VIAVI Solutions

Introducing VIAVI Railway & MCx – For Proactive Critical Communication Operators

Max Becutti and Pascal Bertrand, are responsible for Railway and MCx Service Assurance Product Line Management at VIAVI Solutions.

In this article, they explain how we are enabling customers to test, measure and monitor telecom networks and mission critical systems performance with confidence.

The acquisition by VIAVI Solutions in May 2022, brought together the market-leading solutions from both Comtest Wireless and the previously acquired Expandium (in August 2020).

Combining both companies into a single portfolio has created the industry's largest supplier of railway telecoms and signalling test, measurement and monitoring solutions.

This provides valuable benefits to customers, enabling them to gain even greater value from the individual solutions and the synergies derived from the merger. For example, the new VIAVI Railway and MCx division has allowed the combined team to capitalise on their shared expertise and expand into aligned vertical markets, which also depend on mission-critical systems and operational cyber security.

Right: Max Becutti, Product Line Manager for Railway

Left: Pascal Bertrand, Product Line Director for Mission Critical Communications

Supporting Railways

Max Becutti, Product Line Manager for Railway explains more:

"Combining the Expandium QATS and Comtest NetProbe products and expertise into a single organisation has given us a powerful proposition and a good base for future product evolution, using a 'best of breed' approach.

This is a very exciting time for the railway. The desire to
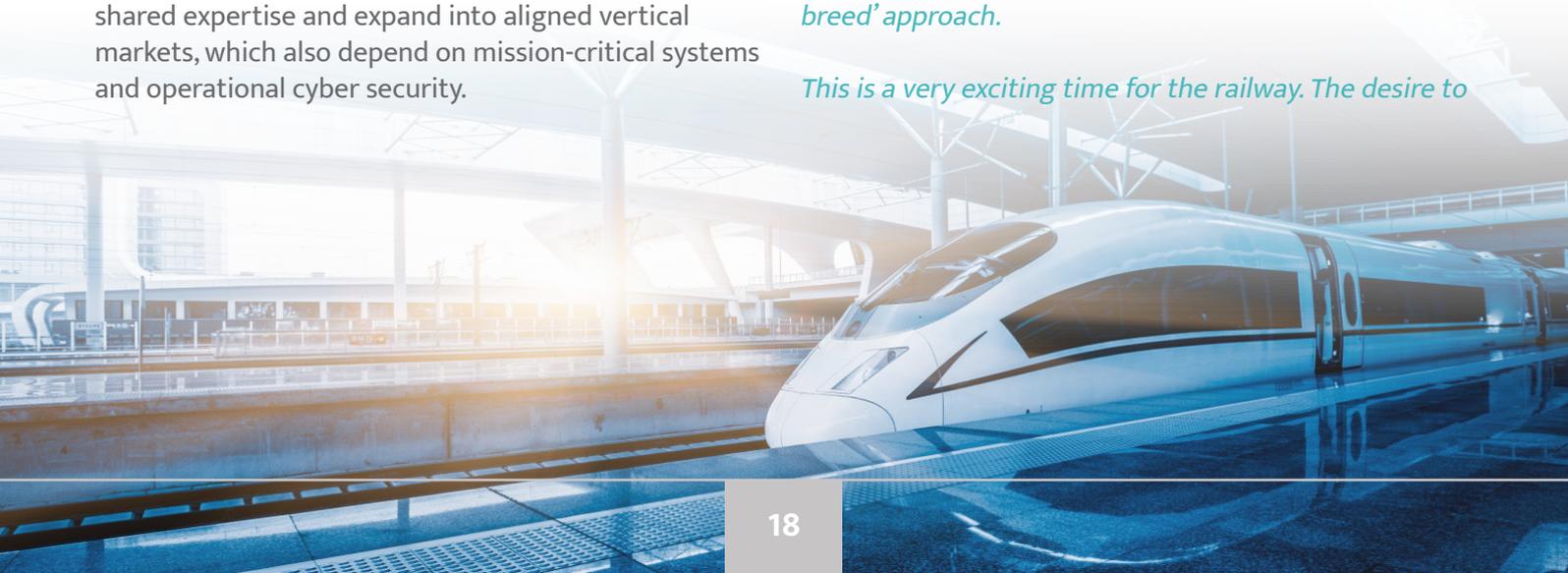
improve train performance will be achieved by tackling three fundamental problems: providing greater capacity, improving service reliability and reducing signalling system renewal costs, something that is a challenge worldwide.

