



ASIAGROUP LEASING TURNS TO MOTOTRBO™ FOR SPECTRUM EFFICIENCY AND COST SAVINGS

MOTOTRBO™ DIGITAL TWO-WAY RADIO SOLUTION PROVIDES TWO VOICE CHANNELS IN A SINGLE FREQUENCY



ASIAGROUP LEASING PTE LTD

A diversified equipment and project services company, AsiaGroup Leasing Pte Ltd provides innovative solutions and quality equipment for heavy lifting, heavy transportation, and other customer needs. As their projects increase and fleet expand, the limited communication support becomes a rising concern for the Safety & Operation supervisors. Responsible for managing their fleet of equipment and coordinating with their operator crew, the supervisors require two-way radio solution to ensure timely communications and worksite safety.

THE CHALLENGE

MAKING THE MOVE TO DIGITAL RADIO COMMUNICATIONS

To equip the supervisors, the company was planning to purchase twenty units of radio that need eight frequencies to cater for their different user groups. However, the governing statutory board - Infocomm Development Authority of Singapore (IDA) imposes a strict regulation on spectrum licensing, requiring applicants to have a minimum of five radios for every frequency they apply.

To comply with the regulation, AsiaGroup need to purchase a minimum of forty radios to be eligible for their application of the eight frequencies. It would be costly for the company to invest in analog radios and the multiple low-power frequencies.

CUSTOMER PROFILE

Company

- AsiaGroup Leasing Pte Ltd



Industry

- Construction

Key Results

- Reduces overall equipment costs while supporting more users
- Increased performance, reliability and functionality of radio communications
- Maximise infrastructure investment since one digital repeater can do the work of two based on TDMA technology, giving the flexibility to tailor voice and data solutions to user requirements

THE SOLUTION

MEETING USER NEEDS WITH EFFICIENT SPECTRUM UTILISATION

For two-way radio users, the most important benefit of digital radio is to make more efficient use of licensed channels. MOTOTRBO™ became the answer to help AsiaGroup overcome the spectrum challenges by providing enhanced performance, greater productivity and safety, and cost effectiveness.

This digital two-way radio from Motorola Solutions encapsulated the ‘3S’ benefits – **Simultaneous voice channels, Savings on radio equipment and licensing fees, and Safety for the workers at the work sites.** MOTOTRBO™ digital radios provide these benefits by leveraging the Time-Division-Multiple-Access (TDMA) technology to double the capacity of the licensed spectrum, enabling more radio users to communicate over their existing channels. It meant that two groups of digital radio users can simultaneously communicate over one frequency, unlike the analog radios, the same number of users would require two frequencies for simultaneous communication.

INDUSTRY-LEADING AUDIO

HIGH-POWERED PERFORMANCE

MIGRATE AT YOUR OWN PACE

ALL ROUNDER DURABILITY

MORE FEATURES

INTELLIGENT AUDIO WITH AUTOMATIC VOLUME ADJUSTMENT AGAINST NOISE

WIDE AREA COVERAGE

IMPORTANT: Radio features and specifications vary by radio model, please contact Motorola representative for clarifications

SUPERIOR, COST EFFECTIVE ALTERNATIVE TO ANALOG RADIOS

By opting for MOTOTRBO™ digital radios, AsiaGroup only need to apply and pay for four instead of eight channel frequencies from IDA. The total cost savings over the project period of three years would be substantial as illustrated in the cost comparison chart.

COST COMPARISON CHART

AsiaGroup’s cost savings are calculated based on the project period of three years and user requirement of twenty radios and eight frequencies to cater for crane operations at their work sites.

	MOTOROLA ANALOG RADIO	MOTOTRBO™ DIGITAL RADIO					
IDA Frequency Fees	\$300 x 8 frequencies	\$300 x 4 frequencies					
IDA Network Fees	\$100	\$100					
TOTAL IDA LICENSE FEES PER YEAR	\$2,500	\$1,300					
Radio Purchase Cost Per Year	\$365 x 40 units	\$498 x 20 units					
TOTAL EQUIPMENT COST	\$14,600	\$9,960					
Cost Savings on Equipment	\$14,600 - \$9,960 = \$4,640						
Cost Savings on Annual IDA License Fees	\$2,500 - \$1,300 = \$1,200						
TOTAL COST SAVINGS FOR 3 YEARS	Cost Savings on Equipment	Cost Savings on IDA License Fees (Year 1)	Cost Savings on IDA License Fees (Year 2)	Cost Savings on IDA License Fees (Year 3)			
	\$4,640	+	\$1,200	+	\$1,200	+	\$1,200
	= \$8,240						



