









# Initial Pricing for 50/100/200GB with Fixed Public IP (Three & EE)

**Wurzel - Connectivity Proposal** 

Version - 1.1 Issue Date - 9 June 2023

Wireless Logic Group Ltd Horizon Honey Lane, Hurley Berkshire SL6 6RJ

Tel: +44 (0)330 056 3300 www.wirelesslogic.com



#### **Contents**

Executive Summary	. 4
About Wireless Logic Group	. 5
Conexa : the network designed & built for IoT	7
Connect - GPRS, LPWAN, 4G, 5G & eSIM technologies	. 9
Secure - NetPro: Our private resilient network infrastructure	11
Control - SIMPro: SIM Management Platform	15
Hardware services & solutions	18
Support desk	19
Quote Details Network connectivity pricing	20
Network Coverage Details	21
Conclusion	25



#### **Executive Summary**

This is a summary of the Wireless Logic Proposal. Within the summary, you should map out the product and service need, using this as a simple intro to the document itself. Be sure to detail the outline to demonstrate an acute understanding of the connectivity and service need. And ensure that you explain the importance of the Wireless Logic solution in relation to the broader application's structure. This intro should ideally be about this length.

#### Project outline

- Clear bullets detailing the overview of the project, such as:
- EG: Supply secure IoT data SIM connectivity solutions to XYZ Ltd
- Create tariffs to meet the GPRS/3G coverage, APN & data requirements for XYZ's device applications & solutions
- Provide Managed Private APN connectivity & platforms for the activation, monitoring, alerting & billing of the SIM estate

#### **Objectives**

- Clear bullet points in relation to what needs to be achieved...
- Agree commercial arrangements
- Agree trial processes to determine 'real-life' data requirements
- Future-proof current & future connectivity requirements

#### Specific points of interest

- Here highlight key factors that will demonstrate your understanding and knowledge of the task ahead. List matters that are important to the customer, and to us. e.g.
- Private APN Connectivity
- Billing
- Support
- Fulfilment

#### Wireless Logic solution

- This is a summary of the solution. If this can't be bullet-pointed, a short paragraph explaining the architecture, approach and outcomes. e.g.
- GPRS & 3G connectivity
- Connectivity Options
- Private APN Connectivity & Management
- SIM Management & Back Office solutions



#### **About Wireless Logic Group**

We are one of Europe's leading IoT and M2M connectivity platform providers, delivering a range of focused and resilient solutions to enable applications to communicate effectively, efficiently and securely.

Our solutions are based around three key elements:



Resilient 2G,3G,4G and LPWAN connectivity with IoT SIMs/eSIMs for global, local and multi networks

#### **Control**

Control your connected assets across multiple networks and technologies using IoT's most powerful management platform



Secure, resilient and ISO27001 compliant private infrastructure which overlays across the global mobile networks

Wireless Logic works in partnership with the world's major mobile and satellite networks, providing best-in-class managed service solutions to system integrators, application providers, OEMs and end users – from global blue-chip organisations to smaller and medium-scale enterprises.

Core to the group's success is our ability to respond to ever demanding and evolving requirements where reliability, cost-effectiveness, strict SLAs and sector knowledge are all vital. Our specialist expertise spans multiple verticals enabling our business development teams to impart sound and results-driven advice and support to both existing and emerging application technologies.

Horizontally positioned, Wireless Logic works across hundreds of applications across many markets - these include transport and logistics, energy and utilities, smart city, retail, OEM, healthcare and a range of enterprise solutions. We now manage over 8 million subscriptions utilising local, in-country roaming, global and multi-profile/eUICC SIM technology, all designed to provide flexible and tailored low and high data usage tariffs for specific applications. The group has strategic partnerships with 45 mobile networks which enable a global reach to more than 750 networks across the globe. eSIM and eUICC technology is managed across the Intelligent Network platform – a dedicated mobile network with its own core managed by Wireless Logic. Wireless Logic's focus is



entirely on their customers – providing world-class service and for flexible, resilient and secure solution.



