

Maximising User Benefits
with

Critical Mobile Broadband Solutions



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About Plextek

We have a 30 year history of providing secure critical communication solutions to global organisations.

Supporting over a dozen secure communication infrastructures over this period, in this brochure, you will find how Plextek can address the global public safety market's need to be quicker, smarter and more efficient in keeping citizens safe in times of crisis.



We understand today's key security challenges in critical communications and can generate both the ideas and deliverable solutions to the assured level of security, performance, resilience and ergonomics that you need.

We are a product development company that works with clients to achieve results based on their specific requirements and our engineering experience, supported by our library of IP for key technology elements aiding accelerated time to market and greater cost effectiveness.

"With concept generation, product design and manufacture conducted under the strictest confidence, Plextek is the partner who understands your needs in the security market, and can deliver you high quality innovative solutions."

Nick Koiza, Head of Security Business at Plextek



An Evolving Market

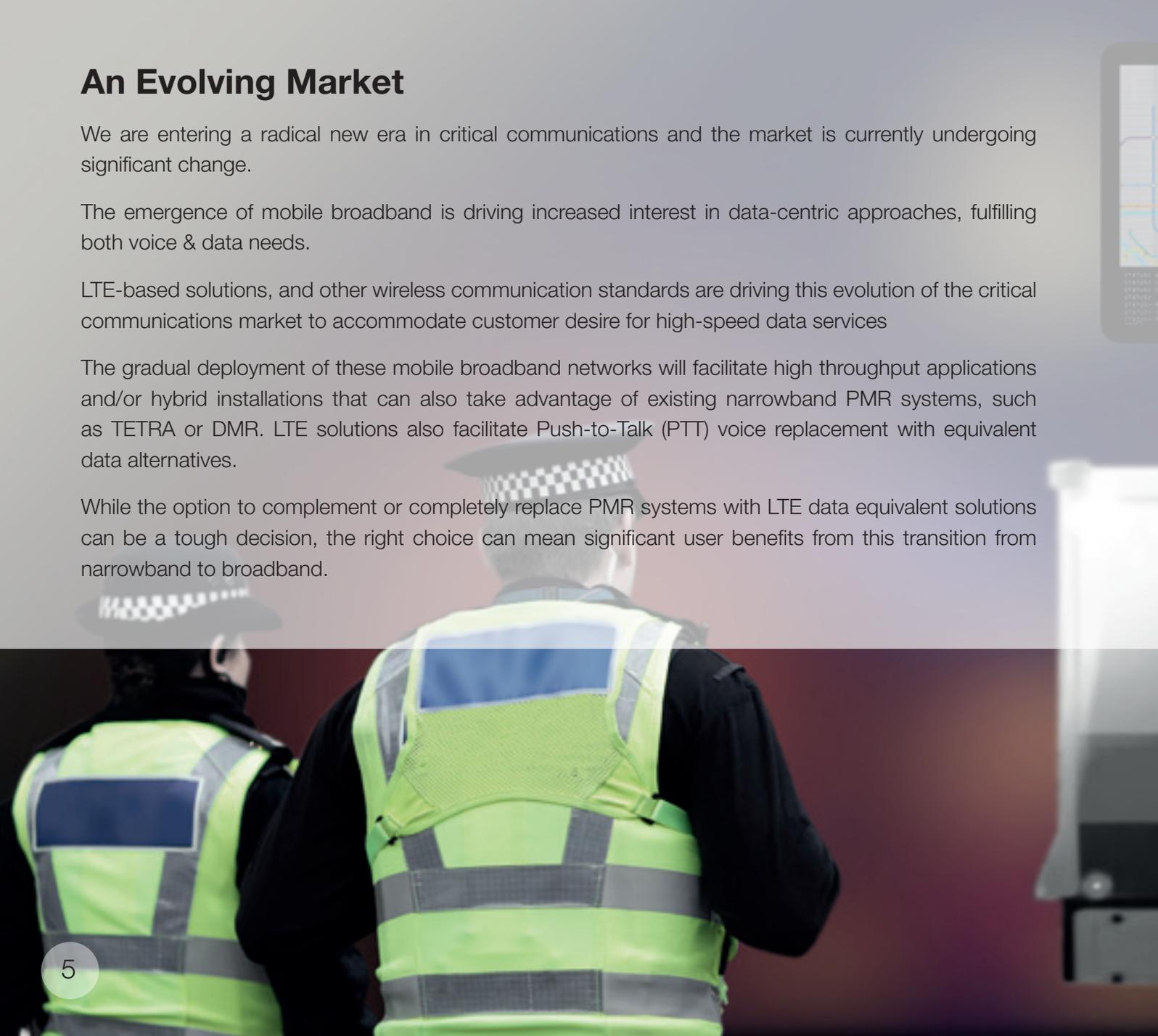
We are entering a radical new era in critical communications and the market is currently undergoing significant change.

