

“Down on the docks time is money; Zeon Digital is a vital cog at DP World.”

Interview with DP World's facilities and projects manager, Trevor Clarke



DP World use Zeon Digital radios across their docks at Coode Island, Melbourne.

Two-way radio keeps the port operating 24 hours a day.

It's difficult to imagine a company like stevedoring giant, DP World, operating on the docks at Coode Island without a sophisticated radio system such as Motorola's Zeon Digital network.

This network is the key to their voice communications keeping the port's computer controlled nerve centre connected to innumerable drivers of massive 'straddles' (reminiscent of Star Wars creatures), giant key cranes, trucks and utilities dotted around the vast docks.

Trevor Clarke, facilities and projects manager of DP World, Melbourne said "Given that there will be enormous changes in the world of shipping cargo in the next ten years the Zeon Digital network was a clear choice for us when we researched two-way radio solutions."

"We wanted the latest technology that was capable of adapting to our developing requirements. We were looking for a future-proof technology that didn't involve enormous capital investment or sustaining the on-going maintenance costs of owning a sophisticated communications system"

Headquartered in Dubai, - the 'DP' stands for Dubai Ports - and although not well known in Australia, DP World is the fourth largest stevedoring company in the world, operating in 42 terminals and employing more than 30,000 people internationally. In Australia, DP World bought out P&O Ports in 2006 and their massive key cranes and straddles have been dominating Coode Island ever since.

"The logistics involved in loading and unloading containers is enormous," explains Trevor. "All components must be perfectly synchronised to ensure maximum productivity. Zeon Digital has provided vast improvements in communications, receivables and dispatch are easier to manage plus we know it is reliable."

DP World's communications set-up revolves largely around its eight key cranes, each with its own talk group that links the crane driver to his foreman and up to four straddle operators. Equipment controllers, based in the communications control room - the nerve centre of the dock - monitor each of the talk groups to facilitate working processes and manage the inevitable enquiries the cranes and straddles generate.

Why two-way radio?

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Why Zeon Digital?

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With up to 22 groups communicating simultaneously, confusion can quickly disrupt work flows if interaction within and between teams is not managed. Zeon Digital’s virtual private network for each key crane easily eliminates this from being a potential problem.

“Dividing the teams into talk groups focuses each team’s radio traffic to one point of contact so that communications are controlled rather than a competing babble of sound,” says Trevor.

“The members can talk freely within the group but as soon as there is an issue such as a container needing to be turned to face the right direction for pick-up by a straddle, then the equipment controller is able to communicate instructions clearly.”

The busy port environment also makes occupational health and safety critically important. Zeon Digital’s dedicated duress button, colloquially known by the DP team as the heart attack alarm, is a massive upgrade from their previous alarm system. It provides a secure means of raising an alarm in case of any crisis for all members of the team.

With communications tied to keeping so many parts of the port running, DP World’s final requirement when assessing two-way radio solutions was system.

“We couldn’t operate without the network being on 24 hours a day,” Trevor says.

“Everyone involved in the docks operates on Just in Time principles, so redundancy was one of our biggest issues. We have to turn around containers in just four days so there is no margin for stoppages.”

The fully redundant design of the Zeon Digital network seamlessly and automatically transfers radios from one site to another, should there be a need to take one down. DP World users do not even notice their transition. This is very compelling.

Trevor’s confidence in Zeon Digital is based on knowing that as Motorola advances its technology, DP World will be a beneficiary without having to invest enormous sums to keep up with technological change.

“Digital has huge scope,” says Trevor “So when we want to introduce enhancements, Motorola’s Zeon Digital network has the fundamentals in place that allows us to do so.”