Continuous investment in technology enables Wireless Logic to provide an increasing suite of value-added products which include specialist mapping and location-based services from Google and HERE, device management platforms, security encryption services and end-to-end managed hardware solutions. The organisation is ISO 27001 information security certified.

All services are supported by a team of 300+ connectivity experts who deliver local service and support through offices in the UK, Germany, Netherlands, France, Spain, US, Denmark, Norway, Austria, Italy, and China. The group operates several brands in the market, including UK-based Arkessa, Germany- based Mdex, Italy-based Things Mobile, Norway-based COM4, Austria-based Data Mobile and Matooma in France.

Founded in 1999, Wireless Logic Group is backed by Montagu Private Equity. The organisation's European headquarters are located in Hurley, Berkshire UK.



### Conexa: the network designed & built for IoT

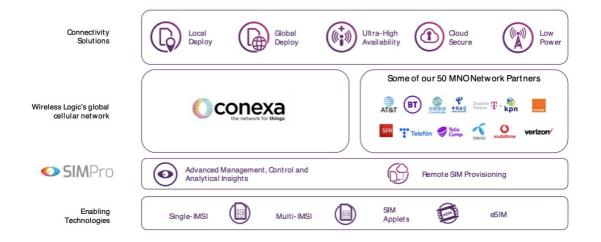
Conexa is a GSMA certified carrier-grade mobile network built by Wireless Logic just for the IoT. It provides a suite of connectivity solutions, network control and security services built over an ecosystem of leading MNO radio network partners for resilient and flexible connectivity anywhere in the world via all the cellular bearer types from 2G, 3G to the latest 4G, LPWAN and 5G technologies.

Conexa is designed to meet the challenges companies face in IoT procurement, manufacturing, and logistics. It provides single or multi-network options and commercial models suited to both low and high data use, according to application type, for global, national, or regional deployments.

Conexa offers 5 connectivity solutions which can be tailored to suit your application



These solutions are built on leading mobile networks and IoT platforms.





Conexa is designed to provide the flexibility, security, scalability, automation and day-today management that IoT managers and device manufacturers need.

- Resilient and secure by design using carrier-grade, distributed private networking infrastructure which is elastic and scalable and provides real time control of connections.
- A single global SIM with zero-touch remote provisioning services simplify
  manufacturing and operations processes so that solutions can be deployed and
  activated anywhere in the world.
- Cloud Secure establishes secure end-to-end connections, with zero touch provisioning for IoT products and services built on AWS, Google or Azure cloud services. Advanced on-SIM security for effective device identification, certificate management and cloud registration.
- Our Ultra-High Availability solution protects business-critical or safety applications with on-SIM control functions which detect and initiate fail-over to an alternative radio and core network infrastructure.



### Connect - GPRS, LPWAN, 4G, 5G & eSIM technologies

#### Join over 8 million IoT SIM subscriptions

If there's one benefit that our customers value above all others, it's choice. Providing IoT connectivity with an unrivalled choice of the world's mobile networks has always been a core element of our DNA.

#### Selecting the right networks

At Wireless Logic we select the right network, service and tariff based on the specific requirements of your application. The precise choice will depend on a number of factors from location to data usage, and whether the device is static, mobile, national or international. We also consider the importance of being 'always on', which can be essential for mission-critical applications.

With this information, including data usage forecasting, we can propose the most appropriate networks, tariffs and contract periods. Our aim is to select the best solution based on your business objectives, your application's scalability, and the duration of the deployment.

Geographically, we use a number of tools to ensure the 'best fit' network for your application. For national and international roll-outs, we regularly use a number of networks within a SIM estate. Importantly, all networks can be monitored and controlled using our SIM management platform – SIMPro.