The emergence of mobile broadband is driving increased interest in data-centric approaches, fulfilling both voice & data needs.

LTE-based solutions, and other wireless communication standards are driving this evolution of the critical communications market to accommodate customer desire for high-speed data services

The gradual deployment of these mobile broadband networks will facilitate high throughput applications and/or hybrid installations that can also take advantage of existing narrowband PMR systems, such as TETRA or DMR. LTE solutions also facilitate Push-to-Talk (PTT) voice replacement with equivalent data alternatives.

While the option to complement or completely replace PMR systems with LTE data equivalent solutions can be a tough decision, the right choice can mean significant user benefits from this transition from narrowband to broadband.





Broadband Opportunities & Benefits

There is a diversity of roles for mobile broadband users in the field, and both single and multi-user organisations are currently enjoying the benefits of reliable and secure voice communications using PMR technologies such as TETRA.

In order to truly exploit this technology platform, a plethora of device options will need to be created. Users will need to be provisioned with dedicated applications that can fully leverage available high speed data services.

For the first time in the history of this marketplace, transitioning to broadband will facilitate high throughput applications - leading to a number of benefits for field users and control room operators including:

- Increased safety and security
- Significant cost savings
- Increased operational effectiveness

Meet Operational Needs

In contrast to conventional voice-based solutions, there is a greater emphasis on understanding how end user's operational needs are met from field devices and applications when deploying data services.

A consultative approach is needed when establishing mobile working practices across your user groups. The wide spectrum of staff roles and associated use cases & operational processes all need to be considered when implementing a data service, and additionally, working environments can be harsh and unpredictable.



Technology diversity and a wide array of device options needs be reviewed when deploying new or updated data services.

Where voice-only services were previously delivered through off the shelf products, providing limited flexibility and scope for data exploitation, the adoption of data-centric solutions, including PTT over LTE, now demands a radical change to the way solutions are made available to customers within the market place.



Tailored Devices & Applications

Establishing individual field worker roles and needs at the outset is paramount.

Only then will it be possible to design next generation products that meet key criteria such as device form factor, ruggedness, power management, wireless OS and application needs etc.

At Plextek, we place strong initial focus on addressing such areas and therefore provide the right solutions – it's all about giving your users the right tools for the job.

Creating your products on a custom basis provides greater flexibility and reassurance that your specific needs will be met.



Innovation in the Market

It's important to exploit the potential that mobile broadband technology promises for innovation.

For example in the PMR world, in-vehicle communications have typically been served through dash-mounted mobile radios, black box telematics, crash-recording and numerous other units.

But have you ever considered encapsulating such functionality within a single device rather than multiple units?

Such innovative single device approaches also aid cost effectiveness in other areas, e.g. enabling the freeing up of space - this typically comes at a premium in a vehicle when you consider, for example, that the average police car is currently inundated with equipment!

You can also create innovative devices and apps exploiting hybrid technologies, with available narrowband TETRA and deployable broadband LTE.

Benefitting from both technologies with an integrated approach has its own advantages for professional users that are currently satisfied with their existing deployments for secure and reliable voice operations.

Cost Effectiveness

Here are some other user benefits to consider when developing a cost effective data service with mobile broadband technology:

Mobile broadband technology lowers your bill of materials costs and accelerates time to market when readily available components are at hand to deploy.

Components such as standard LTE modules significantly reduce the cost of developing user's next generation critical communications products.

In addition, module providers within the mobile broadband industry are starting to embrace the need for 3GPP standardised releases within their LTE offerings.

Further savings can also be generated in the manufacturing supply chain without compromising manufacturing rigour. As a result, the complete design and supply of your latest product is achievable with greater cost effectiveness than procuring inflexible off-the-shelf products.



Become Market Leading with Plextek

Next generation solutions call for developing devices and applications based on a strong understanding of operational use cases.

Deploy flexibly customised devices & applications that fulfil the specific need of each individual field worker regardless of working environment and operational functions.

Give your users the right tools for the job!

Ensure devices are innovative, cost-effective and provisioned with high speed data components adhering to 3GPP standards.

Collaborate with Plextek to develop a secure critical communications solution that delivers on all of these key technology challenges so that your deployment is future proof and capable of handling any emergency situation that comes your way.

About Nick Koiza

Nick's focus at Plextek is solely on helping organisations in the public safety and critical communications and security sectors with their strategic positioning and technological capability.

Nick has a long and successful track record across worldwide comms, security and public safety sectors with senior management positions in public and private companies spanning IT, technology and communications.

Prior to joining Plextek, Nick worked at Sepura Plc, Portalify Oy and Simoco Group, where he developed a strong reputation as a leading authority in secure critical communications.



For more information on how we can develop this technology for your security business needs, please call.

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