

Parklands internet

Tim King

Tim.king@investcope.com

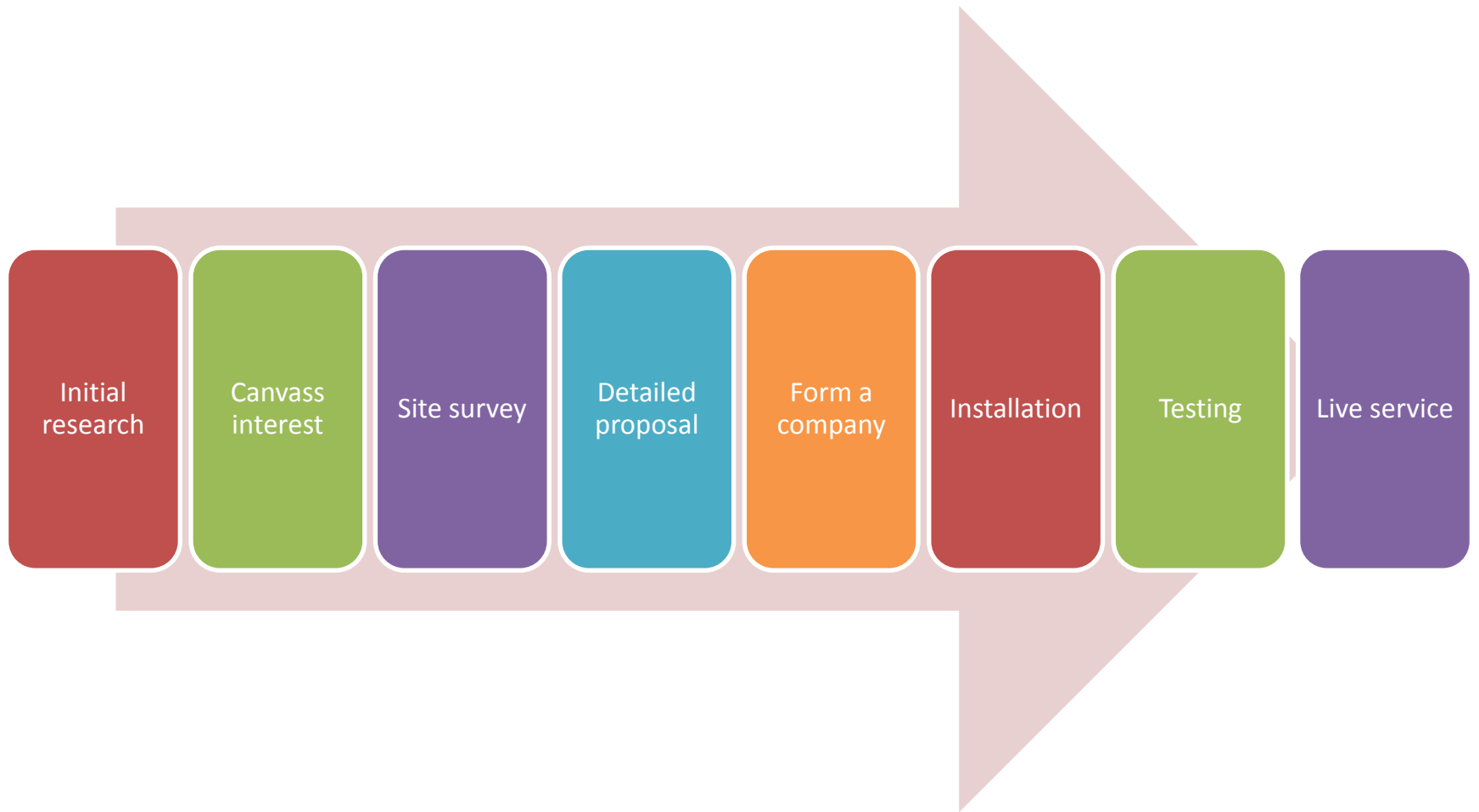
0779 851 7370

(22 Tulip Tree Close)