#### Your first choice for SIM connectivity

- Unrivalled choice of networks with expert customer service.
- Purchasing power across the world's mobile networks delivering competitive pricing.
- Helping solve your technical challenges such as static/fixed IP SIMs.
- Local, in-country roaming, global, steered or un-steered, low or high bandwidth SIM tariffs
- Service Level Agreements designed around you.
- Access to the latest IoT insights in network developments.
- A strong European focus with a truly global reach.



#### Market evolution - eSIM / eUICC technologies

As the IoT market continues to evolve, connectivity management is becoming an increasingly important driver of business value. The science of application vs network selection is an important part of our service, as the right choice can deliver considerable savings over the lifetime of a deployment. This includes the on-going developments in multi-IMSI, eSIM and eUICC technologies – our own IoT network – Intelligent, is embracing the evolution of SIM-based assets, capitalising on the new and unprecedented levels of contract flexibility, Over-the-Air programming, scalability and simplicity in control.



## Secure - NetPro: Our private resilient network infrastructure

NetPro is Wireless Logic's carrier-grade, secure, fast and reliable private network. It delivers a cost-effective alternative to organisations wishing to avoid major investment in their own IT architecture, leased lines and associated support costs.

NetPro has co-located TIER 3 data centres in London Docklands to deliver secure and resilient private network capability with fully redundant interconnects. NetPro connects via dedicated hubs directly into each of our major network partners utilising APN gateways and RADIUS servers. As part of NetPro, Wireless Logic has a single point APN which is common to multiple networks - WLAPN.COM. This is particularly relevant when devices are being connected across multiple networks. The APN will remain constant throughout.

NetPro applies fixed IP addressing to mobile devices to enable secure routing from Wireless Logic's infrastructure to the remote user's LAN. NetPro's ability to deploy a fixed IP to a module enables a device to be passive in communications – a user can securely retrieve data from a machine instead of relying on it to be sent and send two-way instructions that remain secure at every part of the data's passage. This approach has great advantages in the IoT and M2M world from a cost and infrastructure perspective, with no CAPEX required to be part of a resilient private network.

#### The benefits of two-way private connectivity:

- Fast and secure two-way communications
- · Real-time monitoring
- Remote access control between mobile device and central server
- The tightest security and access control.

Users receive a private range of Fixed IP addresses, set up to their own sites or customers' sites using VPN technology, and a resilient communication platform that is supplied for the contract length of the airtime agreement.



#### Considerations

The connectivity options available to Wurzel LTD are dependent on how your application and servers are set up, your security requirements and the need for a Static IP service. Based on our experience in this market, the application and project requirements, the proposed infrastructure is based around the Wireless Logic NetPro service, providing our NetPro (Private APN) secure connectivity via the implementation of IPSEC VPN tunnels.

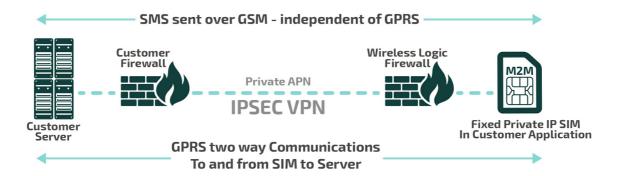
#### **Network Choice**

As discussed in our meeting, as an independent provider of data communications and the largest M2M partner for Vodafone, O2 & Everything Everywhere & Three, Wireless Logic can provide access to a choice and mix of fixed UK network SIM's and tariffs ideally suited to 'high bandwidth' requirements. For 'low bandwidth' applications Wireless Logic can provide the option of a UK roaming SIM, enabling access to the core UK networks via a single SIM & configuration, at a fixed monthly cost.

#### Private APN with Fixed IP through an IPSEC VPN

This set-up delivers the benefit of having a private APN, without the costs, creating a subnetwork within our own private network. With VPN tunnels from our network to a customer's, we enable secure reliable two-way GPRS, 3G& 4G communications, from server to device and vice versa.

