Case Studies

SP-PSA International Port Co, Ltd. (supplied by Vien Thong Radio Co., Ltd.)

Singapore-based PSA International is the second largest port operator in the world with 28 ports in 16 countries. And one of its latest additions, SP-PSA International Port (SP-PSA) in Vietnam, boasts the first NEXEDGE® system in Asia.

● Expansion

Located in Vung Tau Province, south of Ho Chi Minh City, SP-PSA is ideally positioned to serve the fast-growing container traffic in the region. Road and inland waterway networks provide strong links to the industrial heartland of southern Vietnam, so future expansion of the port is certain. A two-phase development plan will result in 4 container berths, a total quay length of 1200 meters, and 12 quay cranes. When completed, the terminal will have a projected annual capacity of 2.2 million TEUs*. With staff working all over this large facility, and stacks of containers causing problems for signal propagation, the company was looking for a radio system that not only offers reliable performance today but which can also accommodate future expansion without requiring investment in new licenses.

* Container capacity is expressed in "twenty-foot equivalent units" or TEU.

● Demonstration

Naturally this project attracted strong competition, a challenge that was met by the local Kenwood dealer Vien Thong, fully supported by Kenwood Electronics Singapore (KES). A meeting was organized in Singapore to demonstrate the advantages of NXDN® and Kenwood’s FDMA-based digital trunked system. PSA was clearly impressed. Convincing that a NEXEDGE® system would satisfy their requirements — and with Kenwood offering to design, build and commission the system within a very short timeframe — the final decision was made to purchase NEXEDGE® for the SP-PSA International Port.

● Installation

The SP-PSA system includes 4 antennas; rack-mounted repeaters, duplexers, power supply, backup batteries, and a VPN router; and a total of 111 radios, both handheld and vehicle-mounted. It is currently configured for 15 talk groups (15 GIDs and 120 UIDs) using 12.5 kHz channel spacing; a future upgrade to 6.25 kHz could double the number of available channels. Once installed, a coverage test was performed with NX-300 units and the results were more than satisfactory: the radios were able to communicate directly at distances of up to 3 km, and up to 5 km with 5 W trunking. In all it has been a very successful debut for NEXEDGE® in the Asian market.

Trunking communications (for broadcast calls)
Radio-to-radio communications (for individual calls)

Network monitoring equipment