d. Integrating with ERP to check the payment received.
- e. Provision for sharing necessary data between proposed POS
- f. Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost
- g. application and other Applications through API& EDI integration as and when VPT will request

**Dry docking services**

- a. Application should be able to provide a provision for capturing of dry dock services as decided by VPT
- b. Provision for generating provisional / final bills as decided by VPT
- c. Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost
- d.

**Xi) Electricity charges**

- e. Provision for EDI/API integration with electric meters (Smart meters ) located in VPT / VPT employees quarters/ VPT berths in SAP/PPP applications
- f. Provision for adjustment of bills from employees salary/ PDA accounts of trade in SAP
- g. Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request

**Storage Operations**

The system shall support for import, export and transshipment cycles for :

- a. Import Receipt/Storage Operations
- b. Export Receipt/Storage Operations
- c. Inter Carting Operations
- d. Provision for sharing necessary data between proposed POS

application and other Applications through API& EDI integration as and when VPT will request

- e. Plot allocation procedure for cargo storage should be given by Traffic department and CE-RE section should be incorporate in proposed POS application
- f. Provision for obtaining reports on management's dash board with complete description
- g. Plot occupancy of VPT land
- h. Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost
- i.

For all the above, the features such as storage Planning, Viewing availability of space for the yard or the shed, Updation of storage plan, Delivery from storage in real time, Receipt to storage in real time, Shifting from one storage area to another etc to be incorporated.

### **Tariff/Billing Management**

1. Configurable Tariff Management as per the Scale of Rates (SoR) of the Port and its maintenance at front end only. The change of SoR also through front end only against to the services effected for SoR approved by tariff management. Change provision only for the IT section only
2. Billing/ Invoices Management as per SoR
3. Offline Invoice/Credit Note Generation
4. All vessel related charges like Port dues, Berth hire, Pilotage, Tug Hire etc as per Scale of Rates (SoR) of Visakhapatnam Port Trust
5. Vessel, Berth and period wise billing
6. Billing parameters includes Slabs (GRT, RGRT etc), MT, vessel type(Feeder, Main Line etc.) Vessel Category(Passenger, Container, Cruise, General Cargo, Tanker, LNG Vessel etc.) , vessel status (foreign, coastal) and currency (INR, USD), Duration of Stay, etc
7. All cargo related charges like Wharfage, Demurrage, Storage etc as per SoR
8. Collection of Penalty/incentive based on cargo operation
9. Charges for Equipment usage, Electricity, Offshore water supply, Water Front Royalty, Water Front Royalty on Re-loading of LNG, IGTPL Revenue Share etc.
10. Agent, equipment and period wise billing
11. Pilotage service billing for berths other than port berths
12. Berth hire charges for other vessels, floating crafts, bodies, Yachts
13. Wharf entry charges for Fresh Water Supply tankers



14. Overtime charges of crew for the supply of fresh water for employees
15. Provision to have a preview of the invoice before finalizing
16. Provision to make corrections (Date / Voy No. / Change etc)
17. Provision to delete an estimated invoice and regenerate one after making necessary changes.
18. Provision to change the billed party w.e.f a particular date and time in which case part of the vessel bills go to the owner and part to the charter.
19. Ship To Ship (STS) Operation Cargo and vessel related billing.
20. Back loading of POL Products (Shifting/Pilotage/Wharfage) billing
21. Billing of Oil pumping facility through Ports Berth, Jetties & Pipelines for transferring POL Products.
22. VCN Cancellation, Security Charges for Cruise Vessels Provision to automate billed rebate/concession as per quality criteria (ref. MGT, No. of Vessel & No. of Direction of VSL (E/W) & period)
23. Provision to Bill Double the normal berth hire on cargo ships idling on ship's account for 24 hrs or more during and after operations.
24. Provision to bill Berth hire at double the normal rates for research vessels, supply vessels, pleasure yachts, oil rigs and other non-cargo vessels excluding Passenger Ships, Navy & Coast Guard Ships and Ships & Barges for bunkering.
25. Performance Norms based Incentive and Penalty Scheme for cargo operations at Visakhapatnam Port Trust for POL products except Furnace oil, handled at COT, NTB & STB and Cement handled through Pipelines, in accordance with the Berthing Policy issued by the Ministry of Shipping, Government of India
26. PD Account maintenance of customers and Maintenance of Customer Master Data
27. Payment Integration through PCS/Portal
28. Auto Mailing of Invoices
29. Customer Portal to view Invoices, PD Account Balance etc
30. Provision to view charges for the actual services rendered after the completion of voyage.
31. PDA account wise reports of up to last 3 months should be generate in POS application only
32. GSTN reports should be available in POS application only
33. Berth wise revenue reports should be available in POS application
34. Cargo wise revenue should be available in POS application
35. Party wise revenue should be available in POS application
36. MIS reports against to the PDA number( stakeholders of VPT) for the last 6 months available in Proposed POS application only
37. Provision for API/EDI integration of financial operations between PCS1x and proposed POS application

38. Invoice has to comply with GST e-Invoice rules
39. Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

### **Online Berthing**

Provision should be provided for allotment of berths online by giving access to Vessel Agents for submission of berth requests. The system should facilitate the planning, allocation and publishing of report in the Visakhapatnam Port Trust website/Customer Portal.

Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request

### **Service Portfolio**

- Services Master with features like to add/delete/suspend for temporary duration/modify
- Tariff and contracts
- Configurable tariffs against the services mentioned
- Customer based tariffs like specific contracts
- Multiple tariffs for same services for different users
- Unit based and time based tariff
- Minimum and maximum rate tariff
- Configuration of service delivery model with sub services, resources and equipment's linked to main services
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost
- 

### **Weighbridge operations**

- Request application from CHA / Importer / Exporter for allotment of weighbridge
- Approval or reject with reason application for allotment of weighbridge
- Allotment of weighbridge along with Entry/ Exit gates
- Planning the weighbridge for multiple shifts
- Recording the operational data from Weighbridge Operator (contracted by port) and revenue thereof.
- Integration to weighbridges (optional)
- Weighbridge plan to display all concern team

- Reconciliation and recover weighment charges as per SOR and provision to verify same before weighment.
- Recording of weighment and map with IGM/ Shipping Bill Item, Gate pass and generation of IGM/ Shipping Bill Item wise summary
- Generation of weighment slip showing gross/tare/net weight of each vehicle
- Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request

### **Registrations**

- Agent registration
- All vessels and voyage registrations
- Crew and craft registration
- Master data creation and maintenance at regular intervals (every month) for vessels, cargoes, ports,countries..etc.
- Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request

### **Service Requisitions**

- Service request for services via through port portal for certain or all services
- An auto-generated assessment of charges depending on services requested by the user.
- Each service request will have a unique Id to track the complete cycle
- Integration with portal to receive the service requests from users
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

### **Planning & Scheduling**

- System should support Automatic berth allotment as per VPT berthing Policy
- System should support Gang allocation based on gang allocation rules of VPT
- Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT

will request

## **Operations**

- System should have following business process in POS COTS solution in operations module
- Berth requisition
- Resource Requisition
- Berth, resource, shed availability
- Berth, resource, shed utilization
- Planning is like berth planning and resource planning.
- Allotment / allocation of berth and resources
- Vessel arrival details
- Vessel movements booking / requests like STA, STB, ATB, BTB, BTA, BTS, to record vessel berthing, unberthing shifting and wharfing
- Vessel movements within the port like STA, STB, ATB, BTB, BTA, BTS, to record vessel berthing, unberthing shifting and wharfing
- Single/multiple banking process
- Billing process for all vessel related charges i.e. Berth Hire charges, Stevedoring charges, container related charges - Container/Cargo Related Charges, Additional Berth Hire Charges, Double Banking etc.
- Billing process for operations charges like wharfage,
- Integration with ERP to check the payment details against the bill raised
- Vessel movements capturing which includes all facts like berthing timings, unberthing timings, shifting timings, wharfing timings etc. and resource details
- Vessel movements with different conditions like cold movement, night movement, Single/ multiple tug assistance, single / multiple pilot allocation etc.
- Vessel movement cancellation and calculation cancellation charges, if applicable
- Resource like tug, pilot availability and utilization
- Billing calculation for all vessel movements as applicable
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

## **Barge / IWT Operations**

- System should have following business process in POS COTS solution for Barge / IWT Operations
- Barge registrations and renewal process
- Notifications for barge renewals / license expiry
- Barge operations like lighterage operations/loading/unloading to mother vessel
- Barge movements like berthing, unberthing, sailing out etc.
- Cargo loading / discharging operations
- Billing for all barge movements and operations
- Allocation / removing of barges to mother vessel
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

## **Craft Operations and Craft station operations**

- System should have following business process in POS COTS solution for Craft Operations
- Allocation of crafts for vessel movements
- Cancellation of allotment
- Craft utilization log for various vessel movements
- Craft movement tracking via mobile application
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

## **Cargo Operations**

System should have following business process in POS solution for general cargo Operations

- Import Operations
  - Import general manifesto
  - Import Application
  - Vessel Load/Discharge Sequence
  - Labour Request
  - Labour Allotment
  - Labour Deployment (In development)
  - Labour Written Form (In development)

- Vessel Tally
- Vessel Tally Mapping
- Internal Shifting Request
- Yard Delivery/Receipt (Shifting)
- BE on Submission
- Out of Charge
- Delivery Order
- Bill of Coastal Goods
- Draft Survey
- Ullage Survey
- Shed DO
- Truck Entry Permit
- Cargo Gate Pass
- Truck Gate In
- Truck Weighment
- Yard Delivery (Instead of Truck Shed Operation)
- Truck Weighment
- Truck Gate Out
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

Billing calculation and invoice generation for all cargo operations like cargo handling, demurrages, licenses etc.

**Export Process (Transit and Stock):**

- Export Gate Open
- Shipping Bill
- Export Application
- Export Link
- Storage Request & Allotment
- Carting Permission
- Truck Entry Permit
- Cargo Gate Pass
- Truck Gate In
- Truck Weighment
- Yard Receipt (Instead of Truck Shed Operation)

- Truck Gate Out
- Let Export Order
- Allow for shipment (Export Ready Application)
- Internal Shifting
- Yard Delivery/Yard Receipt (Internal Shifting)
- Vessel Load Discharge Sequence
- Labour Request
- Labour Allotment
- Labour Deployment (In development)
- Labour Written Form (In development)
- Vessel tally
- Draft Survey
- Mate Receipt
- EGM
- Voyage Registration
- VCN Conversion
- Allotment of Rotation No
- VCN Link
- SB Conversion
- Internal Shifting Request
- Yard Delivery
- Yard Receiving
- Mate Receipt
- Import Operations
- IGM
- Import Application
- Vessel Load/Discharge Sequence
- Labour Request
- Labour Allotment
- Labour Deployment (In development)
- Labour Written Form (In development)
- Vessel Tally
- Vessel Tally Mapping
- Internal Shifting Request
- Yard Delivery/Receipt (Shifting)

- BE on Submission
- Out of Charge
- Delivery Order
- Bill of Coastal Goods
- Draft Survey
- Ullage Survey
- Shed DO
- Truck Entry Permit
- Cargo Gate Pass
- Truck Gate In
- Truck Weighment
- Yard Delivery (Instead of Truck Shed Operation)
- Truck Weighment
- Truck Gate Out
- Liquid Bulk Cargo Operations Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

### **Import Liquid Cargo**

- Once the berthing is completed, Gangway is made ready
- Key meeting safety inspection
- loading arms contention to vessel
- Line packing Operation
- Discharge operation
- The following information is recorded along with operations
- All resources utilization
- Stoppages
- All activities commencement and completion timings
- Vessel completes discharge, which is remaining on board.
- Survey recording of the discharge quantity and remaining quantity.
- Loading Arms stripping Operation
- Disconnection of loading arms
- Pigging Operation
- NO DISPUTE CERTIFICATE from End User
- Port clearance certificate



- Unberthing Operation
- Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request

### **Export Liquid Cargo**

- Once the berthing is completed, Gangway is made ready
- Key meeting safety inspection
- loading arms contention to vessel
- Line packing Operation
- Loading operation
- All resources utilization
- Stoppages
- All activities commencement and completion timings
- Vessel completes loading which is remaining on board.
- Survey recording of the discharge quantity and remaining quantity.
- Loading Arms stripping Operation
- Disconnection of loading arms
- Pigging Operation
- No Dispute Certificate from End User
- Port clearance certificate
- Unberthing Operation
- Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

### **Rail Operations Inward Rake Operations**

- Rake Application
- Pre Arrival Information
- Rake Arrival Details
- TXR Release and Certification (After Arrival)
- Rail Weighment Details (For Inward it is optional)
- Rail Receipt Capturing (For Inward it is optional)

- Wagon Placement Details
- Declaration of Loading and Unloading
- Wagon Removal Details
- TXR Release and Certification (After Loading/Unloading-Optional)
- Wagon Formation Details
- Rake Diverted Details
- Derailment
- Rerailment
- Sick Wagon Placement
- Sick to Fit Certification
- Transshipment Wagon details
- Wagon Damages Details
- Placement of Newly Build Wagons
- Shunting Operation
- Under Charge and Error Sheet
- TXR Release and Certification (Before Departure)
- Rake Departure Details
- Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request
- Railway assets details at located at VPT
- Reports on Railway services utilization at VPT on Management's dashboard
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

#### **Inward Rake Operations (back load operations)**

- Rake Application
- Pre Arrival Information
- Rake Arrival Details
- TXR Release and Certification (After Arrival)
- Rail Weighment Details (For Inward it is optional)
- Rail Receipt Capturing (For Inward it is optional)
- Wagon Placement Details

- Declaration of Loading and Unloading
- Wagon Removal Details
- TXR Release and Certification (After Loading/Unloading-Optional)
- Declaration of Loading and Unloading (If it is Back Loading)
- Wagon Removal Details (If it is Back Loading)
- Rail Weighment Details (If it is Back Loading)
- Rail Receipt Capturing (If it is Back Loading)
- Rake Diverted Details
- Derailment
- Rerailment
- Sick Wagon Placement
- Sick to Fit Certification
- Transshipment Wagon details
- Wagon Damages Details
- Placement of Newly Build Wagons
- Shunting Operation
- Under Charge and Error Sheet
- Wagon Formation Details
- TXR Release and Certification (Before Departure)
- Rake Departure Details
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

### **Outward Rake Operations**

- Rake Application
- Pre Arrival Information
- Rake Arrival Details
- TXR Release and Certification (After Arrival)
- Wagon Placement Details
- Declaration of Loading and Unloading
- Wagon Removal Details
- TXR Release and Certification (After Loading/Unloading-Optional)
- Rail Weighment Details
- Rail Receipt Capturing

- Rake Diverted Details
- Derailment
- Rerailment
- Sick Wagon Placement
- Sick to Fit Certification
- Transshipment Wagon details
- Wagon Damages Details
- Placement of Newly Build Wagons
- Shunting Operation
- Under Charge and Error Sheet
- Wagon Formation Details
- TXR Release and Certification (Before Departure)
- Rake Departure Details
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost
- Rake details exchange provision between FOIS and POS application through EDI & API integration

### **Signal Station Operations**

- All communications from signal station to vessel movements, crafts, pilots will be recorded
- Interface with VTMS / VTS systems present at the port for exchanging information related to vessels, movements, etc.
- Alerts and notifications based on vessel movements
- Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request with VTMSVTS or any other system will be replace
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

### **Crew Station Operations**

- Crew station operations such as
- planning,
- scheduling and

- allocation of crew to various port movements and others
- Billing / invoice for crew services
- Tagging of crew to various movements and update dispatch and related details on real- time basis
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost
- Crew details upload provision in POS application or crew/ passenger details updation from PCS1x through EDI& API integration

### **Navigational Assistance**

- Mobile application to pilot
- Channel information, vessel to be handled/navigated information, berth information, anchorage information etc. to be provided on handheld
- Pilot can update the status of navigational equipment such as buoys, etc.
- Pilot can enter the navigation facts like start and completion timings

### **Shed Operations**

- Tariff with the free days for combination of different sheds and cargoes for carting in reshipment / normal storage area
- Controlling non authorized entry by checking the entry permit details of the Exporter / CHA / Vessel Agent.
- Gate entry for factory stuffed containers
- Recording the details custom LEO copy of S/Bill and P.T. copy of S/Bill (duly paid) from the Exporter/CHA
- Process for issuing the “Let Move” Memo to Exporter/CHS
- Destuffing process for containers
- Gate entry process for Factory Stuffed containers
- Cargo storage process from container after destuffing
- Cargo delivery process based CHA request
- Import containers from other ports receiving, destuffing and delivery process
- Complete import process containers, bulk, break bulk at shed or open yard
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

## **Common Functions**

The system shall support certain common functions for all types of operations

Shift Working Report indicating amount of cargo discharged/ loaded through the tally sheet - productivity of the gangs, equipment and also the balance of cargo to be handled – delays in working and any special events. Direct links to EIS and Portage section for calculation of the piece rates and incentives.