As a result, the evolution from GSM-R to Future Railway Mobile Communication System (FRMCS) is underway; the timetable has been defined by the UIC and national deployments could start as early as 2026.

Many customers are already actively planning to use 4G and 5G solutions for railway infrastructure communications. In fact, work on implementation has already begun in several markets and we are proud to be supporting these projects.

The new team structure also enables us to better support our customers during the transition to these new FRMCS technologies, both wayside and on board.

At the same time, we remain committed to supporting customers with their existing railway telecommunication and signalling test, measurement and monitoring solutions.

In terms of our railway solutions portfolio, the creation of the VIAVI Railway and MCx Division provides us with the opportunity to extend our range considerably. For example, this quarter, we will be launching standalone and integrated operational cyber security solutions, compliant with meeting the new NIS2 directive, announced last November.

Also, as part of the VIAVI group, we are now leveraging the access it gives us to a much wider range of product solutions. This means we can offer our customers a broader portfolio and a faster speed to market, as well as supporting them with wider requirements than the core railway solutions, where required. One of our most recent additions, for example, is a solution that supports asset discoveries."

Supporting Mission-Critical Communications

Pascal Bertrand, Product Line Director for Mission Critical Communications shares his vision and objectives.

"The extension from our railway-based solutions into
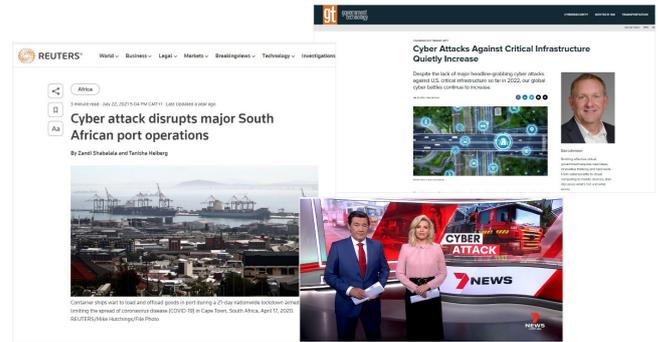
mission-critical assurance was a natural evolution. Bringing together our unique combination of resources offers powerful, exciting new capabilities and expertise to mission-critical markets.

Firstly, let me explain what we mean by mission-critical systems. These are systems essential to the survival of a business or organisation and if they fail, operations are significantly impacted and there can be a threat to human safety.

The new generation of mission-critical services (MCS) networks offers flexibility and local broadband access, which allows these sectors to improve their efficiency, reactivity and service quality, thanks to new applications and usages.

Public transportation systems, ports, blue light and emergency services, factories, mines and offshore platforms are all examples of other verticals that use local private broadband networks. Given the potential threat to personal safety, it is imperative that these mission communication systems remain safe, secure and fully reliable at all times.

As highly technical sectors, they rely on highly technical systems, and require skilled, technical expertise.

Which is why our outstanding experience in the railway telecoms and signalling markets gives us an incredible wealth of domain knowledge and experience in supporting customers and the user experience. Who else can offer the equivalent of Comtest's Drive Test expertise, Expandium's monitoring knowledge and solution platform, plus VIAVI's leadership with LTE and 5G technologies, for example?

However, new systems bring new challenges, as well as new benefits. That's why we are dedicated to supporting customers who want to migrate from their current Tetra, Wi-Fi or GSM-R-based solution to a 4G or 5G-based communications system.

Thanks to our deep understanding of the railway sector and our work with customers in over 30 countries around the world, we have great first-hand experience in helping to manage technology migrations and updates of this type and scale.

Our expertise and know-how can smooth the transition and fill the gap between service usage and technological complexity. As a result, customers can confidently operate their new systems more efficiently and effectively, to reduce maintenance costs and make their working lives easier.

The dedicated team have a customer-centric approach and we can provide a competitive range of solutions suitable for standalone, shared or hosted private networks.

The solutions and services we offer are similar to those for the railway market. For example, we offer manual and automated mission-critical services drive tests, performance monitoring and troubleshooting. Our extensive solution database and AI capabilities also allow comms data to be stored for several years, making it easy to review quality trends or provide evidence when required."

Summary

Railway and mission-critical systems are undergoing huge transformations to improve efficiencies and effectiveness.

VIAVI Railway and MCx offers customers the opportunity to welcome these new capabilities, by giving them the capabilities and skills to monitor systems performance and easily troubleshoot issues when required.

