

bluereach[®]



Empowering Alternative Access

ISPANZ Wellington May 2017

Presented by Mike Lancaster, GM Bluereach

Our heritage

- Founded in 2015 by Malcolm Dick (ex-CallPlus Chairman and Co-Founder) after the sale of his CallPlus Group to M2 (Vocus) Australia
- Malcolm retained all Wireless spectrum and has engaged a small team of proven experts to oversee creation and initial operation of a Nationwide Wholesale Wireless Access business.

What do we do?

- Provide Wholesale 4/5G wireless services
- Make our nationwide spectrum available
- Operate the core network and provide oversight and management of the entire network
- Supply SIM, Base Station and Customer hardware
- Continually enhance and develop core capability
- Bring complementary new features, services, partners and functionality to market
- Collaborate with retail operators to mutual benefit

Why Wireless?

- Quick to deploy
- Independent access technology
- Degree of nomadicity and mobility within coverage areas
- Wide range of Customer Premises Equipment (CPE)
- Range of speeds, today up to 100Mbps, in the future a lot faster
- Managed interference environment in licenced spectrum – no surprises

How can Bluereach help you?

- We can enable your business to have it's own Wireless Access technology, without the steep learning curve and investment risk – this gives you more choices and certainty
- You can deploy rurally or urban
- You can use your spectrum (such as Managed Spectrum Park) and ours
- Internet, Data and Voice Services supported
- You have more visibility and input into meeting your needs – we are flexible and will listen
- We can assist with design, deployment and basic operations

We're Open Access

- The model is all about sharing
- Retail Parties who invest in radio infrastructure enjoy a period of exclusivity before access is opened to all retailers on the network.
- You have access rights to other geographic areas to support your national customers or those that relocate
- You can make \$ from others connections on infrastructure or spectrum you own/manage

What does the equipment look like?



Sites today



- 20 rural sites
- 33 Urban cells (Auckland)
- Other pilot builds in progress

Who's trialling our services?

- Full Flavour – BOP – rural deployment
- Wireless Nation urban deployment – Auckland Central pilot
- Compass Wireless South Auckland Rural UE trials
- South Island - Multi-Region Pilot deployment and testing

Built last Sunday



And the creator....

- Braving a cold southerly



Installed site pics Auckland...



And how not to install them...



Key benefits

- Standardised technology – 3GPP Global standard 4/5G
- Core services managed by Bluereach
- Local expertise harnessed with a national enterprise
- Wholesale service only
 - You own your customers and the customer relationship
- You can buy and own Base Station equipment, and operate sites as part of the greater network
- Economy of scale – we build and operate this together
- Enjoy group buying power

More Benefits

- As the network grows it will develop more inherent robustness and diversity that all members can benefit from
- Bluereach will continue investment in the core enhancement, diversity and associated services with a variety of 'best of breed' suppliers at competitive prices
- Leading/bleeding edge opportunities to adopt the latest features and technology. The 4G/5G core will accept any standardised radio access technology ensuring straight forward evolution on site by site basis.

Summary

- We're here to work with you - collectively
- We can empower you to have the latest wireless technology and offer choices to your customers
- You will be part of a nationwide group
- Benefit from other nationwide opportunities such as IOT partners who require services
- Flexible wholesale model
- Ready now for pilot deployments in your area

Empowering Alternative Access

- Contact us for more information
 - 0800 BLUE 4G (0800 258 344)
 - Mike Lancaster 021 777 511
 - www.blureach.co.nz



Additional info

- Site Range up to 60km
- Site capacity today max 70 Mbps DL on 10 MHz FD
- Typically 40 Mbps aggregate on 10 MHz TD (MSP)
- More features coming Multiple antenna UE
 - MIMO increased capacity
 - More diversity on DL improved coverage/performance
 - Uplink improvement higher modulations and more TX in UE
- Carrier aggregation, 2 channels then up to 5 (band dependant) increases capacity

eNB and outdoor UE



Jesse's messages

We've got it working good in the office!

Heads up - Mikrotik SXT LTE now working with the Bai Cells