- a. Out Turn indicating the actual cargo handled against the manifested quantity reconciling discrepancies.
- b. Cargo Monitoring - to track and trace the status of a particular consignment through various queries.
- c. Cargo Damages/ short landed/ short shipped / excess landed cargo
- d. Detention of cargo – put on hold at bill of lading level, at voyage level or at party level.
- e. Nonmoving cargo reports beyond pre-defined period
- f. Grant of Permits for dangerous goods, explosives, radioactive material and noxious substances from the relevant approving authorities electronically
- g. Grant of entry passes/ work permits for vehicles and labour
- h. Gate Operations for export/ import/ transshipment etc.
- i. Monitoring the gate movements – trucks – stay in port (ISPS requirements)
- j. Private equipment operations within the port
- k. Allotment, occupation, vacation and rental payments for temporary allocation of storage space/ office space.
- l. Registration of Agents of all types electronically
- m. Validations at all possible places in POS application
- n. Monitoring the validity of license and give alert on expired license electronically

## **Railway operations:**

- Applications for railways service from agents with necessary details like cargo details, rakes requirements, storage requirements, over dimensional consignment (ODC) detail.
- Indent for Wagons by wagon users
- Attachments along with application to support the request
- Verifying the application along with support documents and approving or rejecting with reason
- Trip Plan with details of requirements provided by agent & operational availability details captured in the system

- Estimation of charges for the service as per standard rates applicable
- Railway incentive
- All India engine hire charges (payable to railways should come from POS)

### **Loading/ unloading of goods**

- Recording the details of Railway Receipt (RR) received from agent (Inward trip)
- Bill/Invoice generation for collection of port and Railway charges (including applicable taxes)
- Recording of following operations facts for loading / unloading wagons
- Marking of wagons placed
- Placement of wagons
- Loading/Unloading commencement
- Any discrepancies
- Completed Loading/ Unloading Sheet & Forwarding Note along with Sealing and labelling of wagons
- Recording the details of Unloading Sheet (UDS) and recording unloading completion details
- Calculating and generating the bill for collection of Demurrage Charges to be remitted.
- Demand analysis based on indent applications to be notified to Controller by Depot
- Recording the arrangement and supply of Wagons
- Recording the capture details of Certification of lashing packing and loading of ODC
- Recording the details of Wagon examination & Certification by TXR
- Recording the details of declaration of loading-completion and Request for dispatch of load
- Recording the details of detention for calculation of demurrage charges, if any
- Recording the details of verification (including weighment) in respect of Rating on FOIS installed and scrutiny of Railway Board notifications for charging load booked to Indian Railway
- Recording the details of application received for rebooking of load from party
- Recording the details of in respect of permission given for Rebooking of Load

- Railway trip operations - Inward trip movement
- Recording the details of Line Clear of up train or Foreign Power
- Recording the details warning for up train / foreign power
- Notifications and alerts to concern parties
- Recording the details of Line clearance
- Recording the details of nomination of line for receiving Up Train / Foreign Power
- Recording the details of Memo sent to TXR for Up train to be received to Railway
- Recording the details of path is set for up train / foreign power acceptance
- Recording the details of time of arrival of Up Train / Foreign Power
- Recording the details of verification of Up Train
- Recording the details of preparation of Up Train Guidance
- Alerts, notification to Controller for arranging engine for upload clearance
- Recording the details of path is set for light engine
- Recording the details of confirmation in system from Controller for orders in respect of light engine
- Recording the details of path is set for up train / light engine clearance to Depot
- System should have provision to display or relay the information to Controller about load / light engine dispatched
- Recording the details of transfer of foreign power to down yard
- Recording the details of confirmation in system about the orders in respect of foreign power
- Recording the details of path is set for foreign power to nominated line
- Recording the details of controller's order for planning of engine
- Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request

#### Railway trip operations -Outward trip movement

- Recording the details of clearance of Down Load or Empties or Light Engine
- Recording the details of Movement of Engine
- Recording the details of arrangement of engine for clearance of Down



load

- Recording the details of guidance for down load to be dispatched
- Recording the details of down load or empties connected to engine available
- Recording the details in respect of Line Clearance from Controller before dispatch of Down Load / Light Engine
- Recording the details of acceptance of Down Load for formation of Down Train
- Recording the details in respect of Down Load / Empties received
- Recording the details of verification and details of wagons weighed containing loose/bulk commodity
- Recording the details of notification to the concerned by issuing message and details thereof
- Recording the details of Shunting Memo for formation of train
- Recording the details of nomination of line for Marshalling of Train and its formation
- Recording the details of memo sent to TXR for examination of train
- Recording the details of message or notice for train ordered
- Recording the details of Down Train Guidance
- Recording the details in respect of memo received from TXR
- Recording the details of removal of sick wagons from Down Train ordered
- Recording the details in respect of Down Train made ready
- Recording the details of foreign power attached and Vacuum Testing Memo for Down train offered
- Recording the details of release of signal for dispatch of Down Train / Foreign Power
- Recording the details of Down Train / Foreign Power dispatched

### **Port Land / Storage Licensing**

- Licensing process for Shed/Yard for storage of cargo inside the docks.
- Request/application for storage area and storage of cargo along with supporting documents
- Recording the System the discrepancy with reasons
- Approval / reject with reason application for space allocation
- Allotment of space at single/multiple location and storage area

- Amendment/ Renewal/extension of storage period and change of area
- Business conditions configurations for extension of period and demurrage etc
- Integration with ERP
- Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request
- Other operational information provided by end user departments should be incorporate into proposed POS application
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

## **Dredging**

- Dredging operations by mechanical and hydraulic dredging
- Application for requesting the dredging services
- Accept or reject with reason application for dredging
- Integration with ERP for dredging equipment/dredger
- Progress or %age completion of job
- Bill/Invoice for dredging operations
- Other operational information provided by end user departments should be incorporate into proposed POS application

## **Floating Craft Service Station**

- Floating Craft roaster to meet the marine requirements
- Allocation of floating crafts for vessel movements
- Cancellation of allotment
- Floating Craft utilization log for various vessel movements
- Floating Craft movement tracking via mobile application
- Other operational information provided by end user departments should be incorporate into proposed POS application
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

### **Uncleared cargo operations**

- Sell the un-cleared cargo lying on shed after a certain period goods by offering them up for bid, taking bids, and then selling the item to the highest bidder.
- At the end of every shift, shed staff will update the system with undelivered/unclaimed cargo.
- Concerned authority will issue the notice to the cargo owner for removal/shipment/delivery of cargo.
- In case of no response from cargo owner, after the final notice, sale of cargo notice will be issued.
- After sale of cargo notice if there is no response from cargo owner, sale re- tally will be issued and forwarded to customs.
- Upon approval, Bill of Entry will be prepared in the system and forwarded to Special Disposal Cell of Customs.
- After the custom duty payment, auctioned goods will be allowed to transport out of port premise.
- Cargo status will be updated in the system.
- Other operational information provided by end user departments should be incorporate into proposed POS application
- Firm should implement new changes as instructed by VPT until 3 years of time (i.e 6 months of implementation + 6 months of stability and 2 years of AMC period) with free of cost

### **Dashboard Implementation:**

A suitable informative and user friendly dashboard that displays key performance indicators (KPI) to monitor the business of the Port and help in taking day to day decisions should be provided. Total dashboards to be delivered are decided by VPT during implementation time of POS application as per the VPT management requirements and inputs also shared by VPT management

- Other operational information provided by end user departments should be incorporate into proposed POS application dashboard
- Dash board contains following highlight points for VPT management
  - Berth occupancy
  - Cargo wise traffic
  - Railway services utilization

- Evacuation of cargo
- Pilot log details
- Equipment utilization with a provision of capturing delays for the break down
- Invoice details
- Payment details in POS and also done at SAP

### **MIS Reports:**

The Software providers should provide the below mentioned typical reports as a default in a proposed Port Operating System. However, these reports are indicative and during the Business process study phase few more additional reports will be discussed to configure as per the VPT management request without any Change request (CR) if already data available in proposed POS application. Otherwise, CR will be given as per the Man hours per Day calculation basis. Some of the standard MIS reports are

- Tonnage Handled
- PCS Message Exchanged
- Pilotage Movement
- Fortnightly Return Of Ships
- Berth wise Tonnage
- Dwell time of the port
- Voyage Operation Detail
- Vessel Performance Detail
- Turn Round Time-Vessel Wise
- Total Turn Round Time
- Pre-Berthing -Date Wise
- Total Pre Berthing Details
- Number & Size Of Ships
- Berth Occupancy
- Vessel Movement Query Date wise
- Naval/Costal Vessel Movement Query Date wise
- Vessel Productivity
- Vessel Productivity\_web
- Vessel Arrived
- Date wise PreBerthing Details
- Traffic Pre Berthing Details
- Vessel Arrival/Shifted/Sailed Details

- Daily Traffic Report
  - Vessels at Berth OA ETA
  - Cargo Summary
  - Work Detention Details
  - Berth Utilisation Details
  - Port Performance Report
  - Terminal wise Container Vessel Reports
  - Cargo Related Reports
  - IGM/EGM Details
  - Vessel wise Commodity
  - Flag Wise Commodity Statement
  - Flag Wise Summary
  - Commodity Wise Summary
  - Flag Wise Vessel Wise Summary
  - Flag Wise Vessel Wise Statement
  - Commodity Wise Flag Statement
  - Commodity Wise Reg Imp/Exp
  - Type Wise Summary
  - Port Wise Commodity Statement
  - Port Wise Commodity Summary
  - Port Wise Flag Wise Commodity
  - Port Wise Flag Wise Commodity Summary
  - Flag Wise Vessel Wise Port
  - Vessel Wise Commodity Summary
  - Commodity Wise Quay Wise Statement
  - Quay Wise Commodity Wise Statement
  - Other BI reports as per the VPT management requirement
- Like,

**B.I REPORTS TO BE DEVELOPED IN NEW POS  
ADMINISTRATION REPORT STATISTICAL TABLES (YEARLY)**

- berth particulars and berth occupancy
- permissible vessel dimensions
- vital port statistics—floating crafts
- commodity-wise traffic handled
- traffic handled according to principal commodities
- number and type of containers handled
- commodity-wise export cargo received by different modes of transport during the year
- commodity-wise import cargo dispatched by different modes of transport during the year

- Number and size of ships sailed in
- Performance of cargo ships
- Category-wise pre-berthing delays
- Category-wise non-working time during
- productivity of port labor
- number of trains/wagons received / dispatched (general) in (monthly data)
- type-wise number of wagons received/dispatched
- Number of iron ore rakes received, tipped, dispatched and iron ore received at the ore handling complex (mechanical)
- Iron ore rakes unloaded at manual sidings
- Utilization of cargo handling equipment
- Performance of port dredger during the year
- Quantity dredged during the year
- Other operational information provided by end user departments should be incorporate into proposed POS application

There are no Change requests (CRs ) are entertained for providing MIS reports,if data available in POS database only.

## **2. Requirement for Customer Portal for Port Users.**

To facilitate the seamless message exchange with Ports agents / external users VPT would like to propose a user-friendly customer portal, which should include the following key features / requirements.

- Need to configure SMS/email facilities against to operational and transactional activities of the trade in VPT
- Other operational information provided by end user departments should be incorporate into proposed POS application

**Charges Assessment Calculator:** The users of the port will enter the required inputs against the intended services avail from the port then application should auto calculate as per Port tariff.

**Live load and Discharge Information:** The live load and discharge information of vessel with quantity and expected cargo completion time to be updated on customer portal landing page, which should accessible to all VPT Customer Portal users without login.

**Latest Vessel Position list:** The latest Vessel's positions of the port like Anchored, Berthed, Sailed and Departure arrival information to be available on customer portal landing page.

**VPT Proprietary application documents:** The port defined VPT authorised documents should be available in customer portal landing page of the application in a downloadable format and also provision for uploading necessary documents into POS application based on check list will provide by traffic department

**Ports Latest circular and Messages:** The Solution to provide message scroll ribbon on the customer portal application of the agents, which should be created by the admin login of the application to update latest notifications and alerts and also should be validate operational checks against to port activities

**Custom Invoices:** The custom Invoice request feature to be provided in the application with required services to be chosen against the VCN and the agent code of the customer to whom the invoice to be raised.

Invoice should be able to contain necessary information as per the GST portal or other agency suggestions in the proposed POS application (like IRN number, QR code for GST e-Invoice portal ..Etc.)

**Consolidated Payment Status Report / Information:** The application should provide a payment status / consolidated report against the services invoiced from Port finance team and payment transactions done through PCS on daily basis/ weekly basis/monthly basis

The Customer Portal Software deployed shall be a an advanced robust open platform architecture that enables the end stakeholders to access the solution with predefined role rights access through unique authentication mechanism to submit various requests through front end user interface or system integration of the solution. Further the system converts the received requests into individual threads and process with dynamic Enterprise ServiceBus.

#### The Functionalities of the Stakeholders:

The Functions of the Portal application facilitate stakeholders with multiple module wise activities and acts as a centralized database to provide effective track and trace facility to all stakeholders and acts as data repository for research, analysis and reports.

#### Customer Portal Messages Required to be configured:

Sr. No.	Module	Functionality
1	Vessel Profile.	Vessel Agent to register their vessel to the respective Port.
2	Voyage List	Vessel Agent to register the Voyage for the registered Vessel
3	Allotment of VCN	Port/Terminal to allocate VCN for the new voyage request of user (Shipping line/Importer/Exporter)
4	Berth Allotment	Port/Terminal to receive application for berth allocation and to allocate resource
5	Passengers/Crew List	
6	Stowage Plan	Shipping line to exchange stowage plan with Port/Terminal
7	Bay Plan	Shipping line to exchange bay plan with Port/Terminal for specific vessel
8	Stowage Instruction	Shipping line to exchange Stowage Instruction with Port/Terminal for specific vessel
9	Dangerous Goods Notification	Shipping line to exchange Dangerous Goods Notification with Port/Terminal for specific vessel
10	Dangerous Goods Notification Acknowledgement	Port accept and acknowledge Dangerous Goods Notification which shipping agent has submitted to Port/Terminal for specific vessel
11	Requisition of Resources	This feature will enable port user to request to Port for resources requisition
12	Allotment of resources	This feature will enable Port to acknowledge and allocate resources based on request of Port Users
13	Re-Berthing	This feature will enable port user to request for re-berthing of already sailed/unberthed vessel
14	Vessel Movement	This feature will enable port user to request for vessel movement from one berth to another berth of already berth vessel



15	Terminal Performance Report	This feature will enable Port/Terminal to monitor its performance through different parameters
16	Pilot Memo Application	This feature will enable Port to create Pilot booking based on the berthing request of Vessel agent
17	Pilot Memo Acknowledgement	This feature will enable Port to acknowledge Pilot booking request based on availability of pilot and request time for pilot booking
18	Pre-arrival notification	This feature will enable vessel agent to intimate port about arrival of vessel with all the required information by port
19	Expected time of Arrival	This feature will intimate Port with expected time of arrival of vessel by vessel agent
20	Expected time of Arrival Acknowledgment	This feature will be utilized for Port to acknowledge expected time of arrival of vessel.
21	Stowage plan for general Cargo	This feature will enable shipping line to exchange stowage plan with Port/Terminal
B	Container	
22	Container Loading and discharge Order / Adv. Container List	This feature will allow, vessel agent to submit Export and Import advance list to Port
23	Container Loading	This feature will allow vessel agent to view and terminal to data entry container loading activities
24	Container report	Report view option based on time, Line, POD, Category wise
25	Container Stuffing	This feature will enable Port, Importer/Exporter to view container stuffing details
26	Container Load Plan	This feature will enable Port, Importer/Exporter to view and download container load plan
27	Container Special handling order (SSR)	This feature will enable port user to ask for different special handling services (SSR)
28	Container Stuffing / De-stuffing report	This feature will enable Port, Importer/Exporter to view container stuffing/De-stuffing report
29	Gate Open Report	This feature will enable Port user to understand gate open time for different vessel
30	Container/Cargo Gate-in Gate-Out Report	This feature will enable Port and Port users generate gate-In and gate-out report for Container and Cargo based on time
31	Equipment Interchange Report	This feature will enable Port user to view and download EIR copy of container
32	Empty Container Release Order	This feature will enable Vessel agent to upload container release order