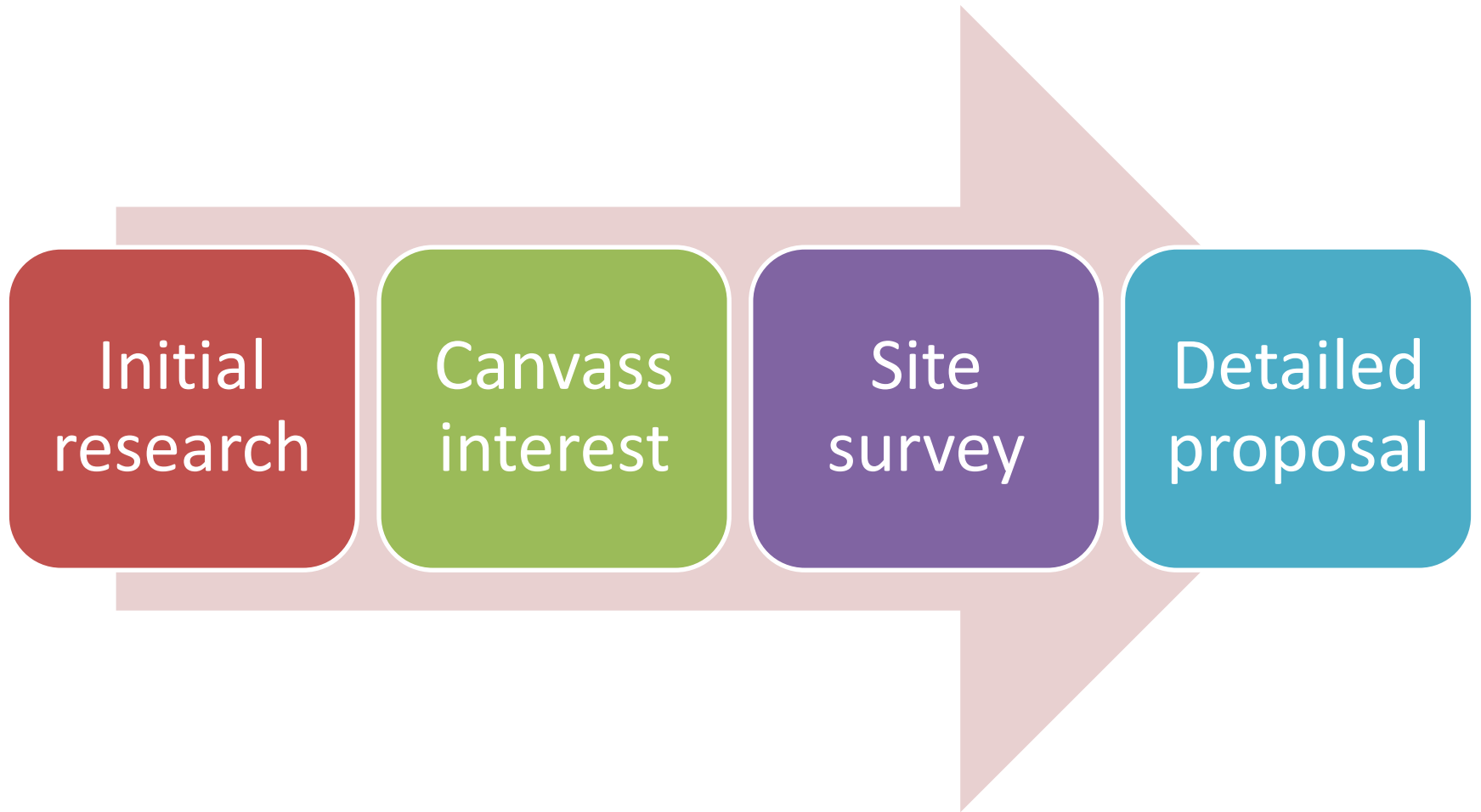
Please note

- The content of these slides are an initial proposal, not an offer for service.
- It is likely that the fine detail of the proposal will change as new information becomes available.
- Please therefore read this presentation with the 'health warning' appropriate to an early stage project.