Our market-leading assurance services focus on improving the quality of experience and help railway and mission critical services to:

- Increase reliability
- Reduce outage
- Reduce OPEX / CAPEX
- Increase end-user satisfaction

If you'd like to know more, please visit **viavisolutions.com/railway** or contact us at **sales.railway@viavisolutions.com**.
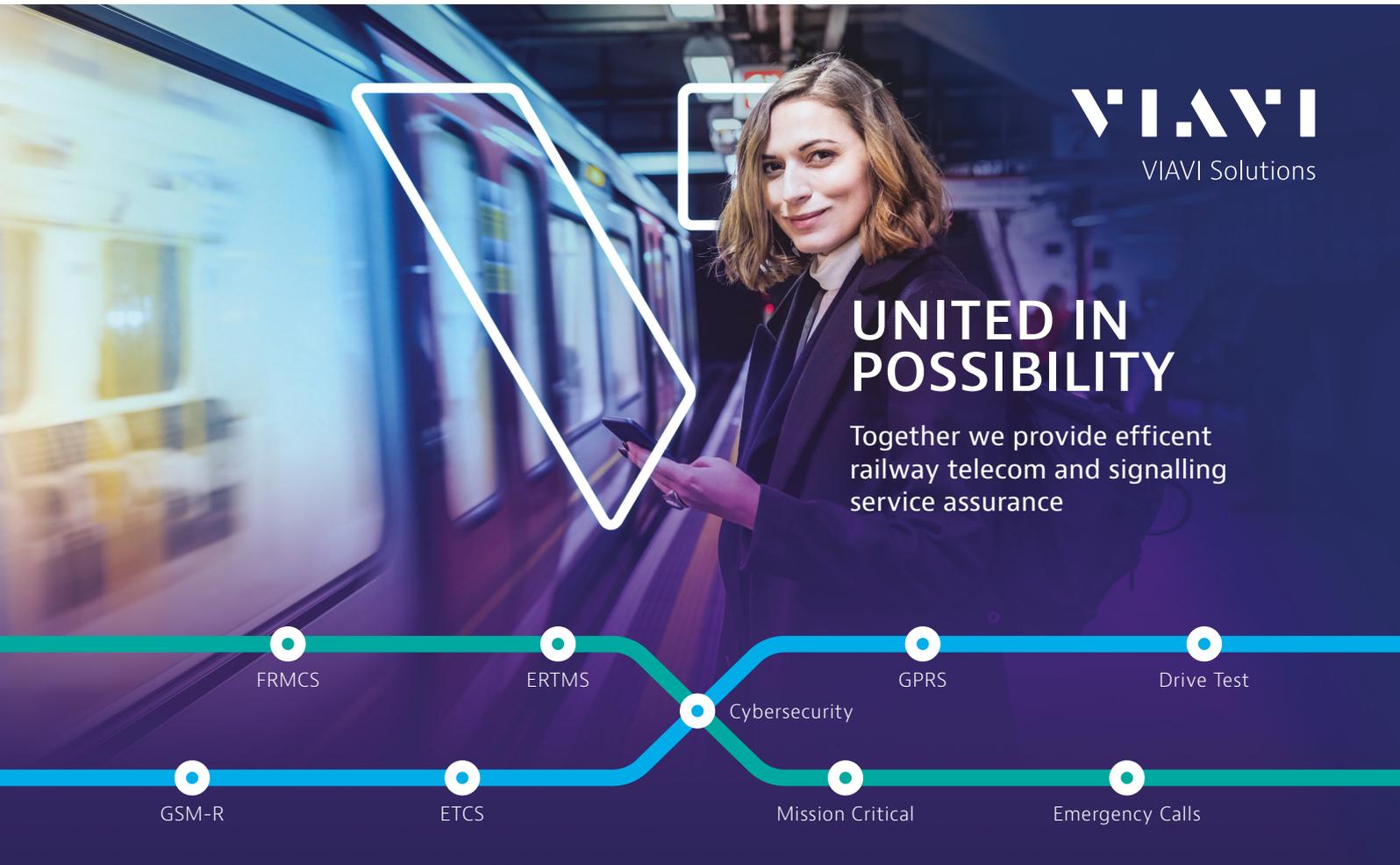
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UNITED IN POSSIBILITY

Together we provide efficent railway telecom and signalling service assurance

FRMCS · ERTMS · Cybersecurity · GPRS · Drive Test

GSM-R · ETCS · Mission Critical · Emergency Calls

Visit **viavisolutions.com/railway** or contact us at **sales.railway@viavisolutions.com** for more information