33	Container Stock Report	This feature will share container stock report at Port/Terminal, CFS and empty yard
34	Request for Carting Permission	This feature will enable CFS/Port to give Carting permissions online
35	Confirmation of Carting	This feature will enable CFS/Port to give confirmation on Carting permission online
36	Job Order	This feature will enable Port/Terminal to download Job order of already berthed vessel uploaded by vessel agent
C	Cargo	
37	Agent Delivery Order	Use the Agent Delivery Order/Bill of Lading pages to search, add, and update the bill of lading details such as number of packages, name of consignee, package code, etc.
38	Mate Receipt	Use the Mate Receipt pages to search, add, and update the details such as weight of cargo, shipping bill date, mate receipt type, etc.
39	Application for Log Entry	Apply for log entry in case the cargo is short landed or excess landed
D	Transport	
40	In land Way bill (e-way bill)	Railway/uses this message to provide the advance list of wagons/containers expected at the port from different in-land container depot (ICD).
41	Rail Receipt	Container Train Operator uses this message to inform the port authorities and stake holders about the cargo expected at the port via rail
42	Removal Memo from Rake	Port authorities use this message to inform the Container Train Operators /Shipping agent about the placement of container on the rake and removal memo from rake.
43	Pendency of Containers	Port authorities use this message to inform the Container Train Operator/SA about the Pendency of container with respect to the destination/ICD/ CFS location in the port.
44	Train Schedule	Railways uses this message to inform the stakeholders and the port about the train schedules.
F	Customs	
45	Import / Export Manifest Details	User can search Manifest entry number to view the status and other details
46	Bill of Entry on submission	User can search Bill of Entry number to view the status and other necessary details required.
47	Transshipment Permit Approval	User can search and view status of Transshipment permit.
48	Shipping Bill Details	User can check details of his/her shipping bill.
49	Goods Arrival at Port	User can search and view cargo arrival status and custom permission status

50	Vessel Sailing Report	User can check status, report and details of vessel sailing
51	Consignment Arrival at Port	Search and view consignment arrive details and reports
52	Landing/ Tally Report	Custom, Port and Shipping agent use this functionality to view Landing tally report and its acknowledgement status
53	Excess Landed Cargo	Custom, Port and Shipping agent use this functionality to view excess landed cargo and its acknowledgement status
54	Location of Cargo	Custom, Port and Shipping agent use this functionality to view location of cargo and its acknowledgement status
55	Cargo Movement Approval	User can search and view current approval status for movement request.
56	Grant of Port Clearance	To search and check port clearance approval statutes
57	Details of Shutout Cargo	Port, Customs, CFS, and Shipping agent use this page to view the Stuffing Report status.
58	Stuffing Report	Port, Customs, CFS, and Shipping agent use this page to view the Stuffing Report status.
G	e-DO	Electronic delivery for customers
59	Delivery Order	This feature will enable VOA to Upload Delivery order and Port/Terminal/Importer/Exporter to view and download it

H	Gate Appointment	Exporting/importing
60	Gate-In Appointment Booking	This feature will enable CFS/Exporter to create gate in appointment of its consignment to Port/Terminal
61	Gate Open Cut off time	This Feature will update Port user with gate cut-off time
62	Delivery Gate Schedule	This feature will enable Port/Terminal to create delivery schedule of vessel container/Cargo
63	Transport Order	This feature will enable Importer/Exporter to create and request for transport order of container from Port to CFS and CFS to Port
64	Pre-Gate	Port/Terminal can use this feature for pre-gate activities
65	Equipment Interchange Report	This feature will enable Port user to view and download EIR copy of container

Container Operations are done by VCTPL at VPT General Cargo Area, hence container related messages in Proposed VPT Customer Portal need to be approved during the time of implementation. However it is expected to have 50 more additional messages which are to be configured in proposed customer portal which may be agreed during the time of business process study.

## **2. Mobile Application for Port Operating System and Port Community System.**

### **Mobile Application:**

- Mobile application has the business process covering various internal, external user's activities, alerts, notifications, workflow etc.
- All information viewed by the user are encrypted at backend
- The architecture is scalable and platform independent
- Application should works both offline and online based on time stamp of server and real time of the world for synchronization
- Application can be integrated with any kind of external application
- Mobile application gives first-hand information to port authority, customers and port users
- The all business users functions are covered in the mobile application like
- Pilot operations done at VPT
- Craft operations done at VPT
- Recording tally clerk operations for loading/unloading of vessel and truck
- Gate operations
- Mobile application has real time integration with all business module

- The application resolution is independent that will automatically expand/compress itself as per the device screen resolution
- Mobile Application Platform should be hosted in VPT dedicated environment that provides a complete environment for building, integrating and deploying mobile apps meant for various Department / User categories. The platform is leveraged to provide App version management, Device management, Push notifications, multiple authentication methods and offline synchronizing for enforcing, controlling and governing mobile-based information access policies. End users must sign up to the platform for availing POS mobile services.
- Mobile application should be available in Play store/ appstore (Andriod/loS and other mobile operating systems )

The proposed Mobile application to be integrated with POS system/server which gives quick information access and services monitoring with real time schedule. The live Vessel / Services schedule of the application enables users to monitor the real time expected time of commencement / completion. The Mobility application also enables Port users to track the position of the Vessel with required check list information and infrastructure status.

#### Key features of Mobility Application:

- Mobile application has the business process covering various internal, external user's activities, alerts, notifications, workflow etc.
- All information viewed by the user are encrypted
- The architecture is scalable and plot form independent
- Application works both offline and online
- Application can be integrated with any kind of external application
- Mobile application gives first and information to port authority, customers and port users
- The all business users functions are covered in the mobile application like
  - User Management
  - Marine
    - Pilot Log
    - Tug Log
  - Berth Operation
    - Cargo Load Operation
    - Cargo Discharge Operation
  - Stockyard/Warehouse Operations
    - Truck Loading
    - Truck Unloading
  - Rail Operation
    - Rake Operations
  - Gate Operations

- Gate In
- Gate Out
- Reports
- Support
- Dashboards
- Alerts/Notifications of operational and transactional activities
- Mobile application has real time integration with all business module
- Graphical reports summarizing various reports as defined
- The application resolution is independent that will automatically expand/compress itself as per the device screen resolution

## **5. Integrated Application Performance Monitoring**

The proposed Solution must comprehensively cover the following multi-dimensional dimensions of application performance management:

- a. End-user experience monitoring by capturing data on how end-to-end performance impacts the user, and identifies the problem.
- b. Discovery of application architecture, modelling and mapping in run-time by discovering the software and hardware components involved in application execution, and their communication paths and establishing the potential scope of problems.
- c. User defined transaction profiling by examining user-defined transactions, as they move across paths to identify the source of the problem.
- d. Deep-dive in-context component monitoring to conduct deep-dive inspection of the resources consumed by, and events occurring within, the application components.
- e. Application analytics including technologies such as behaviour learning engines – to crunch the data generated, discover meaningful and actionable patterns, pinpoint the root cause of the problem, and ultimately anticipate future issues that may impact the end user.
- f. The proposed POS solution must be able to deliver all the above mentioned outcomes as part of one integrated user interface with no requirement to launch or access separate tools/screens.
- g. The information flow among all the modules should be in-context,

correlated and seamless without the need to manually correlate and analyze data among multiple disparate tools.

- h. The licensing model of the POS platform with integrated APM should be based on the number of application instances and not on the server host compute. The proposed POS solution should provide integrated APM with perpetual licensing models and it should be capable of working on cloud as well as on prem.
- i. The proposed integrated Solutions with APM platform must support both Linux and Windows flavours for deployment of its core components (such as management server) and should not require any kind of "root access" or "root privilege" to deploy agents in the monitored applications. Proposed applications is platform independence and able to access with any secure browser available in the digital world
- j. The proposed solution with integrated APM should also have an option to identify network performance bottlenecks and app/network- interaction bottlenecks using an agent that resides on the java or .net application instance without needing any kind of network tapping or data capture appliances.
- k. The solution should be able to detect load balancers, TCP endpoints etc. and depict it on a dynamic network map. The solution should also be able to capture network KPIs such as throughput, latency, TCP Loss, SYN/FIN errors, client limited, client zero, TCP retransmission timeouts, server limited, server zero etc. in- context to the problematic application transaction with a provision to drill down from the application transaction to any correlated or contextual network metric.
- l. The proposed solution with integrated APM should be able to auto discover experience journeys for the users and provide below details:
- m. The proposed solution with integrated APM must be able to track web and mobile user sessions to analyze any user's behavior based on users unique ID. There must be a provision to query for a segment of users with similar behavior, such as from a specific geo location or visiting a specific page or using a particular device etc. The solution should also support a seamless ingestion of raw session data to an analytics engine to perform slicing and dicing on the data.
- n. The proposed solution with integrated APM should be able to provide in context database monitoring and OS monitoring supporting wide array of RDBMS as well as NoSQL and provide auto correlation to application

performance

- o. The proposed solution with integrated APM must have a robust alert and respond engine that leverages multiple data inputs into analysis (app performance data, machine data, analytics data and user provided data), uses Boolean logic to combine multiple conditions through AND / OR logic, has capability to disable rule evaluation temporarily for predetermined maintenance windows, can trigger alerts or notifications when rules are violated (email, SMS or custom), can utilize complex logic to combine different metrics into one trigger/alert. Proposed POS application must be able to configure and provide MIS reports/BI reports for VPT management from the available data in POS database without any CRs (Change requests) even during AMC period also.
- p. The proposed solution with integrated APM should provide mechanisms (API based or other methods) to take data feeds from various infra providers - cloud platforms, software defined data center and networking platforms as well as send data feeds and trigger actions into hybrid cloud management platforms, application resource scalability and optimization platforms and service management platforms of various Govt agencies/ Terminal Operators of VPT...etc during entire period of the tender contract without any further CRs(Change Requests) until , if any new data filed will be defined in the POS application. It should facilitate auto remediation of problems based on alert triggers and pertinent action workflows through these integrations.
- q. The proposed POS application is able to prevent the Cyber attacks

## **6.Integration with external systems.**

Proposed solution to be integrated seamlessly with all external systems as mention in the deployment diagram.

### **Integration Architecture:**

The Integrated solution to be an advanced robust open platform architecture enables end stakeholders to access the solution with predefined role rights access through unique authentication mechanism to submit various requests through front end user interface or system integration of the solution. Further the system converts the received requests into individual threads and process with API integration in REST mode.

The End user systems integrate through transport mode of HTTPs, SOAP and JMS with POST mechanism through Electronic Data Interchange formats like XML, JASON, through direct API integration.



Integration with third party applications:

A Kafka/MQ/API based, spring application server is used to integrate any REST based API for real time data exchange. With Kafka/MQ/API is used as a message queue, with the application server capable of automatic error reprocessing, throughput of the limited network at VPT, High availability, controlling message flow, modifying data based on simple and instant configurable rules or complex rules written in scripts in secure manner.

Integration Gateway is a high performance application, also capable of sending large volumes Emails, SMS and Push notifications for operational and transactional activities at VPT.

Integration Gateway is a high performance application, also capable of sending/receiving large volumes EDI messages with ability to configure custom EDI messages.

### Web Services

The POS system should be capable of communicating and integrating with various messages exchanged through the Port Community System (PCS) and other community systems or Portals using Web Services technology.

### 6.1 PCS Integration:

Interface with Indian IPA PCS for following Messages should be ready with API Connectivity

#	Modules	Message Name	EDI	Message Flow
1	Vessel	Vessel Profile	VESPRO	SA / SL to Port / Terminal
2	Vessel	Voyage Registration	CALINF	SA / SL to Port / Terminal
3	Vessel	Allotment of VCN	CALINV	Port / Terminal to SA / SL
4	Vessel	Berth Management	BERMAN	SA / SL to Port / Terminal
5	Vessel	Berth Allotment	BERALT	Port / Terminal to SA / SL
6	Vessel	Stowage Plan	STOPLN	SA / SL/SL to Port / Terminal

7	Vessel	Bay Plan	BAPLIE	SA / SL to Port / Terminal
8	Vessel	Stowage Instruction	MOVINS	SA / SL to Port / Terminal
9	Vessel	Re-Berthing	UNBERT	SA / SL to Port / Terminal
10	Vessel	Vessel Movement	VESDEP	Port / Terminal to SA / SL
11	Vessel	Terminal Performance RePort	TPFREP	Port / Terminal to SA / SL
12	Vessel	Pilot Memo Application	PLTMEM	SA / SL to Port / Terminal
13	Vessel	Pilot Memo Acknowledgment	ACKPLM	Port / Terminal to SA / SL
14	Vessel	Expected time of Arrival	ETAETD	SA / SL to Port / Terminal
15	Vessel	Pre Arrival Notification	PAISPS	SA / SL to Port / Terminal
16	Cargo	Agent Delivery Order	AGDORD	SA to Port
17	Container	Equipment Interchange RePort	EICREP	Terminal / Port to SI
18	Container	Request for Carting Permission	CARREQ	CHA / SI to Port / CFS
19	Container	Confirmation of Carting	CARCFN	CFS / Port to SL / CHA
20	Container	Job Order	JOBORD	CFS to Port / Terminal
21	TransPort	In land Way bill	COPINO	CONCOR to Port CONCOR to SA CONOCR to ICD
22	TransPort	Rail Receipt	RAILRE	CONCOR to Port CONCOR to SA CONOCR to ICD

23	TransPort	Removal Memo from Rake	RMLMEM	CONCOR to Port CONCOR to SA CONOCR to ICD
24	TransPort	Penden cy of Contai ners	CONTPE	Port / Terminal to SA / SL/ Concor
25	TransPort	Train Schedule	RAILSC	CONCOR to Port CONCOR to SA CONOCR to ICD
26	Customs	IGM On Submission /Inward Entry	CHPOI03	Customs to Terminal / Port
27	Customs	Bill of Entry on submis sion	CHPOI09	Customs to Terminal / Port
28	Customs	Out of charge	CHPOI10	Customs to Terminal / Port
29	Customs	Tranship ment Permit Approval	CHPOI13	Customs to Terminal / Port
30	Customs	Allotment of Rotation number	CHSA / SLE02	Customs to Terminal / Port
31	Customs	Shippin g Bill Detai ls	CHPOE05	Customs to Terminal / Port
32	Customs	LEO	CHPOE07	Customs to Terminal / Port
33	Customs	Goods Arrival at Port / Terminal	POCHE06	Customs to Terminal / Port
34	Customs	Vessel SA / SLiling	POCHE14	Customs to Terminal / Port

		RePort / Terminal		
35	Customs	Consignme nt Arrival at Port / Terminal	POCHE17	Customs to Terminal / Port
36	Customs	Landing/ Tally RePort / Terminal	POCHI06	Customs to Terminal / Port
37	Customs	Excess Landed Cargo	POCHI07	Customs to Terminal / Port
38	Customs	Location of Cargo	POCHI08	Customs to Terminal / Port
39	Customs	Cancellat ion of Rotation No.	CHSAE04	Customs to Terminal / Port
40	Customs	Grant of Entry Inward	CHSAI02	Customs to Terminal / Port
41	Customs	Cargo Movement Approval	CHSAI15	Customs to Terminal / Port
42	Customs	Grant of Port / Terminal Clearance	CHSAE13	Customs to Terminal / Port
43	Customs	Details of Shutout Cargo	CHPOE09	Customs to Terminal / Port
44	Customs	Stuffing RePort / Terminal	CHPOE08	Customs to Terminal / Port
45	Customs	Grant of Entry Outwa rd	CHPOE11	Customs to Terminal / Port
46	eDO & Gate Appointment	TransP ort / Terminal	TPRORD	SL / CHA / SA to Port / Terminal / CFS

		Order		
47	eDO & Gate Appointment	Equipment Interchange RePort	EIRMSG	Port / Terminal to SL / CHA / SA / CFS
48	Vessel	Agency Change	AGNCHG	SL / CHA / SA to Port / Terminal
49	Customs	Excess Landed Cargo Acknowledgement	CHPOI07A	Customs to Terminal / Port
50	Customs	Landing / Tally RePort / Terminal Acknowledgement	CHPOI06A	Customs to Terminal / Port
51	Customs	Location of Cargo Acknowledgement	CHPOI08A	Customs to Terminal / Port
52	Customs	Detention / Release Order	CHPOI31	Customs to Terminal / Port
53	Customs	Container arrival at CFS	CFCHI17	Customs to Terminal / Port
54	Customs	Gate Pass	POCHI16	Customs to Terminal / Port
55	Vessel	VCN Link		
56	Finance	Payment Status	PAYSTS	SA / SL to Port
57	Cargo	Stowage Plan for Cargo	STPCGO	SA / SL/SL to Port / Terminal

58	Finance	Request for Vessel Assessment charges	REQVAC	SA / SL to Port
59	Finance	Request for Stevedore Assessment charges	REQSAC	SA / SL to Port
60	Finance	Request for Cargo Assessment Charges	REQCAC	SA / SL to Port
61	Finance	Request for Container Assessment Charges	REQCTC	SA / SL to Port
62	Finance	Request for Containerised Cargo Assessment Charges	REQCOC	SA / SL to Port
63	Finance	Conformation of Assessment Charges	CNFASC	Port to SA / SL
64	Finance	PD Balance	PDABAL	Port to SA / SL
65	Finance	Daily Summary	DLYSUM	Bank to Port

However, as per business confirmation of VPT, the other new messages also should be added from PCS1x messages list attached in annexure 1 and Unnati Portal messages attached in annexure 2 will be addressed during the initial Process study phase of the project and the software providers should provide the following Key features to be incorporated throughout the application.

- Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT will request

## **6.2 Integration with SAP ERP:**

The POS system should be tightly integrated with the SAP – ERP System of the Visakhapatnam Port Trust especially its FICO module and project system module

- Provision for sharing necessary data between proposed POS application and SAP through API& EDI integration as and when VPT will request

## **6.3 RFID Integration / Gate Operations:**

Provision for issuing wharf entry pass is currently incorporated in the RFID system of Visakhapatnam Port Trust. The POS should be integrated with existing RFID system and data should be transmitted to/from both the systems in active mode as well as mode.

- The software providers should propose an auto gate automation process for all Cargo Gate In / Gate Out activities of the Port.
- Facility to support Gate Operations at VPT
- Operations for export / import/ transshipment etc. with RFID integration.
- The Proposed solution should have feasibility to integrate with RFID cards, which issued to truck drivers and registered trucks
- The solution to capture the Pre advice request from the Agents with Truck and cargo information. The solution to validate the PCS eDO and customs approved Out of Charge information for cargo delivery operations.
- The shed supervisor approvals on cargo delivery operations to be authenticated with yard operations for which approval done on mobility applications.
- Agent wise Gate in / Gate Out transactions report.
- Agent wise cargo summary report on Cargo Delivered and In Yard cargo stock.
- The solution to provide an option to display the Truck information in IN / out gates with approvals to the CISF team for required verification and approval.
- Provision for sharing necessary data between proposed POS application and other Applications through API& EDI integration as and when VPT

will request

## **7. Hardware Requirement and Deployment**

Bidder is to provide specifications/configurations of hardware, operating systems, database, antivirus, firewall and list of third party components required to deploy.

- Production environments for all Proposed solutions with High availability and Load Balancing
- DR environments for Production environment with 50% of workloads estimated
- Test and Pre Production environments for the proposed solutions(UAT, SANDBOX)
- Enough SAN storage for Back up and restoration.

All hardware should be able to cater to the following estimated numbers of user to start with 10% year on year growth.

4. Customer Portal: 500 concurrent users
5. POS Users: 300 Concurrent users
6. Mobile Application users
  - Portal users: 500 Concurrent users
  - POS user: 150 Concurrent users.

## **8. Warranty Support Terms.**

- a) The Systems shall be under warranty for a period of one year from the date of operational acceptance of the complete system. The warranty support should be comprehensive which covers all the software offered and implemented as part of this tender.
- b) The bidder should provide onsite support for a period of 12 months termed as warranty from the date operational acceptance of POS. The onsite support personnel appointed for the onsite support should be able to give necessary support and training for the efficient functioning of the system. He should be capable of attending to any issues related to the smooth functioning of POS and having minimum 5 years technical experience and operational activities of ports
- c) The bidder should be able to deploy technically experienced persons of at least 5 years even during AMC period of the project at VPT location and should follow the VPT HR policies.
- d) Two copies of necessary System/Reference, Operation and User Manual should be supplied along with the soft copies of the same for operational acceptance of the system at no extra cost.



**Technical Support- Onsite during the Warranty support:**

- The consultants of the successful bidder will perform all type of monitoring and administrative activities like restarting POS servers, maintenance of system configuration, administration for Browser-Based User Dialogs, User Administration, Scheduling Background Tasks, Printer Connections, System Monitoring and Trouble Shooting, Backup procedure, Memory Management, System Load Verification, Database Overview and monitoring, DB Monitoring Tools, Recovery, DBA activity, and also monitoring cyber security parameters during entire project.
- The successful bidder will perform above activities in Quality and production systems. They will also perform all the System Monitoring and health check activities for smooth running of the servers in regular intervals of time and should submit a report for VPT project manger
- The contractor has to fix all vulnerabilities, if any, in the application software found based on the application audit conducted by Visakhapatnam Port Trust during the period of contract.

Note: Service Level of Warranty support will be same or better than the Port Implementation Support Services Levels mentioned in Section 9.

**9. Post Implementation Support Terms**

The POS shall be under AMC for a period of Five years 6 months from the date of expiry of the warranty period. The AMC support should be onsite and offsite and comprehensive which covers all the software offered and implemented as part of this tender. The contractor shall arrange onsite support also in case of such requirement.

**Technical Support- Onsite during 5 Year Post Implementation support:**

- The consultants of the successful bidder will perform all type of monitoring and administrative activities like restarting POS servers, maintenance of system configuration, administration for Browser-Based User Dialogs, User Administration, Scheduling Background Tasks, Printer Connections, System Monitoring and Trouble Shooting, Backup procedure, Memory Management, System Load Verification, Database Overview and monitoring, DB Monitoring Tools, Recovery, DBA activity.
- The successful bidder will perform above activities in Quality and production systems. They will also perform all the System Monitoring and health check activities for smooth running of the servers.

- The contractor has to fix all vulnerabilities, if any, in the application software found based on the application audit conducted by Visakhapatnam Port Trust during the period of contract.

## **Service Conditions:**

Support Levels

Implementation Support

### **Level 1 Support**

Level 1 support team would receive the tickets and resolve if any solutions are directly available. Communications to users in all cases will be done proactively by Level 1. Telephonic support, email support or end user level support on their desk has to be provided by successful bidder as and when required. Level 1 team may record the issue reported through email or telephonically.

The support team will be responsible for detailed problem determination of issues. This detailed problem determination includes simulating the issues, determining the point of failure for the problem resolution.

All application support tickets, master data or transactional data related tickets will be handled at this level.

### **Level 2 Support**

The level 2 support team will be expected to have the deepest level of application or product understanding. This team should understand both the standard application features as well as the detailed components of the customized features.

When bugs occur in the code or configuration, the level 2 support person will be responsible for making changes to system, transporting them, communicating the change to the level 1 support person, who can then resolve, test and close the user call.

For the more technical roles, this includes not only user calls/issues, but also those problems found by the proactive application monitoring being done on a regular basis by the level 1-support person. Therefore, the level 2 person may also have to apply patches, complete performance tuning, re-create tables or indexes, etc.

- i. The successful bidder will be responsible for Level 1 (Helpdesk, Process, Configuration, Integration and Testing) support and Level 2 (Code Change, Bug fixes) support for resolving problems and issues during the support period
- ii. For level 1, level 2 support, adequate shared resources shall be made available by the successful bidder
- iii. The proposed support scope shall cover the offices of

- Visakhapatnam Port Trust in <Address>
- iv. The successful bidder should provide contact numbers, email addresses, escalation matrix of the shared support team. Visakhapatnam Port Trust shall be kept informed well in advance in case any changes are being made in the contact details.
  - v. The consultants deployed for the support services should have adequate experience to resolve the issues with respect to all modules. The bidder should submit the details of the consultants.

## **10.Roles and Responsibilities of the Contractor and Other Requirements**

### **Project Management**

2. The contractor shall ensure that a senior support team manager (Project Manager) to provide consistent leadership and performance monitoring for effective support. The details of the Project team and task (Form VI) and Details of the Key personnel (Form VII) should be submitted by the bidder.
3. The contractor shall prepare weekly/monthly status reports and submit to the Project Manager of Visakhapatnam Port Trust.
4. The Project Manager of the contractor should be available for all review meetings.
5. Technical team should be available at 24×7×365 at VPT premises irrespective of public holidays during entire contract period
6. Monthly health check reporting – covering logs reported etc
7. Incorporating any changes or modifications to the already developed functionality
8. Any small development / enhancements
9. Modification to Report layouts which doesn't result in any database structural changes. In case of any database structural changes, it has to be routed through Change Management process
10. 60% of AMC cost should be attributed to help desk support & application maintenance and 40% for modifications to functionalities / features

#### **i. Documentation**

The successful bidder should maintain all the necessary documentation (i.e., Functional specs, Technical Specs, List of affected codes, Test scripts, Unit test plans, System Test plans etc) for any changes they perform in

the system. Configuration documents, process flow documents and other documents. All these documents should be approved by Visakhapatnam Port Trust and a copy needs to be submitted by the bidder and update the documentation up to date which includes latest changes

## **ii. Training**

The Contractor should provide necessary Training on the application to the end users before go live and during the warranty period to utilize the application properly and effectively by Visakhapatnam Port Trust. Training/Re training should be done as part of the software AMC/ATS without any additional cost. The training/Re training during the AMC period shall be for a maximum period of 30 days in a year.

The L1- bidder need provide certified level administrator training for VPT management nominated employee also on application data base and process flows installed at VPT for proposed POS application

## **iii. Technical Support**

The consultants of the successful bidder will perform all type of monitoring and administrative activities like restarting POS servers, maintenance of system configuration, administration for Browser-Based User Dialogs, User Administration, Scheduling Background Tasks, Printer Connections, System Monitoring and Trouble Shooting, Backup procedure, Memory Management, System Load Verification, Database Overview and monitoring, DB Monitoring Tools, Recovery, DBA activity.

The successful bidder will perform above activities in Quality and production systems. They will also perform all the System Monitoring and health check activities for smooth running of the servers 24\*7

The contractor has to fix all vulnerabilities, if any, in the application software found based on the application audit conducted by Visakhapatnam Port Trust during the period of contract at free of cost. Technical team should be available at 24x7x365 at VPT premises irrespective of public holidays during entire contract period.

The successful bidder provide certified level administrator training for VPT management nominated employee also on application data base and process flows installed at VPT for proposed POS application

### **Master Data Migration**

The contractor has to migrate all the Master data from the existing system to the new system to be hosted in the cloud either in raw form or in a summarized manner for generating statistical (Marine and Traffic) and financial (Billing/SOR) reports as well as for analysis purposes from the new POS. And Contractor will migrate entire existing POS application data into the proposed POS application within the tender cost only. There is no separate cost borne to provide the master data migration for every six months (data obtained from other sources like PCS1x, TAMP and other sources)

### **Recording / Tracking of Issues**

The consultants of successful bidder will use necessary tools for Incident management and recording/tracking of issues raised during support period. L1 bidder need to submit a report for VPT project manager on regular intervals from ticket tracking tool with detailed manner.

### **Problem Management**

System outages are to be met with an immediate response, with continued effort until the issue is resolved. Events impacting a single work group or inconveniencing the entire organization, (for example, failed printing, or failure of a particular module) will be responded to within 2 hours, with resolution expected within 24 hours. Configuration/customization changes and transport requests will be addressed within 24 hours.

### **Change Management**

The change management in Visakhapatnam Port Trust is a predefined process which keeps track of all the changes carried out in the system through proper documentation and approval mechanism. The successful bidder, during this support phase, should follow the procedure for any Change in the system. All such changes depending on the type of requests would follow one of the below mentioned path of the change management process.

For changes pertaining to Customization, Configuration, new transactions/ processes/ developments, Report generation/modification, Interface & Integration requirements required for implementation will be mutually agreed by both the successful bidder and Visakhapatnam Port Trust by way of Change Request procedure.

### **Change Request & Implementation Procedure**

#### **Change Request**

The change requirement from Visakhapatnam Port Trust will be intimated to the Contractor in the Change Request Form (**Form No IX**) by mail. The Project Manager or any other nominated person of the Contractor should intimate the methodology in which the change is going to be implemented in Visakhapatnam

Port Trust along with the efforts in man days, time for implementation and the probable impacts of the change in the module or the entire system through Change Proposal in response to the Change Request given by Visakhapatnam Port Trust.

L1 bidder should be able to do new changes in proposed POS application with free of cost for 3 years period entire project period (i.e 6 months implementation+6 months stability and 2 years of AMC period).

As part of AMC, the bidder must resolve 12:00Hrs of efforts for minor enhancements which doesn't require approval for every small step

The Change management procedure should be as per the RICEFW (Report, Interface, Conversion, Enhancements, Forms and Workflow) method.

If the necessary data/fields are not available against to the change then only will consider as change request (CR) , otherwise , if same data available in application database then CR request will not be consider by project manager and same should be done by L1 bidder with free of cost.

### **Change Order& Valuation**

Visakhapatnam Port Trust in consultation with the contractor will arrive at a consensus in the man days requirement for the change. Visakhapatnam Port Trust will obtain a management approval for the financial implication to carry out the changes and a change order (**Form X**) with the financial implication as per the man day costs for the Change Request.

It is contractor's sole responsibility to ensure that there are no adverse impacts occurred in the application due to the changes if any, made in the system. Proper impact analysis has to be conducted by the contractor.

The changes on account of CR implementation should be tested by support team and subsequently UAT will be carried out by the end users in the Quality environment with the support of the contractors before they are moved to production.

### **Operational Acceptance**

The contractor shall request for Operational Acceptance with respect to Change Order, for payment in the next quarterly cycle. Necessary documentation for the changes has to be submitted by the Contractor. Besides, training if required, to the users shall be given by the contractor.

### **Testing, UAT, Transportation to production**

The successful bidder should carry out Code review, System Integration Testing (SIT) of the process / module (including co-ordination with other vendors if required), Unit testing, Integration testing of components etc. They will also be

responsible for conducting the User acceptance testing for the same where the users will participate.

Bug fixes/program changes will be tested by the support team and subsequently UAT (user acceptance testing) will be done by the end users in the Quality environment before they are moved to production.

#### **System testing:**

- The MSP(L1 bidder/Managed Service Provider) shall provide details of tests being carried out during the implementation (e.g. including conference room pilots, unit tests, System integration tests, Stress tests and final user acceptance test.)
- MSP has to prepare a testing strategy document, which will include testing plans, schedules, content, training approach and methodology. Testing strategy should define the requirements and goals of POS configuration, determine the tools and methods used to check that the system responds correctly, determine how and when the test will be performed and recommend how the approval process should occur.
- The test strategy document shall guide the project team through the implementation to ensure that planning and conducting testing activities in the various phases of POS implementation are proper.

The following testing should be done by MSP:

- Unit Testing: After development and customization/configuration of the POS solution, the MSP shall, conduct tests to demonstrate the readiness of the system which meets all the requirement specifications (functional and Non-functional) as brought out in this RFP.
- On the basis of these tests, a report would be submitted by the Managed Service Provider for review and approval by VPT. MSP should perform following as a part of the scope: Unit testing shall cover all the custom developed objects as part of configuration/customization phase.
- This shall be tested thoroughly to make sure that the test results (output data) are correct, and reflect the business processes defined in the Business blueprint report. MSP shall perform a code review for each of the custom development as a part of quality procedure and submit it to VPT
- Integration testing: The purpose of the integration test is to execute the

integrated components, including simulation of live operations, and analyse the results that are important for the functional verification of the production system.