With this structure, users have full visibility and control over the network infrastructure, supported by our in-house Service Desk available 24x7 for all Private APN connectivity network queries. If required secondary back-up VPN's can be implemented for fail-over.



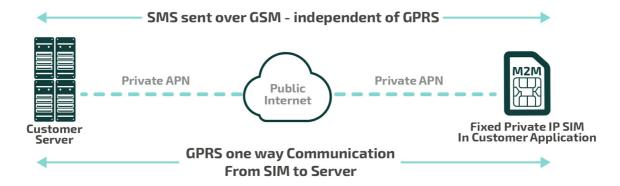


#### Private APN no VPN

This set-up utilises the NetPro Private APN services without an IPSEC interconnect. Should a VPN be required later, IPSEC VPN links can be enabled with no additional cost or reconfiguration of devices in the field.

This structure enables full visibility and control over the network infrastructure, which is dual redundant & co-located with support from our in-house Service Desk team available 24x7 for all Private APN connectivity network queries.

#### Private APN with Fixed IP through overview:



#### Simplified & Unified APN addressing

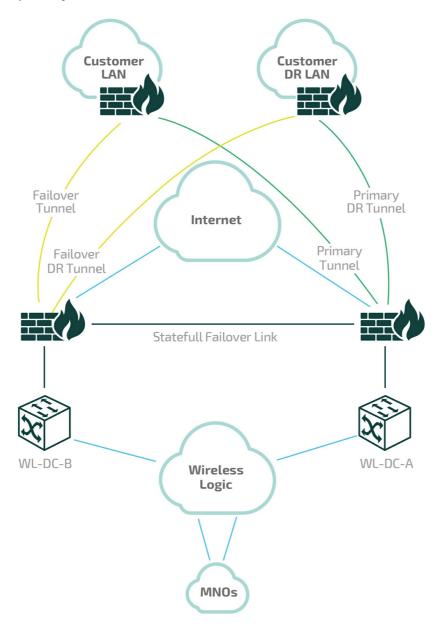
To simplify the provisioning and support of customer hardware, all primary UK networks can be provided with a single unified APN address – WLAPN.COM. This will allow customers to deploy a mixed estate of SIMs, with a single APN configuration irrespective of the network.

#### Wireless Logic - Customer interconnect overview:

Our standard interconnect option makes use of two Cisco ASA Firewalls in a redundant pair. One of the firewalls is located in each of our data centres with connectivity between the two which allows stateful failover of the connections. The external IP address of the firewall is available via both ISP's with priority controlled using BGP. Only one of the two firewalls will be operational at any one time and so a single VPN/fibre link will exist to the customer's site.



For additional resilience on the customer side, an additional IPSEC VPN tunnel or lease line can be added to a DR site, with the only proviso that the DR site must have a different IP subnet to the primary:





### **Control - SIMPro: SIM Management Platform**

#### Take complete control of your SIMs

Our SIM management platform – SIMPro is the engine behind visibility, control, billing and management of entire SIM portfolios across multiple mobile networks. Constantly evolving with enhanced features, it provides the ultimate user experience within the connectivity sector, all accessed via the Wireless Logic web portal.



#### **Control made simple:**

- Directly activate and suspend SIMs.
- Monitor the activity of an entire SIM estate across multiple networks, locally and globally.
- Real-time reporting, accessed at all times, from anywhere.
- Optimise the performance of your SIMs monitor data usage to ensure the right tariff is selected avoiding 'bill shock'.
- Track the activation process using SIMPro's notification systems.
- Act immediately if a SIM is lost or stolen.
- Communicate two-way with SMS.
- Track location of your entire SIM estate.
- Specify key requirements such as International roaming or voice.

SIMPro is delivered as part of Wireless Logic's Value-Added Services.





































