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# Orion Networks



## Orion Networks Enables DMR/LTE Vehicle Area Network for Transit Operators with Sierra Wireless

With the AirLink® MP70, Orion Networks is now able to provide transit customers with fleet telematics and “best available” connectivity over LTE, Wi-Fi and digital mobile radio.

### QUICKFACTS

#### Company

Orion Networks  
(<https://orionet.com.au/>)

#### Customer Profile

Orion Networks, established in 2010, is the largest commercial IP connected two-way radio network in Australia, operating Motorola DMR (digital mobile radio) around Australia in critical business environments such as airports, ports, stadiums, major events, local government and transport sectors.

#### Objectives

- Leverage other carrier networks to provide increased data bandwidth and new services to customers
- Provide customers with a “vehicle area network” to connect a variety of systems

#### Results

AirLink MP70 enables Orion Networks to offer customers increased data bandwidth across LTE DMR and Wi-Fi and provides a platform for connecting many onboard systems via a vehicle area network.

#### Sierra Wireless Products and Services

- AirLink® MP70



“With a single communications platform, our customers can access the best available network, and with GNSS and telemetry data, we can offer a whole new suite of services to our transit customers.”

**Mark McKenzie,**  
Head of Business Operation, Transdev Qld



## CHALLENGE

The Orion radio network has a huge footprint across Australia, particularly in cities, which makes it ideal for mission critical voice services. However, Orion's customers had provided feedback that they wanted more data bandwidth. Orion Networks wanted to leverage additional carrier networks to extend their coverage and provide new services to their customers. The challenge was determining how to combine the bandwidth of DMR (digital mobile radio) with other networks to give customers a one-stop solution for voice and data services.

One group of Orion's customers was specifically looking for increased bandwidth - transit agencies are outfitting their vehicles with multiple systems, including fare payment, route and schedule management, passenger counting and video. Communications needed for all these systems is complex and costly if each system is connected independently. Even more complicated, many of these systems send data to cloud services that aren't accessible to bus operators.

Orion wanted to find a communications solution that would provide a "vehicle area network" to support all the required connectivity, and enable the collection of vehicle telematics data for fleet customers. The solution would need to be flexible enough to enable applications to operate on the "best available" network, whether it be LTE, DMR or Wi-Fi.

One of Orion Networks long time customers - Transdev - wanted to offer its customers "control room integration" - central oversight and management of their networks. Orion Networks worked with Sierra experts to help meet Transdev's needs.

## SOLUTION

Sierra Wireless was the catalyst for Orion's offering. "We heard from our sales representative that Sierra was working to provide open APIs to its routers, and we were interested in working with them to see how we could take telematics information and provide it to our customers. Sierra already has a strategic relationship with Motorola and the MP70 supports this capability" explained Glen Norris, National Business Development Manager for Orion Networks. "We realized that we could leverage the AirLink® MP70 router to provide other sources of data outside of our primary radio focus."



“ Analytics and data that was difficult to gather and, in many cases unobtainable, is now available instantly and in real-time. ”

**Marc Cleave,**  
Head of Engineering,  
Transdev Australasia

The AirLink MP70 router can connect various systems and will select the best network for data communications, based on signal strength. The router is Telstra LANES-certified and accommodates dual SIMs. It enables customers to use a multi-network approach to source and collect different types of data. Customers can connect all the systems, collect data from multiple application layers including the telematics data from the vehicle bus, and present that data to their customers in a dashboard.

## RESULTS

By working with Sierra Wireless to leverage their products and relationship with Motorola, Orion been able to extend its offerings. Using a single platform, Orion can provide customers with access to DMR, 3G/4G cellular and Wi-Fi networks.

“Our customers are asking for more data and more information, and with this solution we can satisfy those requirements,” explained Mr. Norris. “The control room operation we’ve enabled for Transdev manages over 500 buses at a time through their system, with fewer resources than before. Transdev has access to the data, has designed a central data repository, and can push data to existing platforms through open API’s.

“We have deployed the Orion Networks solution across our transit fleets to provide complete control room operations. Fleet operations can now manage the network remotely, and monitor fleet performance proactively,” said Mark McKenzie, Head of Business Operation at Transdev Qld. “With a single communications platform, our customers can access the best available network, and with GNSS and telemetry data, we can offer a whole new suite of services to our transit customers.”

“The depth and quality of data that we can now easily access through our bespoke systems provides us with a much clearer picture of our true performance of our buses. Analytics and data that was difficult to gather and, in many cases unobtainable, is now available instantly and in real-time,” explained Marc Cleave, Head of Engineering, Transdev Australasia. “The overall benefit for fleet management is that we can pull data at the micro-level, on individual components, which can be contrasted with our performance at a fleet level. This means issues, route performance, and enhancements can now be quickly identified, and we can see in real-time the effect that changes have had on our bus fleet.”

### About Sierra Wireless

Sierra Wireless (NASDAQ: SWIR) (TSX: SW) is the leading IoT solutions provider that combines devices, network and software to unlock value in the connected economy. Companies globally are adopting IoT to improve operational efficiency, create better customer experiences, improve their business models and create new revenue streams. Whether it’s a solution to help a business securely connect edge devices to the cloud, or a software/API solution to help manage processes associated with billions of connected assets, or a platform to extract real-time data to make the best business decisions, Sierra Wireless will work with you to create the right industry-specific solution for your next IoT endeavor. Sierra Wireless has more than 1,300 employees globally and operates R&D centers in North America, Europe and Asia.

For more information, visit [www.sierrawireless.com](http://www.sierrawireless.com).

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