- Integration testing shall be accomplished through the execution of predefined business flows, or scenarios, that emulate how the system will run the processes of VPT. These business flows, using migrated data from the existing systems, shall be performed in a multifaceted computing environment comprising of POS products, third-party software, system interfaces and various hardware and software components. Integration testing shall focus on cross-functional integration points, as well as end-to-end business processes.
- Performance and load Testing: MSP will be responsible for carrying out the performance and load testing of the developed application in a production like simulated environment arranged by MSP at its own cost. Various performance parameters such as transaction response time, throughput, hits per second and transactions per second etc. should be taken into account. Test cases along with test results to be shared with VPT. The MSP should use suitable simulation tools in accordance with the agreed test procedures keeping in view VPT's projected future load of transactional users as proposed by MSP and agreed by VPT.
- Security Testing (Penetration and Vulnerability testing): The solution provided by MSP should be in compliance with security requirements as mentioned in the RFP including but not limited to security controls in the application, at the network layer, network, data centre(s), and security monitoring system deployed by the MSP and preventive tests of cyber-attacks .
- The solution shall pass vulnerability and penetration testing for rollout of each phase. The solution should pass web application security testing for the portal and security configuration review of the baseline infrastructure.
- MSP should carry out security and vulnerability testing on the developed solution. Security testing to be carried out in the exact same environment/architecture that would be set up for production. Security test report and test cases should be shared with VPT.
- During Operation & Maintenance phase, penetration testing to be conducted on yearly basis and vulnerability. VPT will also involve third party auditors to perform the audit/review/monitor the security testing carried out by MSP. Cost for such auditors to be paid by VPT.



- System Acceptance: The MSP will develop acceptance test procedures for VPT approval. The purpose of this acceptance is to ensure conformance to the required process operations, response times, and integrity of the software after installation, and to eliminate any operational bugs. Acceptance testing has to be conducted in the test system with migrated data.
- For this MSP ensure the completeness of following activities:
- Fine tuning of the software, ensuring all required related software components are installed. All the acceptance tests should be carried out before Go-Live at site.
- At the satisfactory conclusion of these acceptance tests, the implementation of the software shall be considered complete for migration and Go-live.

#### User Acceptance Testing

- MSP shall maintain a traceability matrix, to confirm that all the business and functional requirements as stated in Annexure of this volume of the RFP are met by the solution.
- MSP shall be responsible for the below mentioned activities as part of the testing:
- Unit testing of different modules of the solution Integration testing of the solution Functional testing
- Performance testing which includes load / stress testing
- MSP shall prepare test plans and test cases for testing and user acceptance.
- MSP shall prepare test data for testing and user acceptance. MSP shall ensure that they create data, which is similar to what VPT has both in terms of quality and volume.
- MSP shall setup a separate test environment for testing, which would be used for testing and quality check, before changes are pushed to the production environment.
- MSP shall perform testing and enable User Acceptance Testing (UAT), prior to Go-Live of each project phase. MSP shall get the Vulnerability Assessment (VA) and Penetration Testing (PT) and Application Security Audit conducted by CERT-In empaneled agency before deployment/ Go-Live of each project phase. MSP shall be responsible for all payments to engage such agencies. MSP shall be required to make necessary changes in the SRS as well as other documents based on the changes made during testing and UAT.
- As part of FAT, all aspects of project development and

implementation shall be reviewed. This will include software, hardware, network, solution architecture, high level and low-level design, coding, testing, implementation of business processes, project documentation, version control, change management, security, architectural requirements and compliance with all the business and functional requirements.

- MSP shall fix the bugs found during UAT.
- VPT reserves the right to engage a third party agency for Final Acceptance Testing (FAT) and certification after Go-Live of phase III of the project. MSP shall assist the third party agency in all activities undertaken as part of FAT. Any non-compliance reported shall have to be fixed by MSP within the contractual period.

### **AUDIT, ACCESS AND REPORTING PURPOSE**

This Schedule details the audit, access and reporting rights and obligations of VPT or its nominated agency and the Managed Service Provider.

### **AUDIT NOTICE AND TIMING**

As soon as reasonably practicable after the Effective Date, the Parties shall use their best endeavors to agree to a timetable for routine audits during the Project Implementation Phase and the Operation and Management Phase. Such timetable during the Implementation Phase, VPT or its nominated agency and thereafter during the operation Phase, VPT or its nominated agency shall conduct routine audits in accordance with such agreed timetable and shall not be required to give the Managed Service Provider any further notice of carrying out such audits.

VPT or its nominated agency may conduct non-timetabled audits at his/ her own discretion if it reasonably believes that such non-timetabled audits are necessary as a result of an act of fraud by the Managed Service Provider, a security violation, or breach of confidentiality obligations by the Managed Service Provider, provided that the requirement for such an audit is notified in writing to the Managed Service Provider a reasonable period time prior to the audit (taking into account the circumstances giving rise to the reasonable belief) stating in a reasonable level of detail the reasons for the requirement and the alleged facts on which the requirement is based. If the Managed Service Provider considers that the non-timetabled audit was not appropriate, the matter shall be referred to the escalation procedure as set out in the Governance Schedule.

The frequency of audits shall be a (maximum) half yearly, provided always that VPT or its nominated agency shall endeavor to conduct such audits with the lowest levels of inconvenience and disturbance practicable being caused to the Managed Service Provider. Any such audit shall be conducted by with adequate notice of 2 weeks to the Managed Service Provider.

VPT will ensure that any 3rd party agencies (except CAG) appointed to conduct the audit will not be the competitor of Managed Service Provider and will be bound by confidentiality obligations.

## **ACCESS**

The Managed Service Provider shall provide to VPT or its nominated agency reasonable access to employees, subcontractors, suppliers, agents and third party facilities as detailed in the RFP, documents, records and systems reasonably required for audit and shall provide all such persons with routine assistance in connection with the audits and inspections. The Chairperson, PIU / Steering Committee shall have the right to copy and retain copies of any relevant records. The Managed Service Provider shall make every reasonable effort to co-operate with them.

## **AUDIT RIGHTS**

VPT or its nominated agency shall have the right to audit and inspect suppliers, agents and third party facilities (as detailed in the RFP), data centres, documents, records, procedures and systems relating to the provision of the services, but only to the extent that they relate to the provision of the services, as shall be reasonably necessary to verify:

- The security, integrity and availability of all data processed, held or conveyed by the Partner on behalf of VPT and documentation related thereto;
- That the actual level of performance of the services is the same as specified in the SLA;
- That the Managed Service Provider has complied with the relevant technical standards, and has adequate internal controls in place; and
- The compliance of the Managed Service Provider with any other obligation under the MSA and SLA.
- Security audit and implementation audit of the system shall be done once each year, the cost of which shall be borne by the Managed Service Provider.
- For the avoidance of doubt the audit rights under this Schedule shall not include access to the Managed Service Provider's profit margins

or overheads, any confidential information relating to the Managed Service Provider" employees, or (iii) minutes of its internal Board or Board committee meetings including internal audit, or (iv) such other information of commercial-in- confidence nature which are not relevant to the Services associated with any obligation under the MSA.

## **AUDIT RIGHTS OF SUB-CONTRACTORS, SUPPLIERS AND AGENTS**

The Managed Service Provider shall use reasonable endeavors to achieve the same audit and access provisions as defined in this Schedule with sub-contractors, suppliers and agents who supply labor, services, equipment or materials in respect of the services. The Managed Service Provider shall inform VPT or its nominated agency prior to concluding any sub-contract or supply agreement of any failure to achieve the same rights of audit or access.

**REPORTING:** The Managed Service Provider will provide quarterly reports to the Chairperson, PIU / Steering committee regarding any specific aspects of the Project and in context of the audit and access information as required by VPT or its nominated agency.

## **ACTION AND REVIEW**

Any change or amendment to the systems and procedures of the Managed Service Provider, or sub- contractors, where applicable arising from the audit report shall be agreed within thirty (30) calendar days from the submission of the said report.

Any discrepancies identified by any audit pursuant to this Schedule shall be immediately notified to VPT or its nominated agency and the Managed Service Provider Project Manager who shall determine what action should be taken in respect of such discrepancies in accordance with the terms of the MSA.

## **TERMS OF PAYMENT**

The MSP shall bear the cost of any audits and inspections as per the scope of work defined in Volume – II of the RFP. The terms of payment are exclusive of any costs of the Managed Service Provider and the sub-contractor, for all reasonable assistance and information provided under the MSA, the Project Implementation, Operation and Management SLA by the Managed Service Provider pursuant to this Schedule.

## **RECORDS AND INFORMATION**

For the purposes of audit in accordance with this Schedule, the Managed Service Provider shall maintain true and accurate records in connection with the

provision of the services and the Managed Service Provider shall handover all the relevant records and documents upon the termination or expiry of the MSA.

### **Security administration**

Management of security environment to maintain performance at optimum levels.

- Address ongoing needs of security management including, but not limited to, monitoring of various devices/tools such as content filtering and blocking, virus protection and vulnerability protection through implementation of proper patches and rules.
- Maintain an updated knowledge base of all the published security vulnerabilities and virus threats for related software, including, but not limited to, operating systems, application servers, web servers, databases, security solutions, messaging solutions, etc.
- Ensure that patches/workarounds for identified vulnerabilities are patched/ blocked immediately.
- Respond to security breaches or other security incidents and coordinate with respective OEM in case of a new threat is observed to ensure that workaround/patch is made available for the same.
- Maintenance and management of security devices, including, but not limited to detecting intrusions or unauthorized access to networks, systems, services, applications or data, protecting email gateways, servers, desktops from viruses

## **7.6**

### ***Roles and Responsibilities of the Contractor***

#### **iv. Master Data Migration**

The contractor has to migrate all the Master data from the existing system to the new system to be hosted in the cloud either in raw form or in a summarized manner for generating statistical (Marine and Traffic) and financial (Billing/SOR) reports as well as for analysis purposes from the new POS.

And L1- tenderer will migrate entire existing POS application data into the proposed POS application within the tender cost only.

#### **v. Recording / Tracking of Issues**

The consultants of successful bidder will use necessary tools for Incident

management and recording/tracking of issues raised during support period.

**vi. Problem Management**

System outages are to be met with an immediate response, with continued effort until the issue is resolved. Events impacting a single work group or inconveniencing the entire organization, (for example, failed printing, or failure of a particular module) will be responded to within 2 hours, with resolution expected within 24 hours. Configuration/customization changes and transport requests will be addressed within 24 hours.

**vii. Change Management**

The change management in Visakhapatnam Port Trust is a predefined process which keeps track of all the changes carried out in the system through proper documentation and approval mechanism. The successful bidder, during this support phase, should follow the procedure for any Change in the system. All such changes depending on the type of requests would follow one of the below mentioned path of the change management process.

For changes pertaining to Customization, Configuration, new transactions / processes/ developments, Report generation/modification, Interface & Integration requirements required for implementation will be mutually agreed by both the successful bidder and Visakhapatnam Port Trust by way of Change Request procedure.

**viii. Change Request & Implementation Procedure**

**a) Change Request**

The change requirement from Visakhapatnam Port Trust will be intimated to the Contractor in the Change Request Form (**Form No IX**) by mail. The Project Manager or any other nominated person of the Contractor should intimate the methodology in which the change is going to be implemented in Visakhapatnam Port Trust along with the efforts in man days, time for implementation and the probable impacts of the change in the module or the entire system through Change Proposal in response to the Change Request given by Visakhapatnam Port Trust.

The Change management procedure should be as per the RICEFW (Report, Interface, Conversion, Enhancements, Forms and Workflow) method.

**b) Change Order& Valuation**

Visakhapatnam Port Trust in consultation with the contractor will arrive at a consensus in the man days requirement for the change. Visakhapatnam Port Trust will obtain a management approval for the financial implication to carry out the changes and a change order (**Form X**) with the financial implication as per the man day costs for the Change Request.

It is contractor's sole responsibility to ensure that there are no adverse impacts occurred in the application due to the changes if any, made in the system. Proper impact analysis has to be conducted by the contractor.

The changes on account of CR implementation should be tested by support team and subsequently UAT will be carried out by the end users in the Quality environment with the support of the contractors before they are moved to production.

### **c) Operational Acceptance**

The contractor shall request for Operational Acceptance with respect to Change Order, for payment in the next quarterly cycle. Necessary documentation for the changes has to be submitted by the Contractor. Besides, training if required, to the users shall be given by the contractor.

## **10.3 Testing, UAT, Transportation to production**

The successful bidder should carry out Code review, System Integration Testing (SIT) of the process / module (including co-ordination with other vendors if required), Unit testing, Integration testing of components etc. They will also be responsible for conducting the User acceptance testing for the same where the users will participate.

Bug fixes/program changes will be tested by the support team and subsequently UAT (user acceptance testing) will be done by the end users in the Quality environment before they are moved to production until project manager will give clearance.

### **System Testing:**

The MSP shall provide details of tests being carried out during the implementation (e.g. including conference room pilots, unit tests, System integration tests, Stress tests and final user acceptance test.)

MSP has to prepare a testing strategy document, which will include testing plans, schedules, content, training approach and methodology. Testing strategy should define the requirements and goals of POS configuration, determine the tools and methods used to check that the system responds correctly, determine how and when the test will be performed and recommend how the approval process should occur.

The test strategy document shall guide the project team through the implementation to ensure that planning and conducting testing activities in the various phases of POS implementation are proper.

The following testing should be done by MSP:

#### Unit Testing:

After development and customization/configuration of the POS solution, the MSP shall, conduct tests to demonstrate the readiness of the system which meets all the requirement specifications (functional and Non-functional) as brought out in this RFP.

On the basis of these tests, a report would be submitted by the Managed Service Provider for review and approval by VPT. MSP should perform following as a part of the scope:

Unit testing shall cover all the custom developed objects as part of configuration/customization phase.

This shall be tested thoroughly to make sure that the test results (output data) are correct, and reflect the business processes defined in the Business blueprint report.

MSP shall perform a code review for each of the custom development as a part of quality procedure and submit it to VPT

#### Integration testing:

The purpose of the integration test is to execute the integrated components, including simulation of live operations, and analyze the results that are important for the functional verification of the production system.

Integration testing shall be accomplished through the execution of predefined business flows, or scenarios, that emulate how the system will run the processes of VPT. These business flows, using migrated data from the existing systems, shall be performed in a multifaceted computing environment comprising of POS products, third-party software, system interfaces and various hardware and software components. Integration testing shall focus on cross-functional integration points, as well as end-to-end business processes.

#### Performance and load Testing:

MSP will be responsible for carrying out the performance and load testing of the developed application in a production like simulated environment arranged by MSP at its own cost. Various performance parameters such as transaction response time, throughput, hits per second and transactions per second etc. should be taken into account. Test cases along with test results to be shared with VPT. The MSP should use suitable simulation tools in accordance with the agreed test procedures keeping in view VPT's projected future load of transactional users as proposed by MSP and agreed by VPT

#### Security Testing (Penetration and Vulnerability testing):

The solution provided by MSP should be in compliance with security requirements as mentioned in the RFP including but not limited to security



controls in the application, at the network layer, network, data centre(s), and security monitoring system deployed by the MSP and preventive tests of cyber-attacks .

The solution shall pass vulnerability and penetration testing for rollout of each phase. The solution should pass web application security testing for the portal and security configuration review of the baseline infrastructure.

MSP should carry out security and vulnerability testing on the developed solution. Security testing to be carried out in the exact same environment/architecture that would be set up for production. Security test report and test cases should be shared with VPT.

During Operation & Maintenance phase, penetration testing to be conducted on yearly basis and vulnerability. VPT will also involve third party auditors to perform the audit/review/monitor the security testing carried out by MSP. Cost for such auditors to be paid by VPT.

#### System Acceptance:

The MSP will develop acceptance test procedures for VPT approval. The purpose of this acceptance is to ensure conformance to the required process operations, response times, and integrity of the software after installation, and to eliminate any operational bugs. Acceptance testing has to be conducted in the test system with migrated data.

For this MSP ensure the completeness of following activities:

Fine tuning of the software, ensuring all required related software components are installed. All the acceptance tests should be carried out before Go-Live at site.

At the satisfactory conclusion of these acceptance tests, the implementation of the software shall be considered complete for migration and Go-live.