Process



Before money



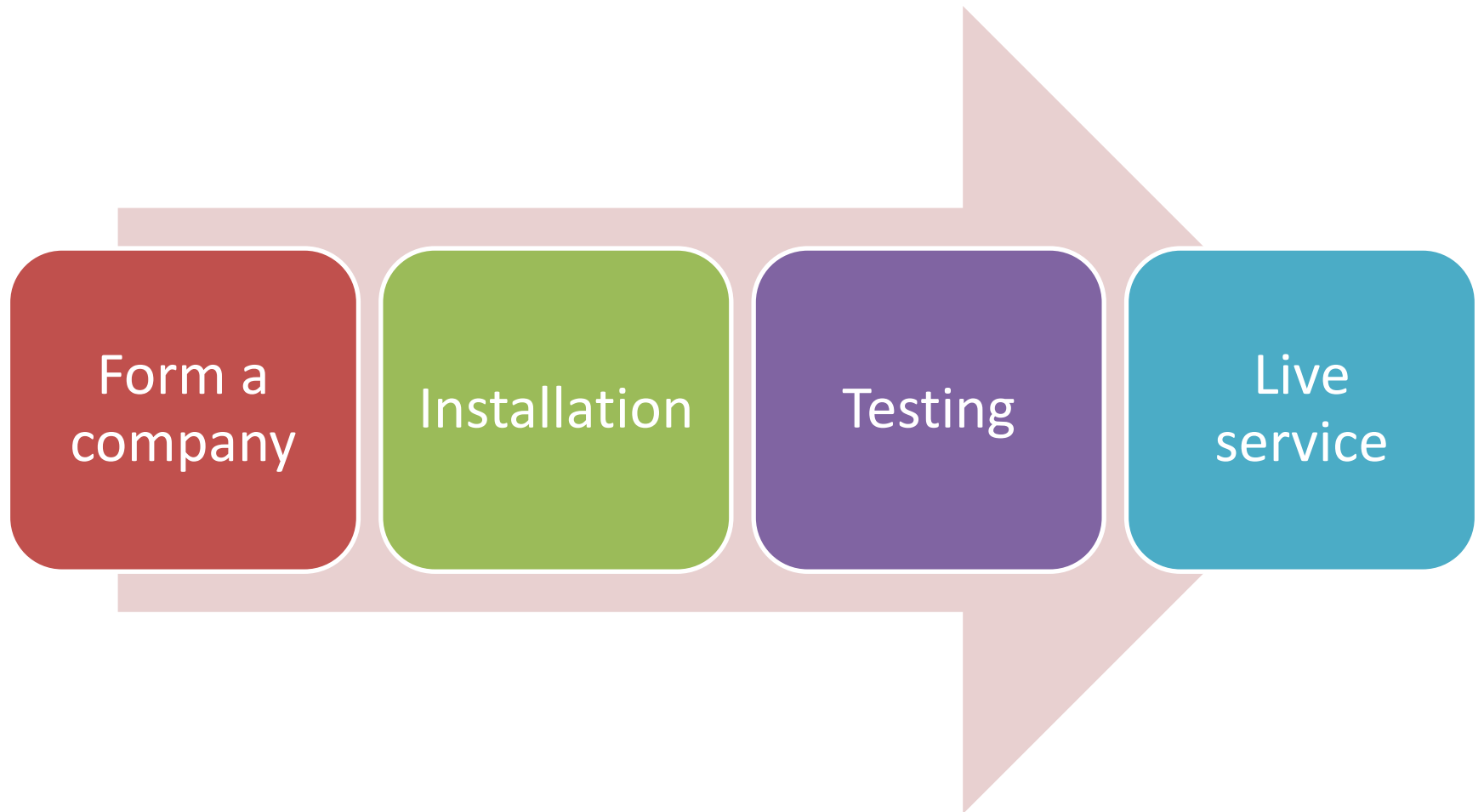
Initial
research

Canvass
interest

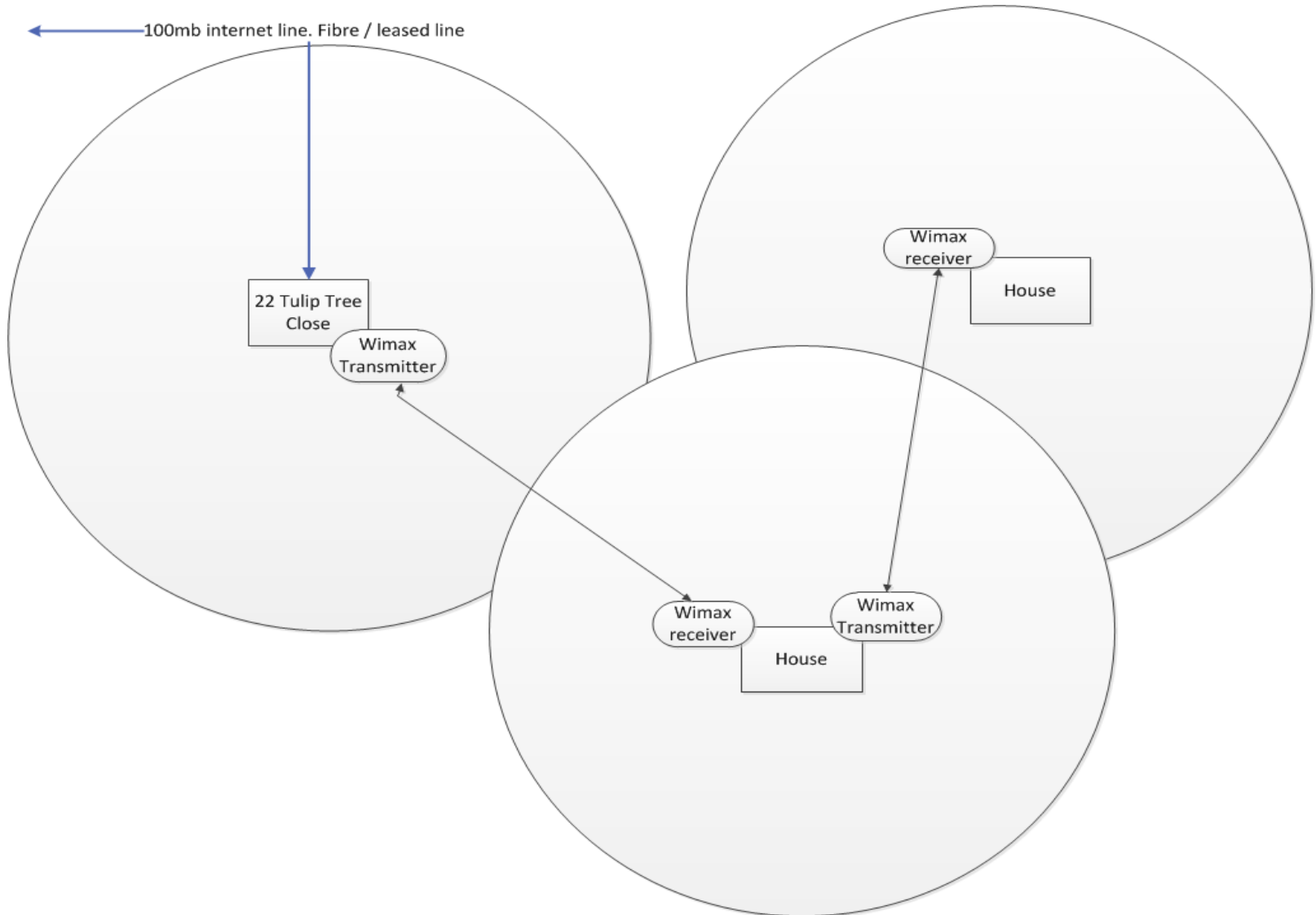
Site
survey

Detailed
proposal

After financial commitment



How it works (i)



How it works (ii)

- The leased line at 22 Tulip Tree Close is re-activated
 - Leaded line, 100Mb.
- A router receives this traffic.
- A WIMAX transmitter is used to send out a radio signal across Parklands
- WIMAX receivers receive the signal at each house and route the traffic to your broadband router
- WIMAX receivers also transmit / pass along other peoples traffic.
 - This extends range
 - Provides more than one signal to receive, in case a transmitter fails

I have never heard of WiMAX

- Used by businesses worldwide
 - Used on the Cranfield Technology Park
 - Used by 2sms.com for office comms and voice calls for 6 years
- Longer range than WiFi
- Existing, proven technology
- Usually too expensive for home use, unless as part of a group
- <http://en.wikipedia.org/wiki/WiMAX>

What is the commercial setup?

- A Ltd company owned by the subscribers
- Not for profit
- Working with a Telco for leased line and customer support
- (Volunteers needed to maintain the equipment at 22 Tulip Tree Close)

Q&A

- What is WIMAX?
 - Long range WiFi : <http://en.wikipedia.org/wiki/WiMAX>
- Where is it used?
 - Businesses use it everywhere in the UK
- How can you provide faster speeds than broadband?
 - There will be a fibre optic cable, which already exists, providing the line into Parklands
- What is the speed
 - The speed is 100Mb in both directions, and it is a leased line, meaning it is not shared
- What line speed will I experience
 - Residential customers will get 10Mb on a 10:1 contention
 - If you are the only household on the internet, you will get 10Mb.
 - If 10 houses are on at the same time, it will fall to 1Mb, still faster enough to stream internet TV.

What will it cost?

