



## Metronet UK deploys InfiNet Wireless Broadband Access solutions across the UK's first profitable broadband wireless carrier network

### Objectives

- To offer a viable alternative to leased line services using BWA technologies;
- To offer contractual SLAs to guaranteed service levels of 99.95%;
- To support a complete range of advanced services across wireless technology, from basic connectivity to VoIP, IP CCTV Surveillance, and advanced data services;
- To offer "fixed menu-price" managed services of up to 200 Mbps across wireless last-mile connections.

### Solution Technology

- InfiMAN and InfiMAN 2x2 Point-to-Multipoint products;
- Customer Premise: R5000-Mm and R5000-5m integrated antenna products provide P2P / P2MP access to customers requiring warranted throughputs of 30Mbps, 50Mbps and 80Mbps;
- Core backhaul: R5000-0m and R5000-Mm backhaul products with throughputs of 80 and 300 Mbps.

### Customer Benefits

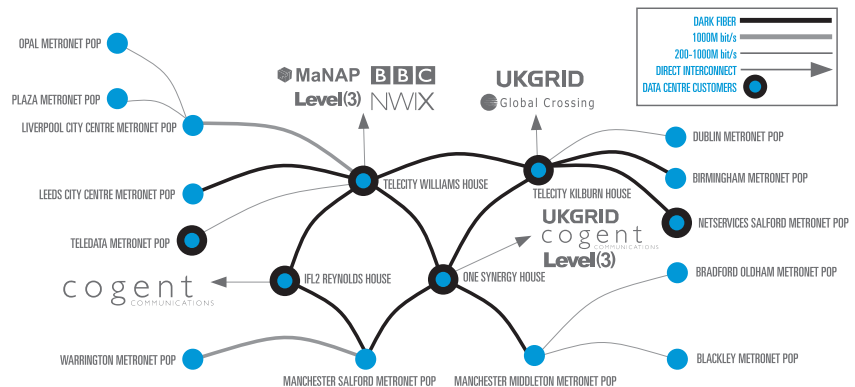
- Broadband Access anywhere using wireless technology;
- Each circuit 50% over-provisioned to ensure guaranteed bandwidth provision;
- High reliability through all weathers and geographies to ensure always-on service;
- Advanced service provision to ensure support of VoIP, CCTV and Video.

### Introduction

With a population of over 2.5 Million, Greater Manchester is the largest regional economy in the U.K. outside of London & the South East. Metronet UK was founded in late 2003 in the Greater Manchester area, with the aim of providing an independent and cost-effective alternative to business DSL and wire-based leased line (private circuit) services. The company lays claim to a number of milestones including the first to support wireless IP CCTV video streaming and the installation of the UK's first Gigabit wireless connection.

The Metronet network is a pure IP-based last-mile wireless broadband network, providing wireless internet connectivity for customers anywhere within its areas of coverage.. As well as targeting corporate data clients, Metronet engages with local Police and Council Authorities to promote use of its network infrastructure to support wireless CCTV video and ANPR (Automatic Number Plate Recognition) camera systems.

One of Metronet's key selling points is its unique SLA contractual guarantee of 99.95% uptime to any customer across its network. This can only be achieved with careful in-house management and support of the network – none of the support is outsourced, thus keeping control of the network "tight" – and vendor equipment is stringently required to exceed the reliability and uptime requirements of the SLA.



### Challenges

There are naturally a number of key challenges in offering a last-mile wireless network service to support a broad-ranging enterprise and public service customer base. Firstly, there is the implementation of the wireless technology itself, and the difficulties that such a technology brings: climate/weather conditions, geography and siting of the wireless technology are but a few of the variables that can affect the reliability of a wireless network.

Secondly, there is the need for stringent security across the network, especially as services are being offered to public sector bodies such as the police and law enforcement agencies. Metronet uses highly secure IP radio connections through proprietary radio transmission techniques that include industrial strength encryption, and frequency hopping around 80 different channels, with random changes being performed every second.

Finally, and probably most importantly, is the commercial offer: Metronet offers fixed price and fixed-menu bandwidth services, with ADSL backup for "peace of mind" which are offered on a very scalable and affordable sliding scale – from 1Mbps to 200Mbps and beyond – with each circuit over-provisioned by double the ordered bandwidth in order to guarantee committed SLAs.

### Customer's Perspective

"Metronet utilises InfiNet's products for customers and locations where bandwidth requirements are more demanding, and where reliability is of paramount importance in particularly difficult environments. Since we have been deploying InfiNet's broadband wireless products, what really stands out is the reliability of the units in the field and the support we receive from InfiNet Wireless as a vendor – this is particularly important to Metronet given our customer SLA and support commitments".

James McCall, Operations Director  
Metronet UK

### Metronet and InfiNet Wireless in partnership

Through its local UK partner 802 Networks, InfiNet Wireless provides Metronet with its InfiMAN and InfiMAN 2x2 Point-to-Multipoint solutions, supporting customers requiring high bandwidth requirements in excess of 30 Mbps, or where difficult non line-of-sight or obscured pathways may cause an obstacle to any wireless service. The integrated antenna products provide access to customers who typically require warranted throughputs of 30 Mbps up to 80 Mbps, whilst the R5000-0m and R5000-Mme products are used for wireless and core-network backhaul with throughputs between 80 Mbps and 300 Mbps respectively. The InfiNet Wireless 2x2 series of products were the first in the world to introduce MIMO technology for Broadband Wireless Access, and set new standards across the industry for throughput, spectrum optimisation & efficiency and system reliability.

Metronet's model is clearly both a commercial and technical success in the market: not only is it consistently experiencing rapid year-on-year growth in excess of 50% per year, it is also now expanding into adjacent territories and cities. With more than 75% of the UK's Gigabit wireless links registered to Metronet, the Company has unmatched expertise in a technology that allows it to develop ultra high-speed Metropolitan networks at a fraction of the cost of cabled network alternatives.



### About Metronet

Metronet UK was founded in late 2003 in the Greater Manchester area, with the aim of providing an independent and cost-effective alternative to business DSL and wire-based leased line (private circuit) services. It is also the first wireless communications operator to achieve profitability in its first city. More recently, Metronet's network reach has extended beyond the Greater Manchester area and into Leeds, Liverpool, Birmingham and Dublin.

### About InfiNet Wireless

Established in 1993, InfiNet Wireless is one of the largest privately owned Fixed Broadband Wireless Access (FBWA) development and manufacturing companies in the world. With more than 15 years of product development, InfiNet's range of wireless connectivity solutions are the preferred choice of global communication corporations and governments who require uncompromising connectivity. To date, InfiNet Wireless over 70,000 deployments from the plains of Siberia to the depths of the Sahara and have been successfully deployed in over 35 countries. Its philosophy of providing the most flexible, reliable, cost-attractive and innovative solutions in the industry has helped it to reach the market leader position for Wireless solutions in Russia and Central & Northern Asia, and is the benchmark of carrier grade multiservice broadband wireless access systems.