#### User Acceptance Testing

- MSP shall maintain a traceability matrix, to confirm that all the business and functional requirements as stated in Annexure of this volume of the RFP are met by the solution.
- MSP shall be responsible for the below mentioned activities as part of the testing:
- Unit testing of different modules of the solution Integration testing of the solution Functional testing
- Performance testing which includes load / stress testing

- MSP shall prepare test plans and test cases for testing and user acceptance.
- MSP shall prepare test data for testing and user acceptance. MSP shall ensure that they create data, which is similar to what VPT has both in terms of quality and volume.
- MSP shall setup a separate test environment for testing, which would be used for testing and quality check, before changes are pushed to the production environment.
- MSP shall perform testing and enable User Acceptance Testing (UAT), prior to Go-Live of each project phase. MSP shall get the Vulnerability Assessment (VA) and Penetration Testing (PT) and Application Security Audit conducted by CERT-In empaneled agency before deployment/ Go-Live of each project phase. MSP shall be responsible for all payments to engage such agencies. MSP shall be required to make necessary changes in the SRS as well as other documents based on the changes made during testing and UAT.
- As part of FAT, all aspects of project development and implementation shall be reviewed. This will include software, hardware, network, solution architecture, high level and low-level design, coding, testing, implementation of business processes, project documentation, version control, change management, security, architectural requirements and compliance with all the business and functional requirements.
- MSP shall fix the bugs found during UAT.
- VPT reserves the right to engage a third party agency for Final Acceptance Testing (FAT) and certification after Go-Live of phase III of the project. MSP shall assist the third party agency in all activities undertaken as part of FAT. Any non-compliance reported shall have to be fixed by the MSP within the contractual period.

## **Service Conditions:**

### **i. Support Levels**

Implementation Support and application support must be 24x7x365. L1-bidder will make his arrangements for the application support of end users

#### ***a. Level 1 Support***

Level 1 support team would receive the tickets and resolve if any solutions are directly available. Communications to users in all cases will be done proactively by Level 1. Telephonic support, email support or end user level support on their desk has to be provided by successful bidder as and when required. Level 1 team may record the issue reported through email or telephonically.

The support team will be responsible for detailed problem

determination of issues. This detailed problem determination includes simulating the issues, determining the point of failure for the problem resolution.

All application support tickets, master data or transactional data related tickets will be handled at this level.

***b. Level 2 Support***

The level 2 support team will be expected to have the deepest level of application or product understanding. This team should understand both the standard application features as well as the detailed components of the customized features.

When bugs occur in the code or configuration, the level 2 support person will be responsible for making changes to system, transporting them, communicating the change to the level 1 support person, who can then resolve, test and close the user call.

For the more technical roles, this includes not only user calls/issues, but also those problems found by the proactive application monitoring being done on a regular basis by the level 1-support person. Therefore, the level 2 person may also have to apply patches, complete performance tuning, re-create tables or indexes, etc.

- ii. The successful bidder will be responsible for Level 1 (Helpdesk, Process, Configuration, Integration and Testing) support and Level 2 (Code Change, Bug fixes) support for resolving problems and issues during the support period
- iii. For level 1, level 2 support, adequate shared resources shall be made available by the successful bidder
- iv. The proposed support scope shall cover the offices of Visakhapatnam Port Trust in <Address>
- v. The successful bidder should provide contact numbers, email addresses, escalation matrix of the shared support team. Visakhapatnam Port Trust shall be kept informed well in advance in case any changes are being made in the contact details.
- vi. The consultants deployed for the support services should have adequate experience to resolve the issues with respect to all modules. The bidder should submit the details of the consultants.

**Severity & Resolution:**

- i. The successful bidder will adhere to the following Service Level Agreements (SLA) related to both the Level 1 and Level 2 support for the production problems
- ii. The “resolution duration” refers to the total number of clock hours within which the fault should be resolved, starting from the time of reporting to the Level 1 or Level 2 support contact person.
- iii. If L1 bidder unable to resolve the issue within the specified time, VPT may impose a penalty based on the reputation damage and operational revenue loss occurred during that time. VPT management decision will be final that time

SI No	Severity Levels	Description	Measurement and Reporting	Response Time	Resolution Duration
1	Business standstill (Critical)	Impacts whole business and/or major module is affected and/or Application is unavailable and blocks the execution of the primary business process. No workaround is possible and/or Business-critical functions cannot be executed. No workaround is possible.	Monitored call reported monthly	15 Minutes	4 Hours
2	Performance Degradation / Partial impact (High)	Impacts the operation but business can run with workaround  Important functions perform with response times that deviate significantly	Monitored call reported monthly	15 Minutes	24 Hours

SI No	Severity Levels	Description	Measurement and Reporting	Response Time	Resolution Duration
		<p>from the agreement.</p> <p>The user is able to work but is unable to achieve a normal productivity level due to the problem.</p> <p>Partial unavailability of system or components.</p>			
3	Regular default category (Medium)	<p>A non-business critical part of an application is unavailable. A workaround is not possible but the user is able to achieve a normal productivity level.</p> <p>The problem has few consequences for the user and workaround is possible.</p> <p>The majority of the functions operate normally.</p>	Monitored call reported monthly	15 Minutes	Up to 80 Hours

SI No	Severity Levels	Description	Measurement and Reporting	Response Time	Resolution Duration
4	No immediate impact to business (Low)	<p>The problem has few consequences for the user and there is a workaround.</p> <p>The application or its parts are used by a very few users &amp; the unavailability will not affect business.</p>	Monitored call reported monthly	15 Minutes	To Be Discussed & Decided

FORMS

Form – I

**Letter of Application** (Refer Sec 2.4)

Registered Business Name:

Business Address :

Tel. :

Fax :

E-mail :

WebSite :

To

The FA & CAO Visakhapatnam Port Trust,

<Address> Sir,

1. We hereby apply to be qualified with the Visakhapatnam Port Trust as a Bidder for the work of '**Supply, Customisation, Implementation and Maintenance of an Integrated Port Operation System (POS)**' in Visakhapatnam Port Trust
2. We authorize Visakhapatnam Port Trust or its authorized representatives to conduct any investigations to verify the statements, documents and information submitted and to clarify the financial and technical aspects of this application. For this, we hereby authorize .....to furnish the pertinent information deemed necessary and requested by Visakhapatnam Port Trust to verify statements and information provided in this application or regarding competence and standings.
3. The names and positions of persons who may be contracted for further information, if required are as follows:

(a) Technical (Name : \_\_\_\_\_  
Designa : \_\_\_\_\_  
tion : \_\_\_\_\_  
Telepho  
ne  
E-mail : \_\_\_\_\_)  
id

(b) Personnel (Name : \_\_\_\_\_  
Designa : \_\_\_\_\_  
tion

Telepho : \_\_\_\_\_  
ne  
E-mail : \_\_\_\_\_)  
id

( c) Financial (Name : \_\_\_\_\_ Designation : \_\_\_\_  
\_\_\_\_\_  
Telephone : \_\_\_\_\_  
E-mail id : \_\_\_\_\_)

4. We declare that the statements made and the information provided in the duly completed applications are complete, true and correct in every detail.
5. We declare that no attempt has been made or will be made to induce any person or firm to submit or not to submit a tender for the subject work.
6. We understand that Visakhapatnam Port Trust reserves the right to reject any application without assigning any reasons.

Yours Faithfully,

Signature :  
(The Authorized signatory of the Bidding Organization) Name  
:  
Designation : Date:  
Company Seal : Business Address :



**Form - II**  
**Tenderer's Particulars**

<b>1. Organisation</b>	
Name of the Organisation	
Address	
City	
Country	
Phone	
Fax	
Web Address	
Location & Address of Corporate Head Office	
<b>2. Contact Details</b>	
Person Name	
Designation	
Address	
Phone	
Fax	
E-Mail	
<b>3. Permanent Account Number</b>	
<b>4. GST Number</b>	
<b>5. Legal status of the applicant (<i>Attach copies of original document defining the legal status</i>)</b> <ul style="list-style-type: none"> <li>a) A proprietary firm</li> <li>b) A firm in partnership</li> <li>c) A limited company or Corporation/ Joint venture/Consortia</li> <li>d) Others</li> </ul>	

6. <b>Core area of competency</b>	..... ..... .....
7. Details of Major Products and Services offered by the Bidder	
8. Year of establishment and number of year in business ( <b><i>Attach Notary attested copy of certificate of registration &amp; ownership</i></b> )	
9. Number of Software professionals available for <b>Port Operation System</b>	
10. Details of offices of the Bidder	
11. Has the Bidder ever abandoned the awarded project before its completion? If so, give name of the project and reasons for abandonment	
12. Has the Bidder ever been debarred/ black listed for competing in any organization at any time? If so, give details.	
13. Any other details considered relevant but not included in the above	

Signature of Authorized Signatory

Date :

Place : Seal :

**Form - III**  
**(Use Company Letter Head)**

To  
The FA&CAO,  
Visakhapatnam Port Trust,  
<Address>.

Dear Sir,

Having visited the Site and examined the Conditions of Contract, specifications, Schedules and Bill of Quantities, for the above- named Service/Work, we offer to execute the service/work in conformity with the said Conditions of Contract, Specifications, Schedules and Bill of Quantities for the sum of Rupees (Rupees\_\_\_\_\_only).

**(Should not be filled in the Technical Bid).**

- 2            We undertake, if our Tender is accepted, to achieve completion of the various sections of the Works within the periods specified in this Schedule.
  
- 3            If our Tender is accepted we will furnish a performance security in the form of Demand Draft or irrevocable bank guarantee from a Nationalised Bank to be bound in a sum equivalent to 10% of the accepted tender value towards the project implementation and Warranty approved by the employer of the contract within the time stipulated in the tender.
  
- 4            We agree to abide by the terms and conditions, rates and purpose of this Tender for the period of 90 days from the date fixed for receiving the same and for a further period of 90 days if requested or for such further period as may be mutually agreed upon and it shall remain binding upon us and may be accepted at any time before the expiration of that period. Should we fail to abide by the terms, conditions and rates of our Tenders during the above said period of 90 days or such extended period we agree to forfeit the Earnest Money deposited by us. Unless and until a formal Agreement is

prepared and executed, this Tender together with your written acceptance

thereof, shall constitute a binding Contract between us.

- 5 We understand and agree that you are not bound to accept the lowest or any tender you may receive.
- 6 If our Tender is accepted we understand and agree that we will be held fully responsible for the due performance of the Contract.
- 7 We have furnished Earnest Money in the form of Pay Order / Demand Draft/Online mode only. No cheques/DD's allowed.provided at online website portal in favour of the Visakhapatnam Port Trust encashable at Visakhapatnam. for the amount of **<eg: Rs.0,00,000/-> <Rupees in words>**. If our Tender is not accepted, the Earnest Money shall be returned without interest to us on our application when intimation is sent to us of rejection or at the expiration of sixty days from the date of expiry of validity of this tender whichever is earlier. .
- 8 We agree to execute all the Works referred to in the Tender Documents upon the Terms and Conditions contained or referred to therein and to carry out such deviations as may be ordered.

Dated this \_\_\_\_\_ day of \_\_\_\_\_  
 \_\_\_\_\_202× Signature\_\_\_\_\_in the capacity  
 of\_\_\_\_\_duly authorised to sign Tenders for and on behalf  
 of\_\_\_\_\_.

( IN BLOCK LETTERS )

Address \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Witnesses

1. Signature : \_\_\_\_\_Name : \_\_\_\_\_

Address : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2 Signature : \_\_\_\_\_  
.

Name : \_\_\_\_\_  
Address : \_\_\_\_\_  
\_\_\_\_\_

**Form - IV****FORM OF AGREEMENT**

AGREEMENT NO of &lt;Year &gt;

This agreement is made at Visakhapatnam this the -----day of <month name >  
 , Two Thousand twenty one between \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_ Represented by \_\_\_\_\_ aged \_\_\_\_\_  
 \_\_\_\_\_, Son of \_\_\_\_\_ residing at \_\_\_\_\_  
 \_\_\_\_\_ (House name and No.) \_\_\_\_\_  
 \_\_\_\_\_ District \_\_\_\_\_ State \_\_\_\_\_

----- (hereinafter referred to as "The Contractor" which expression shall include their successors, assignees and administrators) of the one part AND the Board of Trustees of Visakhapatnam Port Trust <Address> a Trust formed under "Major Port Trust Act 1963" represented by the FA & CAO (hereinafter referred to as "The Employer" which expression shall include their successors, assignees and administrators in the office) of the other part.

Whereas the "Employer" had called for the tenders for 'Supply, Customisation, Implementation and Maintenance of an Integrated Port Operation System (POS)' vide **IRNP/IT/Proc/POS/2020-21** **Date: 12-01-2021** and the contractor had submitted a tender for the same giving the rates subject to the terms and conditions etc. And whereas the said tender of the contractor has been accepted by the employer and a work order No..... DT.: ..... Has been issued to the contractor accepting their tender subject to the "General Conditions of Contract", "Instructions to the Tenderers" and such other contract documents. And as per one of the terms of the above work order, an agreement will have to be executed between the contractor and the employer.

**NOW THESE PRESENTS WITNESES AS FOLLOWS:**

1. The contractor hereby agrees to execute the work of 'Supply, Customisation, Implementation and Maintenance of an Integrated Port Operation System (POS)' as described in the schedule, its annexure etc. at the rates shown there under subject to the "General Conditions of Contract", 'Scope of work' and "Instructions to the tenderers", all hereunto annexed within 8 weeks from the date of handing over of the site or in default to forfeit and pay to the employer the sum of money mentioned in the said conditions.

2. The contractor has furnished a Bank Guarantee for Rs. \_\_\_\_\_ /-(Rupees \_\_\_\_\_ only) vide Bank Guarantee No. <BG No.> dated ----- from, in lieu of Security Deposit for the

due and proper fulfillment of the contract. The contractor further agrees that the aforesaid Bank Guarantee will be kept valid until one month beyond the expiry of the Guarantee/AMC Period. The contractor also agrees that the Bank Guarantee furnished in lieu of Security Deposit for the due and proper fulfillment of the contract will be suitably enhanced so as to cover 10% cost of any additional items/ works that may be required for the proper completion of the contract or otherwise the employer can deduct such additional amounts towards Security Deposit from the Contractor's bills.

3. The following documents shall be deemed to form and be read and construed as part of this agreement viz:
  1. Visakhapatnam Port Trust's Tender No **IRNP/IT/Proc/POS/2020-21** Date: **12-01-2021**
  2. Your Technical bid opened on XX/XX/XXXX
  3. Your price bid opened on XX/XX/XXXX
  4. **Visakhapatnam Port Trust's** Work Order No **<XXXXXXXXXXXX>** Date: **<XXXXXXXXXX>**
  5. ....
  6. ....

The Conditions given in the work order dated XX/XX/XXXX shall over-ride the general conditions given in the tender document, wherever they differ. Any of the counter terms and conditions of the contractor shall not be taken as terms and conditions of this contract/ agreement unless the Trustees in writing specifically agree to it.

IN WITNESS WHEREOF THE CONTRACTOR hereunto set his hand and seal on behalf of ..... And on behalf of the Board of Trustees of Visakhapatnam Port Trust, the FA & CAO has set his hand and seal and common seal of Trustees as has been hereunto affixed the day and year first written above.

Signed, sealed and delivered

by Shri. \_\_\_\_\_

of M/s -----

-----

**CONTRACTOR**

(COMMON SEAL OF THE FIRM)

Signed and affixed seal in the presence of:

1) Signature with address:

2) Signature with address: Signed, sealed and delivered by the FA & CAO,  
Visakhapatnam Port Trust on behalf of EMPLOYER

Board of Trustees of Visakhapatnam Port Trust.

Signed and affixed the common seal of Board of Trustees of the  
Visakhapatnam Port Trust in the presence of 1)



## Form – V-A

## Details of POS projects with SAP &amp; PCS Integration

<b>(Note: Use Separate sheet for each implementation project/support service)</b>				
Name of the Project				
Type of Port	Indian / Foreign			
Type of Project / work	Port Operation System (POS)			
Scope of Work (Tick the modules/Areas) * Specify other modules if any in the blank columns	Marine			
	Cargo (Break-Bulk / Break-Liquid)			
	Billing			
	Customer Portal			
	Mobility Solution			
Whether integrated with SAP/ERP or not	Yes / No			
Whether integrated with message exchanges with PCS or other community systems or Portals	Yes / No			
Value of the Project / Work in INR w/o taxes				
Name & address of Client Contact Details : Tel.: Fax : eMail :				
Date of Work order / Purchase Order / Agreement				
Status of the Project / Work (Completed / Ongoing , If completed specify Date of Completion)				
Details of documentary proof enclosed ( <i>Documents as mentioned in MQC Refer Sec 2.23.3</i> )	i. Documentary evidence such as copies of work orders / Purchase Orders / agreement copy. ii. Client Certificate for the successful implementation and maintenance. iii. In case of JV / Consortium, copy of the			

JV / Consortium agreement.