- **Business**
 - £350 set up
 - £40 per month
 - 20Mb shared no more than 5:1
 - Corporate VPN access
 - Optional fixed IP address
 - Proxy server
- **Residential**
 - £250 setup
 - £20 per month
 - 10Mb shared no more than 10:1
 - For reference, Virgin / BT / Sky normally share at 50:1 contention
 - Proxy server
 - Proxy server will store popular content, so if everyone wants to watch Corrie, it will be downloaded once to the base station, and then streamed from Parklands out to those who want it. In short it just makes the internet faster!
- ~~Corporate VPN~~
 - ~~Fixed IP address~~

Q&A

- Will the signal be strong enough?
 - Yes, WIMAX has a 400m range
- Will the signal affect my health?
 - No (less harmful than WiFi)
 - Both are microwave technologies
 - It exists in towns
 - It is on a Govt approved frequency
- Where will the base station be?
 - 22 Tulip Tree Close
- Am I permanently connected to the internet?
 - Yes
- Is my internet traffic private?
 - Yes, other residents cannot see your traffic
- Can the base station see my traffic?
 - Just as any other internet service provider can, Yes, authorised admin users could see your traffic.

Q&A

- What support will be given?
 - We will ask the community for volunteers to help. Training will be given
 - The main leased line will be managed and monitored by an external company
- What equipment is needed?
 - Subscribers will need a small ariel, about 1/6 the size of a Sky dish, to receive a Wimax signal
 - This then feeds into your normal Broadband router

Q&A

- I have BT vision – will it work?
 - No
- I have Virgin TV will it work?
 - No
- I have Sky on demand. Will it work?
 - Yes
- Will VOIP / Skype work?
 - Yes
- Can I watch internet TV?
 - Yes
- Is there spam / phishing / hacking protection?
 - Some, but you should also consider your own hardware or software firewall
- Is there content filtering?
 - No

Q&A

- I want to access my corporate VPN. Will it work?
 - Only if you subscribe to the business package.
- Is the service unlimited data download
 - In principle Yes, but we reserve the right to stop excessive traffic that impacts service levels of others
- Can I have a fixed IP address?
 - Yes, on the business package
- Can I host web sites on the connection?
 - No
- Who will provide the service
 - We will create Parklands Bromham Telecoms Ltd.

Q&A

- Why a 12 month contract?
 - We need to recover the cost of re-activating the leased line
 - The leased line is a 12 month contract
- Why a company?
 - Limited liability
 - Subscribers are owners
 - Transparency of accounts
 - Any profits fed back in reduced monthly fees
 - Setup fee will purchase your shares in the company. The cash is then used to purchase equipment.
- Why the £250 / £350 setup fee?
 - It costs £150 for the WIMAX antenna needed on your property.
 - The remaining £100 / £250 is needed for
 - It costs £1500 for the WIMAX transmitter base station
 - There is a cost to install the base station equipment
 - It costs £1000 for networking equipment on the base station
 - It costs £1000 for a proxy server

How are the costs broken down

- Monthly fee
 - £20 or £40
- Assume
 - 10 business customers
 - 20 residential customers
- £800 per month income
- Leased line
 - £600
- Power
 - £50
- Monitoring / support
 - £50
- £100 excess
 - Pay down of excess installation costs
 - Hardware replacement fund
 - Any profits paid back to subscribers

Management

- Directors appointed to the company
 - No salary
- Quarterly report to subscribers
 - Accounts
 - Service levels
 - Issues and resolutions
- Accounts filed to companies house
- Company would be VAT registered
- AGM to vote in / out Directors

Appendix

- Initial flier

Community internet

- I'm fed up with slow internet! Are you?
- I am looking to put community broadband into Parklands
- 100mb internet speed on pre-existing fibre connection, with WIMAX (WiFi+) signal to the Parklands estate.
- Costs would be approx £200 setup and £20 a month per house
 - Up to 20mb speeds up and down, unlimited (fair use) bandwidth
- Interested? If Yes, please confirm to parklands@investcope.com
 - **no obligation at this stage**, I just need to get 20-30 houses interested for the financial maths to stack up
- *No planning permission required for small ariel; WIMAX requires no broadcast license*
- *No council / government involvement or subsidy*
- *Not for profit company would be formed with subscribers as the owners*
- *Organiser - Tim King – 22 Tulip Tree Close – 0779 851 7370*
- *If we get sufficient interest, I will convene a public meeting.*