

The proposed Stevedore Net should be equipped with the following features:

REQUIRED

- 1) ***Cargo Timesheet Management.*** To equip each tally clerk with a 3G mobile device that will allow each checker to update loading/discharge status information for each vessel. Stevedore HQ clerks should be able to abstract real-time consolidated timesheet/status reports for submission to Jurong Port and agents via the web, e-mail or EDI depending on the receiving party's capability or requirement.
- 2) ***Cargo Tally Management.*** Using the same mobile device, the checker should be able to check load/discharge information by Bill of Lading (BL)/vessel, capture tally counts for each hatch, alert and report discrepancies, and relay the information in real time to the checker. The checker or HQ clerks should be able to abstract real-time BL/vessel tally status and generate tally reports for submission to Jurong Port and Agents via the web, e-mail or EDI depending on the receiving party's capability or requirement.
- 3) ***Resource Planning & Optimization.*** The system should provide a dashboard displaying vessel arrival schedules together with status and tally of each in real time. Stevedoring companies should be able to plan their worker deployment and port resource requirements via this dashboard.
- 4) ***Integration with JP-Online.*** The system should be integrated with JP-Online to obtain vessel schedules, Bill of Lading information and submission of the a/m reports. On the reverse, cargo tally data and cargo timesheet should also be submitted to Jurong Port via the integration.
- 5) ***Integration with TradeXchange.*** All proposed solutions should consider hosting with a cost-effective shared national platform like TradeXchange¹ to create synergies with other trade-related value added services. Alternative solutions can be proposed, and a comparison must be made ***between the proposed solution*** and one that uses TradeXchange.
- 6) ***Open standards.*** Vendors to propose use of open standards and interfaces for Bill of Lading, e.g., UN/CEFACT and web services respectively, to allow StevedoreNet to integrate with more parties beyond Jurong Port
- 7) ***Access Control.*** There should be company level and user level access control built-in to ensure data privacy between stevedoring companies as well as staffs within the company.
- 8) ***Sharing of Devices.*** Multiple stevedoring companies may share a pool of mobile devices. The mobile application should allow identification of stevedoring companies and provide the

¹TradeXchange® is a neutral and secure trade platform that facilitates the exchange of information within the trade and logistics community. Launched in October 2007, TradeXchange® provides seamless inter-connectivity among commercial and regulatory systems for the Singapore trade and logistics community. More information is available in "<http://www/tradeXchange.gov.sg>"

necessary access control and data confidentiality. However, it should be noted that the users of the devices are hired on a per vessel load basis and they may be working for different stevedoring companies at different times.

- 9) **Convenience & Ease of Use.** The user interface for the mobile device must be very simple to use as the workers may not be IT trained, may be wearing gloves, and may have to physically load/discharge while tallying.

OPTIONAL

- 10) **Booking of Port Resources.** The system should allow the Stevedoring companies customers to book resources such as cargo gears , forklifts , trucks, low beds for use in conjunction with the stevedoring operations or for delivery or receipt of cargoes at the Port
- 11) **Billing & Proof-of-Delivery.** The system may provide POD confirmation and allow the stevedoring companies to generate invoices based on work done.
- 12) **Other Productivity and Business Management Tools.** Vendors may propose other productivity & business tools such as integrated accounting or ERP solutions on a modular pricing basis.

Companies may also propose alternative solutions that may address the needs of the Stevedoring industry. Please indicate the assumptions used for computation of project costs.

Project Timeline

The project may be implemented in a phased approach with the following delivery timeline:

Phase	Deliverables	Deadline
1	1) Full or partial delivery of at least 10 sets of 3G mobile devices	31 March 2010
2	1) Delivery of balance 3G mobile devices if only partial delivery in Phase 1 2) Delivery of Cargo Timesheet Management module (items 1, 6-9)	30 June 2010
3	1) Delivery of all other required modules (items 2 – 5)	31 August 2010
4	1) Delivery of optional modules	31 December 2010

The Stevedore Net is an initiative under IDA and MPA's Infocomm@Seaport and Infocomm@SME Program, and in partnership with Singapore IT Federation.