#### Deploy and activate assets quickly and easily

- View and control SIMs across multiple networks in one customisable window
- One click SIM controls activate, suspend, get live status reports and more
- Scale IoT deployments faster by ordering and activating through SIMPro

### Optimise costs and pre-empt issues through powerful insights

- Create a single view of your deployment with customisable dashboards
- Minimise the risk of bill shock by scheduling real-time reports and usage alerts
- Access real-time session data (network dependent)
- Track SIM location and data usage by country

#### Automate connectivity

- Control deployment with advanced rules and alerts
- Developer ready platform with REST and SOAP APIs
- · Seamless integration into existing workflows

#### Help and support in real time

- Digital Assistant with walk throughs and tips to help you to optimise your deployment
- Talk to our Service Desk via Web Chat
- Live mobile network status
- Quickly and easily raise and monitor support tickets

#### Unified and flexible billing

- Single monthly bill across all networks used
- Flexible commercial models, including data aggregation and adjustable tariffs
- Flexible billing split by business entity, business unit or country



#### User friendly interface

SIMPro is accessed via the Internet with no requirement for software downloads. Filtering tools, an intuitive platform and 100% secure accessibility are all integral to making the user's experience simple. SIMPro works seamlessly alongside the management reporting tools of Wireless Logic's main networks. Real-time data reports are also available on all SIMs routing over our private APNs.

The SIMPro platform is also available with an API spec sheet so that it can be integrated into customers' existing applications or back office systems. An example of this is the integration into Salesforce - this will enable your technical support centre to manage the estate through your existing CRM systems.



#### Hardware services & solutions

Wireless Logic can offer a range of mobile router hardware solutions in conjunction with our secure IoT /M2M data SIM connectivity.

Working with many of the sector's leading brands, we can help scope and specify routers for multiple uses including mobile and sedentary locations, harsh industrial environments, and dual and multi-SIM requirements for failover and high bandwidth applications.

As part of our hardware solutions we also provide pre-configuration of routers in line with user profiles. This enables the delivery of routers to sites/applications already set-up in a 'plug-&-play' state with settings such as IPSEC VPN into the user's network already loaded onto the hardware.

In addition to routers, a range of external antennas and accessories are available to ensure optimal set-up and connectivity.



#### **Support Desk**

Fundamental to the success of any connected application roll-out is the support available and accessible, at any time. Wireless Logic's Support Desk is manned by a large team of experts, able to give 1st and 2nd line support within strict Service Level Agreements.

Operational Support consists of these key areas:

#### Service Desk

#### Monday to Friday - 8.30am to 6pm excluding Bank Holidays

Has a broad range of duties including but not limited to: sales despatch, provisioning, SIMPro training, after sales support and 1st line diagnostics.

#### Sales Administration

#### Monday to Friday - 8.30am to 5.30pm excluding Bank Holidays

Providing support for customers with billing enquiries, contract and sales - processing, account reviews, cancellations and upgrades.

#### **Technical Support**

#### Monday to Friday - 8.30am to 6pm excluding Bank Holidays Priority 1 Response is 24/7

Delivers configuration of VPN connectivity solutions, provides 2nd level support. Technical Support also provide the out of hours support for P1 issues.



### **Quote Details Network connectivity pricing:**

Commitment Level	1 SIM	1 SIM	1 SIM	1 SIM
Network	100GB Three Network with Fixed Public IP (Available on Three)	100GB EE Network with Fixed Public IP (Available on EE)	200GB Three Network with Fixed Public IP (Available on Three)	200GB EE Network with Fixed Public IP (Available on EE)
Inclusive Monthly Data Allowance	100.00 GB	100.00 GB	200.00 GB	200.00 GB
SIM Type	TRIPLE	2FF	TRIPLE	2FF
SIM Charge	£1.2	£0	£1.2	£0
Monthly Line Rental	£135	£200	£235	£360
Aggregation (Data Pooling)	Yes	Yes	Yes	Yes
Additional Data Charges	£4.00 per GB	£4.00 per GB	£3.00 per GB	£3.00 per GB
Commitment Period	24 months	24 months	24 months	24 months
Voice Enabled	No	No	No	No
Billing Increments	1 KByte per session	1 KByte per session	1 KByte per session	1 KByte per session
SMS Enabled	No	No	No	No
Services	NetPro, Fixed Public IP, Aggregation	NetPro, Fixed Public IP, Aggregation	NetPro, Fixed Public IP, Aggregation	NetPro, Fixed Public IP, Aggregation