INDUSTRY SHORTAGE OF CRANE OPERATORS IN SINGAPORE

Since the early months of 2013, the construction sector has seen a severe shortage of crane operators with the rapid increase of construction projects. National Development Minister Khaw Boon Wan noted that such workers are needed to help the construction sector raise its productivity. He said that crane operators are crucial for prefabrication construction, a productivity-boosting strategy where building components are made in factories and transported to construction sites. They are hoisted by cranes for assembly at the actual work site.

DIGITAL RADIO ADOPTION TO RESOLVE SPECTRUM LIMITATION

As the construction sector recruits more crane operators, more radios would be required to maintain the crucial communications between the supervisors on the ground and the operators working high up in the crane cabins. Increasing license applications to cater for increasing radio users would result in frequency overcrowding and drastically increase equipment costs and licensing fees.

LOWER LICENSING AND EQUIPMENT COSTS

By switching to digital radios, companies like AsiaGroup can get increased capacity and flexibility to support more users. A single channel can now support multiple two-way voice conversations, providing twice the calling capacity for the price of one license. And because there is still only one 'real' channel, a second call does not require a second repeater, thus saving on any supporting infrastructure and costs.

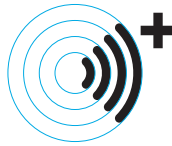
MOTOTRBO™ DIGITAL FEATURES AND BENEFITS

A industry-leading market leader, MOTOTRBO™ is fast transforming how companies collaborate by remastering digital two-way radio communications and changing what users expect from a radio. With integrated voice and data, MOTOTRBO™ helps increase productivity and enhanced safety, all in a single device.

The Intelligent Audio feature automatically adjusts the radio volume against the background noise caused by heavy machinery and construction works, enabling site crew to hear clearly above the clamour.

INDUSTRIAL-LEADING AUDIO (INTELLIGENT AUDIO)

- Automatically adjust volume to compensate for background noise
- Digital quality throughout your coverage area
- Hear and speak clearly, wherever you work
- Support IMPRE™ audio accessories to enhance noise suppression



HEAR BETTER IN ALMOST ANY ENVIRONMENT
AUTO VOLUME ADJUSTMENT

INTELLIGENT AUDIO

MIGRATE AT YOUR OWN PACE

- Operate in analog and digital mode
- Automatic switching between analog and digital calls

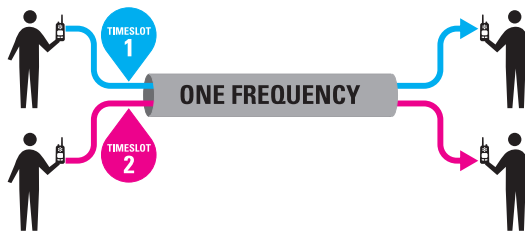
DAY-IN, DAY-OUT DURABILITY

- IP54/55 water protection
- MIL 810 C, D, E, F and G
- 2-years Standard Warranty
- 1-year warranty for accessories



HIGH-POWERED PERFORMANCE

- Enable 2 simultaneous talk groups communication over the same frequency



- Clearer voice communication
- Operate up to 40 percent longer between recharges compared to analog
- Voice announcement provides audible confirmation



VOICE ANNOUNCEMENT

SWITCHING CHANNELS AND ZONES VIA HEARING
WITHOUT HAVING TO LOOK AT THE DISPLAY

"But we need more crane operators, a few hundreds more, as we ramp up our Build-to-Order programme," said Mr Khaw.

(Source: More Singaporean crane operators needed: Khaw, 5 February 2013, news.xin.msn.com)

“The bottom line is that MOTOTRBO™ digital radio supports more simultaneous users, enabling my construction crew to communicate more effectively and helping our organisation to save more costs as our fleet expands,” said Jasmin Poh, Operations Division Head, AsiaGroup Leasing, “this is a competitive advantage for our business in the long term.”

For more information on how MOTOTRBO™ portfolio of digital two-way portable and mobile radios can improve your operations, please visit us at www.motorolasolutions.com/mototrbo.

For information or enquiries, contact: