



# MOTOTRBO™ MAXIMISES RADIO CAPACITY FOR EFFICIENT SEAPORT OPERATIONS IN VIETNAM

TAN CANG - CAI MEP INTERNATIONAL TERMINAL IN VIETNAM DEPLOYS MOTOTRBO CAPACITY PLUS SYSTEM



Maritime trade and shipping play critical roles in a thriving global economy. The ability to move massive traffic of sea cargo quickly, efficiently and accurately is fundamental to any seaport's success.

Motorola's digital two-way radio system – MOTOTRBO™ are in place in ports around the world. Its innovative technology provides expanded capacity and coverage, delivering clear radio communications in extremely demanding environments. Vietnam's seaport operator, Tan Cang – Cai Mep International Terminal Co. Ltd. (TCIT) understood that effective radio communications is critical for its terminal's efficiency and productivity. It was why they chose MOTOTRBO™ Capacity Plus system as the backbone of its radio communications.

## CUSTOMER PROFILE

### Users

- Terminal Operators, Container Truck Drivers, Seaport Managers, Security Crew
- Ba Ria - Vung Tau Province, Vietnam

### Industry

- Transportation & Logistics

### Key Benefits

- Capacity Plus For Expanded Channel Capacity
- Trunking Feature With All Call, Group Call, Private Call
- Superb Clarity
- Expanded Coverage
- Longer Talk Time

## CASE STUDY

### TAN CANG - CAI MEP INTERNATIONAL TERMINAL



#### SITUATION: NEW SEAPORT REQUIRES HIGH STANDARDS FOR RADIO COMMUNICATIONS

Tan Cang – Cai Mep International Terminal Co. Ltd. (TCIT) is a joint-venture company of Saigon Newport Corporation with three shipping lines, including Mitsui O. S. K. Lines (Japan), Hanjin Shipping (Korea), and Wanhai Shipping (Taiwan).

With the advantage of its location, the seaport is well-suited for trans-shipment movements to and from Ho Chi Minh City and provinces of Dong Nai, Binh Duong and Long An. Covering a total area of 40 hectares, the seaport easily handles big-sized vessels up to 110,000 tonnages. Terminal facilities include two berths of 590 metres, container yard of 34 hectares, six STS cranes, 20 eRTG cranes, 50 tractors and two reach stackers. The seaport also boasts of cutting edge IT facilities such as TOS system for Terminal Operation and Management.

#### GREATER CAPACITY, COVERAGE AND CLARITY

Operational since January 2011, TCIT aims to provide international standard of terminal operations in Vietnam. To coordinate the large number of terminal workers and trucking traffic moving about in the seaport, the port management knows that a reliable and robust radio infrastructure is crucial to its communications. To overcome challenges of busy channels, varied call needs and noisy seaport environment, their new radio system must provide greater capacity, coverage and clarity.

#### SOLUTION: MOTOTRBO CAPACITY PLUS PROVIDES SINGLE-SITE DIGITAL TRUNKING

MOTOTRBO is Motorola's digital two-way radio communication system that delivers more: twice the calling capacity of analog systems, integrated data communications, enhanced voice communications and longer battery life. With Capacity Plus, users can further expand MOTOTRBO's capacity. This feature provides scalable, single-site trunking solution that enables over a thousand MOTOTRBO radio users to share both voice and data communication on the same system.

#### EFFICIENT AND COST-EFFECTIVE WAY TO EXPAND RADIO COMMUNICATIONS

When TCIT was evaluating the various radio brands in the market, they found that MOTOTRBO with the Capacity Plus feature could offer efficient and cost-effective way to expand radio communications. "Motorola's reputation as a leading radio manufacturer stood out for strong brand name and good quality equipment," explained by Mr. Le Quang Khanh, project manager of SNP, member of TCIT group.

With the help of Motorola's distributor - Vienthong Radio Company, TCIT successfully installed MOTOTRBO Capacity Plus digital radio system, providing eight channels on four pairs of radio frequencies. Normally, it would require eight pairs of frequencies to have eight channels. The seaport has 21 talk groups in its fleet, and they could easily communicate and coordinate with everyone on all the eight channels. Using the all call feature, the operator could also reach out to the entire fleet in an instant.

The entire deployment took two weeks which comprised four units of R8200 MOTOTRBO Repeater, 27 units of P8268 MOTOTRBO Portable, 57 units of M8260 MOTOTRBO Mobile and radio accessories including Motorola duplexer and antenna. After two days of user training, the terminal operators were calling on their MOTOTRBO portables as they move about in the berth, while truck drivers stay connected with the MOTOTRBO mobiles installed in their vehicles.



## CASE STUDY

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#### MORE DIGITAL BENEFITS

MOTOTRBO Capacity Plus enables users to link up to 12 voice paths and 24 additional dedicated data paths that can accommodate as many as 1,200 users. The digital benefits also include:

- Utilizes Time Division Multiple Access (TDMA) technology to deliver twice the calling capacity of analog radios
- Offers 40% longer battery life than analog radios
- Provides clear voice communication by rejecting static and noise
- Incurs lower infrastructure cost as MOTOTRBO does not require a second repeater for the second call
- Supports data applications such as text messaging, GPS-enabled applications and more

"Our terminal's radio communications greatly benefit from MOTOTRBO Capacity Plus' trunking feature. We enjoy the flexibility of all call, group call and private call capability," explained Mr. Ngo Thanh Tung, TCIT - IT team leader, "clearer voice, longer battery talk time and clear channels delivered by an expanded capacity have definitely added to the PLUS points."

For Mr Ngo and his large base of new MOTOTRBO users, MOTOTRBO Capacity Plus delivered the promise of maximizing radio capacity and performance.

For more information on how MOTOTRBO™ Digital Radio can deliver reliable and clear communications, please visit us on the web at [www.motorolasolutions.com/ap/mototrbo](http://www.motorolasolutions.com/ap/mototrbo)

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