**Signature of the Authorised Signatory**

**Date :**

**Place : Seal :**

**Form – V-B****Details of POS projects implemented as stipulated in MQC**

<b>(Note: Use Separate sheet for each project)</b>	
Name of the Project	
Type of Project	Port Operation System (POS)
Components of the Project	i) Application Software ii) Others – Please specify
Value of the Project / Work in INR w/o taxes in Lakhs	Rs.
Whether this Project involves maintenance support of two consecutive years or not	Yes / No
Status of the Project / Work (Completed / Ongoing , If completed specify Date of Completion)	
Date of Work order / Purchase Order / Agreement	
Name & address of Client Contact Details: Tel. : Fax : e-Mail:	
Details of documentary proof enclosed ( <i>Documents as mentioned in MQC Refer Sec 2.23.3</i> )	i. Documentary evidence such as copies of work orders / Purchase Orders / agreement copy. ii. Client Certificate for the successful implementation and maintenance. iii. In case of JV / Consortium, copy of the JV / Consortium agreement.

**Signature of the Authorised Signatory****Date :****Place :****Seal :**

**Form - VI****Composition of the Team for the Project and Tasks of each Team Member**

<b>Sl. No.</b>	<b>Name</b>	<b>Position</b>	<b>Task/Role for the Project</b>
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

**Signature of the Authorised Signatory****Date :****Place :****Seal :**

**Form VII****Details of Project Personnel**

(use separate sheet for each Key Personnel mentioned in Form VI)

<b>Name of Personnel</b>	
<b>Present Designation</b>	
<b>Role in Visakhapatnam Port Trust</b>	
<b>No. of years of experience</b>	
<b>No. of Assignments</b>	

**Qualification**

Qualification 1	
Qualification 2	

**Certifications**

Certification 1	
Certification 2	

**Specialisations**

Domain Specialisation 1	
-------------------------	--

**Assignments**

Period	
Type of Project/work/Consultancy	
Role	
Organisation 1	
Period	
Type of Project/work/Consultancy	
Role	
Organisation 2	
Period	
Type of Project/work/Consultancy	
Role	

Organisation 3	
----------------	--

**Signature of the Authorised Signatory Date :**

**Place :**

**Seal :**

**Form - VIII**  
**Performance Certificate**

To:  
Sir,

Pursuant to the provisions of the Contract entered into between Visakhapatnam Port Trust and .....dated ..... , relating to the work 'Supply, Customisation, Implementation and Maintenance of an Integrated Port Operation System (POS)' we hereby notify that the technical support for Activities specified mentioned in the Contract for POS is satisfactory.

This letter shall not relieve you of your obligations to take care of the system and the risks attached thereto and remaining performance obligations under the Contract nor of your obligations during the remaining support Period.

For and on behalf of the Employer

**Project Manager**  
**Date**

**Form IX**

**Change Request Form**

To

Sir

With reference to the above-referenced Contract, you are requested to prepare and submit a Change Proposal for the Change noted below in accordance with the following instructions within ..... days of the date of this letter.

1. Title of Change:
2. Change Request No.
3. Originator of Change:
4. Brief Description of Change:
5. System :
6. Technical documents, if any, for the request of Change:
7. Detailed conditions or special requirements, if any, of the requested Change:
8. The Change Proposal shall include the following:
  - (a) The detailed estimate of the mandays of effort required to implement the change.
  - (b) The time to complete the requested Change and the overall impact, if any, on the date of Operational Acceptance of the entire System agreed in the Contract.
  - (c) Analysis using RICEFW methodology.
  - (d) Negative impacts, if any, on the quality, operability, or integrity of the System, with detailed explanation.
  - (e) The number and mix of personnel needed to perform the changes.
9. The execution of work related to the requested Change shall be taken up only after the issue of the Change Order confirming the mandays effort and the Implementation Schedule.

For and on behalf of the Employer Project Manager

Date:



**Form - X Visakhapatnam Port Trust  
Change Order**

To:

Sir,

We hereby approve the Change Order for the work specified in .....

1. Title of Change: .....
2. Change Request No. ....
3. Change Order No.: .....
4. Man days: .....
5. Authorized Price for the Change: .....
6. Time for Achieving Operational Acceptance: .....
7. Other effects, if any: .....

For and on behalf of the Employer

Date:

Form – XI

**Visakhapatnam Port Trust  
Operational Acceptance Certificate**

To:

Sir,

Pursuant to the provisions of the Contract entered into between Visakhapatnam Port Trust and .....dated ..... , relating to the Supply, Customisation, Implementation and Maintenance of an Integrated Port Operation System (POS), we hereby notify that Operational Acceptance is given for the below mentioned activity/(ies).

1.

2.

This letter shall not relieve you of your obligations to take care of the system and the risks attached thereto and remaining performance obligations under the Contract nor of your obligations during the remaining Support Period.

For and on behalf of the Employer

**Project Manager  
Date**

**Form – XII**

**TO BE EXECUTED ON STAMP PAPER WORTH <Rs.XXXXX>**  
**GUARANTEE BOND NO.**

**SPECIMEN FORM OF BANK GUARANTEE BOND FOR PERFORMANCE SECURITY**

In consideration of the FA&CAO representing the Board of Trustees of Visakhapatnam Port Trust (hereinafter called "Visakhapatnam Port Trust") having **agreed to exempt** **<Name of the firm>** (hereinafter called the "said Contractor(s)") from the demand, under the terms and conditions of Contract awarded in tender **No** **<XXXXXXXXXX>** dated **<XXXXXX>** made between Visakhapatnam Port Trust and **<Name of the firm>** for Supply, Customisation, Implementation and Maintenance of Integrated Port Operation System (POS) (hereinafter called "the said Agreement") of Performance Security for the due fulfilment by the said Contractor(s) of the terms and conditions contained in the said Agreement, on production of Bank Guarantee for Rs. \_\_\_\_\_ (Rupees..... only).

2. We\* **<Bank Name>** (hereinafter referred to as the Bank) at the request of **<Name of the firm>** Contractor(s) do hereby undertake to pay to the Visakhapatnam Port Trust an amount not exceeding Rs. \_\_\_\_\_ (Rupees ..... only) against any loss or damage caused to or suffered or would be caused to or suffered by the Visakhapatnam Port Trust by reason of any breach by the said Contractor(s) of any of the terms and conditions contained in the said Agreement.
  
3. We\* **<Bank Name>** do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Visakhapatnam Port Trust stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Visakhapatnam Port Trust by reason of any breach by the said Contractor(s) of any of the terms and conditions contained in the said Agreement or by reason of the Contractor(s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this

Guarantee. However our liability under this Guarantee shall be restricted to an amount not exceeding Rs .\_\_\_\_\_ (Rupees..... only).

4. We \*<Bank Name> undertake to pay to the Visakhapatnam Port Trust any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceedings before any Court of Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.

5. We \*<Bank Name> further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Visakhapatnam Port Trust under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till the Visakhapatnam Port Trust certified that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this Guarantee. Unless a demand or claim under this Guarantee is made on us in writing within three months from the date of expiry of the validity of the Guarantee/AMC period we shall be discharged from all liability under this Guarantee thereafter provided further that the Bank shall at the request of the Visakhapatnam Port Trust but at the cost of Contractor(s) renew or extend this Guarantee for such further period or periods as the Visakhapatnam Port Trust may require.

6. We \*<Bank Name> further agree with the Visakhapatnam Port Trust, that the Visakhapatnam Port Trust shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Visakhapatnam Port Trust against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor(s) or for any

forbearance, act or omission on the part of the Visakhapatnam Port Trust, or any indulgence by the Visakhapatnam Port Trust to the said Contractor(s) or by any such matter or thing whatsoever which under the Law relating to sureties would but for this provision, have effect of so relieving us.

7. This Guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

8. We\*<Bank Name> lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the Visakhapatnam Port Trust in writing.

9. This guarantee shall be valid upto <validity date > unless extended on demand by Port Trust. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. \_\_\_\_\_ (Rupees ..... only). and unless in claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee ,all our liabilities under this guarantee shall stand discharged

Dated the ..... day of 2020 for ..... \* \*

\* Indicate here the name of the Bank.

\*\* Indicate here the period or date

**Form XIII**

**Visakhapatnam Port Trust Proforma of Undertaking**

**REGARDING ILLEGAL METHODS FOR INFLUENCING TENDER PROCESS**

To

The FA & CAO, Visakhapatnam Port Trust,

<address> Dear Sir,

I/ We do hereby undertake that I/We have not made any payment or illegal gratification to any person / authority connected with the Tender process of Tender No.

<XXXXXXXXXXXXXXXXXX> dated <XXXXXXXX> so as to influence the Tender process and have not committed any offence under the Prevention of Corruption Act, 1988 in connection with the Tender.

Yours faithfully,

**Signature** :

**Name & Designation** :

**Form XIV Visakhapatnam Port Trust  
Proforma of Disclosure of Payment**

MADE / PROPOSED TO BE MADE TO THE INTERMEDIARIES IN CONNECTION WITH  
THE TENDER

To

The FA & CAO, Visakhapatnam Port Trust,  
<Address>.

Dear Sir,

I/We have made / proposed to make the following payments in connection with the Tender  
No. <XXXXXXXXXXXX> dated <XXXXXXX>

1. \_\_\_\_\_ to

Mr./Ms./Messrs \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ (Name and Address)

2. \_\_\_\_\_ To Mr./Ms./Messrs \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ (Name and Address)

3. \_\_\_\_\_ To Mr./Ms./Messrs \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ (Name and Address)

Yours faithfully,

**Signature** :

**Name & Designation** :

Note: In case no payment is made or proposed to be made a 'Nil' statement shall be enclosed.

**Form XV Visakhapatnam Port Trust Proforma of Undertaking**

THAT NO CHANGES HAVE BEEN MADE IN THE TENDER DOCUMENT DOWNLOADED

To

The FA & CAO, Visakhapatnam Port Trust,

<Address>. Dear Sir,

We.....

.....

.....do hereby confirm that no changes have been made in the tender document downloaded and submitted by us for the Tender No <XXXXXXXXXXXXXXXXXX> dated <XXXXXXXX>

Yours Faithfully, **Signature** :

**Name & Designation** :



**Form XVI Visakhapatnam Port Trust**  
**Annual Turn Over and Net Profit**  
 (Refer Sec 2.23.3)

Sl. No	Details	Year 2017-2018 Amount (in Crores)	Year 2018-2019 Amount (in Crores)	Year 2019-2020 Amount (in Crores)
1.	Total Turnover for the Year			
2.	Profit after Tax for the Year			
3	Financial Net Worth			

**Signature of the Authorised Signatory :**

**Date :**

**Place :**

**Seal :**

**Form - XVII**  
**POS – General Features**

Sl.No	Features / Functionalities	Compliance (Please Tick)		
		Readily available	Needs Customization	Needs Development
1	Creation of vessel profile uniquely identifying them by IMO number			
2	Voyage registration by Steamer Agents through the message submitted through PCS.			
3	Updation of the ETA of the vessel, Arrival/Departure Recording, Berthing / Unberthing Recording, Vessel Delay Recording, Shipping Programme, Pilotage Recording, Towage Recording, Service Recording, Resource Requisition etc			
4	Online filing of application for allotment of berth by authorized Steamer Agents and publishing the berthing schedule through the port website or using Mobile Application			
5	Viewing the up to date status of the applications filed and Berthing schedule with amendments thereof for by authorized users			
6	Granting of the Port Entry/ Clearance for the vessel with provision for verification of documents			

<b>7</b>	Capture of Pilotage and towage information for inward, outward and shifting operations			
<b>8</b>	Capture of the time of each movement of vessel like berthing, unberthing, shifting etc and any significant delays to a vessel's activities in the Port right from the arrival at outer roads of the port till its sailing.			
<b>9</b>	Mobilizing the resources (craft, tugs, pilots, berthing/ mooring crew etc.) required for inward/ outward / shifting pilotage and berthing / unberthing operations.			
<b>10</b>	Receipt of customs messages electronically through PCS / other EDI Interfaces			
<b>11</b>	Capturing all Dry Bulk / Break Bulk / Liquid Bulk /RO-RO operations with respect to Import /Export /Transshipment /Stuffing/ Destuffing / Storage operation.			
<b>12</b>	Tally / Draft Survey / Ullage Recording of cargo			
<b>13</b>	Allocation of Shed / Yard on licence basis inside Wharf area and its extension / vacation.			
<b>14</b>	Release of cargo, cross verifying with DO and OOC			
<b>15</b>	Holding of cargo release till payment of port charges			
<b>16</b>	Provision for Inter-carting of cargo			
<b>17</b>	Provision for vehicle entry against			

	SB			
<b>18</b>	Admission of cargo against SB/Customs Permission			
<b>19</b>	Receipt of export cargo at storage location against SB/Customs Permission			
<b>20</b>	Loading tally / Draft Survey /Ullage recording and preparation of loaded list			
<b>21</b>	Facility for Transshipment Operations of all types of bulk/break bulk cargo.			
<b>22</b>	Facility for assessing and reporting Port performance, Delays, Cargo handled, Vessels handled etc.			
<b>23</b>	Facility to capture Bunker/Ship Store Supply			
<b>24</b>	Facility to support Gate Operations for export / import/ transshipment etc.			
<b>25</b>	Facility to support CFS operations for both export and import cycles including admission, storage, stuffing, loading, destuffing, storage and delivery.			
<b>26</b>	Configurable Tariff Management as per the Scale of Rates (SoR)			
<b>27</b>	Billing/ Invoices Management as per SoR			
<b>28</b>	Offline Invoice/Credit Note Generation			

<b>29</b>	Self-assessment of the estimated charges payable by the Port Users through the Customer Portal.			
<b>30</b>	Interim invoice generation.			
<b>31</b>	Calculation and billing of Demurrage charges wherever applicable.			
<b>32</b>	Generation of all vessel related charges like Port dues, Berth hire,			
	Pilotage, Tug Hire etc as per Scale of Rates(SoR)			
<b>33</b>	Vessel, Berth and period wise billing			
<b>34</b>	All cargo related charges like Wharfage, Demurrage, Storage etc as per SoR			
<b>35</b>	Charges for Equipment usage, Electricity, Offshore water supply, Water Front Royalty, Water Front Royalty on Re-loading of LNG, IGTPPL Revenue Share etc.			
<b>36</b>	Agent, equipment and period wise billing			
<b>37</b>	Pilotage service billing for berths other than port berths			
<b>38</b>	Berth hire charges for other vessels, floating crafts, bodies, Yachts			
<b>39</b>	CFS operation related billing including stuffing/destuffing, Lift On/Lift Off, Ramp Examination, automatic billing of Export & Import cargo storage charges before the delivery of cargo, Reefer Power, Container Ground Rent, Customs Print out charges, Container Seal(OTL)			

	charges etc			
<b>40</b>	Wharf entry charges for Fresh Water Supply tankers			
<b>41</b>	Overtime charges of crew for the supply of fresh water for employees			
<b>42</b>	Provision to exempt tax for SEZ customers			
<b>43</b>	Provision to have a preview of the invoice before finalizing			
<b>44</b>	Provision to make corrections (Date / Voy No. / Change etc)			
<b>45</b>	Provision to delete an estimated invoice and regenerate one after making necessary changes.			
<b>46</b>	Provision to change the billed party w.e.f a particular date and time in which case part of the vessel bills go to the owner and part of the charter			
<b>47</b>	Billing of Oil pumping facility through Ports Berth, Jetties & Pipelines for transferring POL Products.			