#### **Notes**

- The above pricing includes APN Management & Technical Support & management charges
- Stock SIM's will be provided for installation & activation, delivery costs apply
- Quotation valid for 30 days from date of receipt
- Other data bundles are available and can be provided
- All prices are exclusive of VAT
- Terms and Conditions: https://www.wirelesslogic.com/terms-and-conditions



#### Network Coverage Details 100GB Three Network with Fixed Public IP (Three)

United Kingdom	١
3	2G, 3G, 4G



#### Network Coverage Details 100GB EE Network with Fixed Public IP (EE)

United Kingdom		
EE	2G, 3G, 4G, 5G	
Orange	2G, 3G, 4G, 5G	



#### Network Coverage Details 200GB Three Network with Fixed Public IP (Three)

United Kingdom		
3	2G, 3G, 4G	



#### Network Coverage Details 200GB EE Network with Fixed Public IP (EE)

United Kingdom		
EE	2G, 3G, 4G, 5G	
Orange	2G, 3G, 4G, 5G	



#### **Conclusion**

This document is designed to provide an initial overview of the Wireless Logic solutions, infrastructure, network coverage and management tools. I hope this proposal has met and addressed the requirements discussed in our recent meeting.

We would recommend that for such new project implementations that Wireless Logic work with Wurzel LTD to provide trial SIM's & infrastructure so that the connectivity, management platforms and services can be fully tested and APN connectivity approved.

I would appreciate any feedback and would be happy to answer any questions and to follow up with discussions as to how Wireless Logic can tailor our Private APN solutions to best fit Wurzel LTD going forward.

#### **Fraser Thurlow**

**Business Development Exec** 

Email: fraser.thurlow@wirelesslogic.com

Web: www.wirelesslogic.co.uk





#### UK

Wireless Logic Group Ltd Horizon Honey Lane Hurley Berkshire SL6 6RJ UK 0330 056 3300

#### China

Wireless Logic Onna Ltd 华埃莱斯(常州)通信技术有限公司 Office (Changzhou) No.82 Hehai Middle Road Xinbei District Changzhou Jangsu Province China, ZIP 2 130 25 4008718400

Wireless Logic China Ltd (Sales Office) 华埃莱斯(常州)通信技术有限公司 Building B Qingdao Huaqiang Industry Park Jngyi Road, Chengyang District Qingdao Province China, ZIP 266000 4008718400

#### Denmark

Wireless Logic Nordic Valdemarkshaab 11 DK 4600 Køge Denmark 70 22 20 45

#### France

Wireless Logic France Parc de la Duranne 255, Avenue Galilée 13857 Aix-en-Provence Cedex 3 France 04 42 16 60 17

Matooma

Le Liner ZAC de l'Aéroport Montpellier Méditerranée Entrée 2 SIS-2630 Avenue Georges Frêche 34470 Pérois France 04 88 36 07 40

#### Germany

Wireless Logic CmbH Technopark Am Hochacker 4 85630 Grasbrunn 089 55 06 21 39

mdex GmbH Bäckerbarg 6 22889 Tangstedt Germany 04109 55 54 44

#### Netherlands

M2MBlue BV Josink Maatweg 43 7545 PS Enschede The Netherlands 085 0 160 666

SIMPoint Esp 237 5633 AD, Endhoven The Netherlands 040 8 489 489

#### Spain

Wireless Logic SL O' Jose Liuis Goyoaga 32 Edifico Noray , Oficna 10 3 48950 Erandio (Bizkala) Spain 34 944 043 962