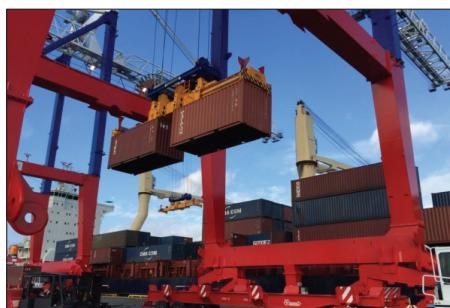


Bronka is a new, modern, deepwater port, which is expected to become one of the key hubs in the Baltic region and 'The Big Port' of Saint Petersburg, Russia...

The new Port Bronka has an annual throughput capacity of around 1.45 million TEUs and 260,000 Ro-Ro cargo units. At a later stage, annual capacity at Bronka will be expanded up to 1.9 million TEUs. The port can accommodate Post-Panamax container vessels and Finnstar class ferries and is operated and owned by Fenix LLC. It has three specialised handling areas - a container terminal (with an area of 107 hectares), a Ro-Ro terminal and a logistics centre. The container terminal is equipped with four Post-Panamax container cranes, a Liebherr LHM-800 mobile harbour crane, 10 Rubber Tyre Gantry Cranes (RTGs), terminal tractors, reachstackers and forklifts.

TOS choice

The green-field container terminal was a challenge on its own and it was built from scratch. "The first negotiations with Bronka Port representatives started 5 years ago," said Dan Pershin, Head of Marketing at Russia-based Solvo. "Consultations were held in regards to IT-infrastructure of the future port where the system would be implemented. It should be noted that the consultation and expert support for Port Bronka was provided by the German company Hamburg Port Consulting GmbH (HPC), which has its own TOS solution in its arsenal." The tender process resulted in Fenix choosing the Terminal Operating System (TOS) offered by Solvo as a fully-fledged solution that was better suited for the Russian stevedoring business. Solvo has an extensive experience in developing and implementing similar solutions



at major container terminals in Russia. Apart from software deployment Solvo was also selected as general contractor for related hardware and infrastructural works. Solvo conducted wireless networks deployment including audit and preparations as well as the development of a gateway between TOS and third party hardware and software. The first containers were received with the assistance of Solvo.TOS by configuring the system to take into account the specifics of Bronka's yard, vessel, rail and road transport. The TOS also included other modules like the Solvo.WEB portal with an expanded

functionality for cargo forwarders and shipping line agents. A terminal equipment management module was also implemented for management and optimisation of operations with cargo-handling equipment, berth and RTG cranes, terminal tractors etc. Optimisation of the operations related to storage and release of cargo, as well as automatic tracking of empty containers, including unnumbered containers, is covered by the Empty Container Depot module. While integration with certified customs information was carried out to provide information about import containers. A reefer container storage zone management module and a parking area management module was also added. The latter was integrated between the Solvo.TOS and in-house ERP system. This made it possible to track the truck in-gate and out-gate movements. Moreover, Solvo developed a custom solution based on customer request for a special self-service kiosk to assist truck drivers at the port entry point. The Solvo.TOS was also integrated with the on-board Konecranes system that controls the RTGs to automate processes related to container positioning and precision placement in the stacking yard.

Digital network infrastructure

Solvo also concluded an agreement to create IT-infrastructure at the terminal that included structured cabling systems, Wi-Fi network etc. They delivered network equipment from Huawei Enterprise to build the wireless system: wireless controllers, access points, antennas, eSight Enterprise Operation System, Agile Controller access point servers and Business Integrated Equipment Configuration. Solvo also supplied, configured and installed radio-data terminals for real-time management such as Thor VM1 and VM3 as well as Marathon hand-holds from Honeywell.

Results

Bronka is well-positioned to become the biggest customer of Solvo by cargo volume once it reaches full capacity. The terminal is expected to process up to 1.9 million TEUs in the near future and with the help of Solvo.TOS Bronka is confident to handle the volumes without having to do tweaks or customisations to the system which ensures streamlined operations without any downtime. As a systems integrator this project was a milestone for Solvo, not only with regards to the solutions and services it provides, but also the implementation had to be carried out in parallel with Port Bronka (multi-purpose sea cargo complex Bronka) launch into commercial operations from scratch. WPB