<b>48</b>	Provision to automate billed rebate/concession as per quality criteria (ref. MGT, No. of Vessel & No. of Direction of VSL (E/W) & period)			
<b>49</b>	Provision to Bill Double the normal berth hire on cargo ships idling on ship's account for 24 hrs or more during and after operations.			
<b>50</b>	PD Account maintenance of customers and Maintenance of Customer Master Data			
<b>51</b>	Payment Integration through PCS/Portal			
<b>52</b>	Provision to view charges for the actual services rendered after the completion of voyage.			
<b>53</b>	Provision for generating Operational/ Financial/Statistical and MIS reports/BI reports			
<b>54</b>	Provision of a Dashboard that displays key performance indicators (KPI) to monitor the business of the Port and help in taking day to day decisions should be provided.			

**Signature of the Authorised Signatory**

**Date :**

**Place :**

**Seal :**

**Form - XVIII**  
**POS - Technical Features**

Technical Features			
S No	Features	Compliance (Please Tick)	
		YE S	N O
1	Does the solution using any open source technology		
2	Does solution web enabled		
3	Does the date of release of First Version of solution is prior to 2 years		
4	Does the Date of release of current version is within 2 years		
5	Does the solution have any Demo version available online		
6	Does the application is scalable to meet future volume of business		
7	Does solution requires any annual license cost		
8	Does the Bidder have a support office in India		
9	Does the solution browser independent		
10	Does the solution supports Data migration from VPT existing system		
11	Does the solution have provision to send SMS		
12	Does the solution have provision to send Email		
13	Does the solution have provision to send/receive EDI messages		
14	Does a Mobile version of the application accessible to both port employees and port users		
15	Does the Solution can be Integrated with RFID system at Gate		
16	Does the solution have provision for Incorporation of Digital Signature in invoices		
17	Does the system can be integrated with Port Community System (PCS) and other community /EDI systems using Web Services technology.		



18	Does the system can be integrated with SAP – ERP System of the Visakhapatnam Port Trust		
<b>Other Details</b>			
<b>Sl.No</b>	<b>Item</b>	<b>Enter Details Below</b>	
1	Supported Databases		
2	Supported Operating Systems		
3	Application Development Platform		

**Signature of the Authorised Signatory :**

**Date :**

**Place :**

**Seal :**

**Form XIX****Proforma of Pre Contract Integrity Pact****General**

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on \_\_\_\_\_ day of the month of \_\_\_\_\_ 20\_, between, on one hand, the Board of Trustees of Visakhapatnam Port Trust acting through Shri. \_\_\_\_\_, (Designation of the Officer), Visakhapatnam Port Trust (hereinafter called the 'BUYER/ EMPLOYER', which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s. \_\_\_\_\_ represented by Shri. \_\_\_\_\_, Chief Executive Officer (hereinafter called the "BIDDER/SELLER" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the 'BUYER/ EMPLOYER' has invited bids for the project of "**Supply, Customization, Implementation and Maintenance of an Integrated Port Operation System(POS) for Visakhapatnam Port Trust**") and the BIDDER/SELLER is submitting his bid for the project and

WHEREAS the BIDDER is a Private Limited company/Public Limited company/Government undertaking/registered partnership firm/ constituted in accordance with the relevant law in the matter and the 'BUYER/ EMPLOYER' is Visakhapatnam Port Trust.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the 'BUYER/ EMPLOYER' will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

**Commitments of the 'BUYER/ EMPLOYER'**

1.1 The 'BUYER/ EMPLOYER' undertakes that no official of the 'BUYER/ EMPLOYER', connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organisation or third party related to the contract in

exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

1.2 The 'BUYER/ EMPLOYER' will, during the pre-contract stage, treat all BIDDERS alike and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS

1.3 All the officials of the 'BUYER/ EMPLOYER' will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the 'BUYER/ EMPLOYER' with full and verifiable facts and the same is prima facie found to be correct by the 'BUYER/ EMPLOYER' necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the 'BUYER/ EMPLOYER' and such a person shall be debarred from further dealings related-to the contract process. In such a case while an enquiry is being conducted by the 'BUYER/ EMPLOYER' the proceedings under the contract would not be stalled.

### **Commitments of BIDDERS**

3. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-

- 3.1 The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the 'BUYER/ EMPLOYER' connected directly or indirectly with the bidding process, or to any person, organisation or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
- 3.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the 'BUYER/ EMPLOYER' or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the

Government.

- 3.3 \* BIDDERS shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
- 3.4 \* BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
- 3.5 \* The BIDDER further confirms and declares to the 'BUYER/ EMPLOYER' that the BIDDER has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the BUYER or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 3.6 The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the 'BUYER/ EMPLOYER' or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 3.7 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 3.8 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.9 The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the 'BUYER/ EMPLOYER' as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.11 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.12 If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of the 'BUYER/ EMPLOYER' or alternatively, if any relative of an officer of the 'BUYER/ EMPLOYER' has financial interest/stake in the bidder's firm, the same shall be disclosed by the BIDDER at the time of filing of

tender.

The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act 1956.

- 3.13 The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the 'BUYER/ EMPLOYER'.

#### **4. Previous Transgression**

- 4.1 The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify bidder's exclusion from the tender process.
- 4.2 The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

#### **5. Earnest Money (Security Deposit)**

- 5.1 While submitting commercial bid, the BIDDER shall deposit an amount \_\_\_\_\_(to be specified in Bid Document) as Earnest Money, with the 'BUYER/ EMPLOYER' through any of the following instruments:
- (i) Bank Draft or a Pay Order in favour of \_\_\_\_\_
  - (ii) Any other mode or through any other instrument (to be specified in the Bid Document).
- 5.2 The Earnest Money shall be valid upto a period of 180 days from the Bid Due Date.
- 5.3 In case of the successful BIDDER, a Performance Guarantee in the form of Bank Guarantee valid till 30 days after the end of defect liability period will also be furnished to the BUYER/ EMPLOYER 'within 21 days of Letter of Acceptance of the Bid by the 'BUYER/ EMPLOYER'.
- 5.4 In case of the successful BIDDER, a clause would also be incorporated in the Article pertaining to Performance Security in the Project Contract that the provisions of Sanctions for Violation shall be applicable for forfeiture of Performance Security in case of a decision by the BUYER/ EMPLOYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 5.5 No interest shall be payable by the 'BUYER/ EMPLOYER' to the BIDDER on

Earnest Money/Security Deposit for the period of its currency.

## 6. Sanctions for Violations

- 6.1 Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the 'BUYER/ EMPLOYER' to take all or any one of the following actions, wherever required:-
- (i) To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.
  - (ii) The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit/Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the 'BUYER/ EMPLOYER' and the 'BUYER/ EMPLOYER' shall not be required to assign any reason therefore.
  - (iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
  - (iv) To cancel all or any other Contracts with the BIDDER. The BIDDER shall, be liable to pay compensation for any loss or damage to the 'BUYER/ EMPLOYER' resulting from such cancellation/rescission and the 'BUYER/ EMPLOYER' shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
  - (v) To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which may be further extended at the discretion of the 'BUYER/ EMPLOYER'
  - (vi) To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.
  - (vii) Forfeiture of Performance Guarantee in case of a decision by the 'BUYER/ EMPLOYER' to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 6.2 The 'BUYER/ EMPLOYER' will be entitled to take all or any of the actions mentioned at para 6.1(i) to (vii) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 6.3 The decision of the 'BUYER/ EMPLOYER' to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and

conclusive on the BIDDER. However, the BIDDER can approach the Independent Monitor(s) appointed for the purposes of this Pact.

## 7. Fall Clause

- 7.1 The BIDDER undertakes that it has not performed/is not performing similar project at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found at any stage that similar project was performed by the BIDDER to any other Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the 'BUYER/ EMPLOYER', if the contract has already been concluded.

## 8. Independent Monitors

- 8.1 The 'BUYER/ EMPLOYER' has appointed the following Independent Monitors (hereinafter referred to as Monitors) for this Pact in consultation with the Central Vigilance Commission.
- <SPOC Name and Address details>**
- 8.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 8.3 The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 8.4 Both the parties accept that the Monitors have the right to access all the documents relating to the project/bidding, including minutes of meetings.
- 8.5 As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the BUYER/ EMPLOYER,
- 8.6 The BIDDER(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the BUYER/ EMPLOYER, including that provided by the BIDDER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Subcontractor(s) with confidentiality.
- 8.7 The BUYER/ EMPLOYER, will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.

- 8.8 The Monitor will submit a written report to the designated Authority of BUYER/ EMPLOYER within 8 to 10 weeks from the date of reference or intimation to him by the BUYER/ EMPLOYER/ BIDDER and, should the occasion arise, submit proposals for correcting problematic situations.

## 9. Facilitation of Investigation

In case of any allegation of violation of any provisions of this pact or payment of commission, the BUYER/ EMPLOYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

## 10. Law and Place of Jurisdiction

This Pact is subject to Indian Law.' The place of performance and jurisdiction is the seat of the BUYER/ EMPLOYER

## 11. Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

## 12. Validity

- 12.1 The validity of this Integrity Pact shall be from date of its signing and extend upto 5 years or the complete execution of the contract to the satisfaction of both the BUYER/ EMPLOYER and the BIDDER/SELLER, including warranty period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.
- 12.2 Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

13. The parties hereby sign this Integrity Pact at \_\_\_\_\_ on \_\_\_\_\_

BUYER/ EMPLOYER

BIDDER

Name of the Officer.

CHIEF EXECUTIVE OFFICER Designation

Deptt./MINISTRY/PSU

Witness

Witness

1. \_\_\_\_\_

1. \_\_\_\_\_



2. \_\_\_\_\_ 2. \_\_\_\_\_,

\* Provisions of these clauses would need to be amended/ deleted in line with the policy of the BUYER/ EMPLOYER in regard to involvement of Indian agents of foreign bidders.

## Annexure

Format for Declaration by the Bidder for not being Blacklisted /Debarred (To be submitted on the Letterhead of the responding company)

Date: dd/mm/yyyy To  
Financial Advisor and Chief Accounts Officer Visakhapatnam Port Trust  
Visakhapatnam

Subject: Declaration for not being debarred / black-listed by Central / any Government or PSU in India as on the date of submission of the bid Tender Reference No: VPT/IT/POS System/XX

Dear Sir,

I, authorized representative of \_\_\_\_\_, hereby solemnly confirm that the Company \_\_\_\_\_ is not debarred /blacklisted by any Government or PSU for any reason as on last date of submission of the Bid. In the event of any deviation from the factual information/ declaration or in event of being debarred/ blacklisted before award of contract, VPT, reserves the right to reject the Bid or terminate the Contract without any compensation to the Company and forfeiture of Earnest Money Deposit and/or Security Deposit.

Thanking you, Yours faithfully,

Signature of Authorized Signatory (with official seal) Date:

Name: Designation: Address: Telephone & Fax:

E-mail address:

**Form XX**  
**MEMORANDUM**

We hereby tender for the execution for Visakhapatnam Port Trust of the work specified in the underwritten memorandum within the time specified in such memorandum at the rates specified therein and in accordance in all respects with the specifications, designs, reports, messages and instructions in writing referred to in the Clauses of Conditions of the Contract and with such materials as are provided for and in all respects in accordance with such Conditions / Instructions to Tenderers.

General Description	:	Supply, Customisation, Implementation and Maintenance of an Integrated Port Operation System (POS)
Earnest Money	:	<Rs.XXXXXXXX>/-, <words XXXXXXXXX>. Period of
Support	:	For a period of 6 years (6 months
implementation+6 Months		Stability + 5.5 Years AMC).

Performance Security: BG for 10% of the Onetime charges  
 Including taxes and duties of tender for the project implementation and warranty. Separate BG for 10% of the accepted AMC Charges will be submitted before commencement of AMC

CONTRACTOR :

DATE :

ADDRESS :

**Form XXI**

**FORMAT OF POWER OF ATTORNEY** (in original)  
**(To be executed on non-judicial Stamp Paper of Rs.100/-)**

In favour of signatory/s to the Tender, duly authenticated by Notary Public.

POWER OF ATTORNEY IN FAVOUR OF----- (Name,  
 Designation, Company name)

TO ALL TO WHOM THESE PRESENTS shall come, I, (Name & address of the authorized person to sub-delegate/delegate powers, delegated on him by the Board of Directors) do hereby sub-delegate/delegate, in terms of the powers delegated to me by the Board of Directors, ----- (name of the Co.) to Shri -----  
 ---- (name, designation & address of the Attorney) the following:

NOW KNOW YE AND THOSE PRESENTS that I, (Name & address of the authorized person to sub-delegate/delegate powers, delegated on him by the Board of Directors), do hereby authorize and empower Shri ----- (name, designation & address of the Attorney) to do severally amongst others, for the purpose of carrying on our business, the following:

- a) To represent lawfully the (name of the Co.) for obtaining bid/tender documents, prepare, sign, execute and submit tenders for execution of **“Supply, Customisation, Implementation and Maintenance of an Integrated Port Operation System (POS)”**. or any other works incidental to such works
- b) To discuss the technical and financial matters, negotiate and accept prices and take decisions regarding terms and conditions and sign agreements and contracts and also to bind the (name of the Co.) to the arbitration clause included in the contract.
- c) For all or any of the purposes here of to sign and deliver or otherwise execute such deed or deeds, transfer or transfers, endorsement or endorsements and to perform such other acts, matters, things as the Attorney shall consider requisite or advisable as full and effectively as the Company could do, if present and acting there.

I, (Name & address of the authorized person to sub-delegate/delegate powers, delegated on him by the Board of Directors) in terms of the powers delegated to me by the Board of Directors of (name of the Co.), do hereby agree that all acts, deeds and things done by the said Attorney by virtue of this power of attorney, shall be construed as acts, deeds and things done by the Company.

I, (Name & address of the authorized person to sub-delegate/delegate powers, delegated on him by the Board of Directors), further undertake to ratify and confirm

whatever our said attorney shall do or cause to be done for the Company, the said Company, in the premises, by virtue of the powers hereby given.

WHEREAS, this sub-delegation is signed and delivered to Shri -----  
(name & designation of the Attorney), on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_  
(Two thousand \_\_\_\_\_).

WHEREAS, even though this sub-delegation is signed on this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_  
(Two thousand \_\_\_\_\_), will have effect from the date he signs and receives this delegation.

IN WITNESS WHEREOF, I, (Name & address of the authorized person to sub-delegate/delegate powers, delegated on him by the Board of Directors) has, this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_  
(Two thousand \_\_\_\_\_) set my hands and subscribed my signature unto this instrument.

SIGNED AND DELIVERED ON  
\_\_\_\_\_ BY (Name of authorized person to  
delegate powers)

WITNESS:

SIGNED AND RECEIVED ON  
\_\_\_\_\_ BY (Name & designation of Attorney)

**INTEGRATED PORT  
OPERATION SYSTEM**

**Annexure II**

(Refer Sec 2.3)

<b>LIST OF DOCUMENTS (To be uploaded by the Bidder)</b> <b>IRNP/IT/Proc/POS/2020-21 Date: 12-01-2021</b>		
<b>S I N O</b>	<b>Description of Documents</b>	<b>Remarks</b>
1	Cost of Tender Document Rs.1770/- in the form of online mode only. No cheques/DD's are allowed	
2	EMD for Rupees Rs.28,00000/-, in the form of online mode only. No cheques/DD's are allowed	
3	Letter of Application (Form – I)	
4	Tenderer's Particulars (Form –II)	
5	Form of Tender (Form – III)	
6	Memorandum (Form - XX)	
7	Proforma for undertaking (Illegal Method / influencing tender process) (Form XIII)	
8	Proforma for disclosure of payment (Form XIV)	
9	Proforma for undertaking (No changes made in the tender document) Form -XV)	
10	Tender document duly filled in except price schedule signed and stamped on all the pages.	
13	Copy of the certification of SEI CMMI Level 3 or above as on date	
14	Audited financial statements (Balance Sheet & Profit and Loss account) for the years, 2017-2018, 2018-2019 and 2019-20 shall be enclosed for verification. (Form – XVI)	
15	Power of Attorney in favour of person authorised to sign the tender document. (Form – XXI)	

16	1. Copy of GST Regn. Certificate. 2. Copy of TIN/PAN allotment letter 3. GST Details	
17	Project details (along with Form V-A & V-B): Documentary evidence such as copies of work orders / Purchase Orders / agreement copy and Client Certificate for the successful implementation or maintenance.	
18	Project team and task (Form – VI)	
19	Details of Key Personnel (Form – VII)	