

FAST-TRACKING 5G ADVANCED DEPLOYMENT FOR A LEADING AUSTRALIAN OPERATOR



Business Challenge

The operator needed to deploy a first-of-its-kind 5G Advanced radio solution in an extremely compressed timeframe, while adapting to evolving trial requirements and maintaining readiness for live network conditions.

Key challenges included:

- Executing a complex Ericsson AIR 3284 trial across operational network clusters
- Meeting tight deadlines while supporting dynamic changes in trial scope
- Delivering site engineering designs compatible with Massive MIMO deployment
- Ensuring structural readiness, power integration, and construction precision
- Bringing clusters live ahead of schedule across multiple Australian states

Additionally, the operator aimed to validate how triple-band FDD Massive MIMO could enhance coverage, boost capacity, and deliver a more consistent user experience across both urban and suburban environments without requiring additional spectrum.

Overview

A leading Australian telecom operator is advancing its next-generation wireless strategy through the rollout of 5G Advanced technologies. To accelerate this journey, the operator initiated a live network trial of the Ericsson AIR 3284, the world's first radio integrating Massive MIMO across three FDD bands, **unlocking greater spectrum efficiency and stronger multi-band performance from existing FDD assets.**

We partnered with the operator to deliver engineering, construction, and programme execution expertise, enabling trial clusters to go live rapidly while maintaining high quality deployment standards across multiple regions **while laying the foundation for future 5G Advanced use cases and improved customer experience.**

How We Embraced Intelligence

We delivered an integrated engineering and delivery approach combining design precision, construction execution, and programme governance.

Radio and site engineering design

Developed detailed equipment layouts, power systems, and cable schematics to support AIR 3284 deployment.

Flexible trial collaboration

Collaborated seamlessly with internal teams to adapt quickly to evolving trial needs while maintaining delivery momentum.

Structural and mounting expertise

Performed expert structural analysis and designed customised mounting solutions to enable safe and optimised Massive MIMO integration.

Multi-band radio deployment readiness

Enabled seamless integration of triple-band FDD Massive MIMO radios, ensuring optimal utilization of low, mid, and high-band spectrum layers within existing network infrastructure.

Construction execution and programme delivery

Delivered precision construction execution and programme management to accelerate rollout timelines across trial clusters.

Performance-driven deployment optimisation

Ensured each site was engineered to fully leverage advanced beamforming capabilities, enabling improved signal quality, reduced interference, and enhanced user throughput.

The Results

Our execution enabled the operator to bring a first-of-its-kind 5G Advanced trial into live operation within weeks and ahead of schedule. Key outcomes included:

01
Rapid activation of trial clusters across Queensland and Victoria

02
Capacity gains of up to 2x downlink and 3x uplink performance

03
Improved coverage and stronger cell edge performance through advanced beamforming

04
More consistent user experience with higher speeds and better reliability in high demand areas

05
Greater spectrum efficiency through simultaneous use of multiple FDD bands

06
Lower site complexity, reduced energy usage, and a more streamlined footprint.



Designing Tomorrow Together

We enabled the world's first 5G triple-band FDD Massive MIMO radio to go live in weeks despite moving targets, delivering a step-change in coverage, capacity, and performance that will serve as a cornerstone of the customer's four-year network transformation.

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