Wireless Broadbard Technologies Submission No. 44 11 AirNet

# **WIRELESS BROADBAND INQUIRY**

## A SUBMISSION TO THE HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON COMMUNICATIONS, INFORMATION TECHNOLOGY AND THE ARTS

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## 1. Preamble

Whilst other parties present possibilities based on specific technologies, AirNet has formed a culture that finds the right people who use the appropriate technologies for the right application in regards to each community.

Interception capabilities have been overlooked dramatically in all the submissions to this inquiry to date. Recent media releases, including the following <a href="http://www.theage.com.au/articles/2002/06/15/1023864366638.html">http://www.theage.com.au/articles/2002/06/15/1023864366638.html</a>, help to promote unregulated hobby and non-profit WLL networks which could threaten and / or undermine the large amount of effort and resources which have been invested in interception capability plans.

AirNet believes the existing regulatory environment is quite sound and could be improved with more effective policing, self-regulation and education.

AirNet is keen to work in-conjunction with this Committee, the ACA and Community groups towards a mutually beneficial and realistic goal.

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# 2. Executive Summary

There are numerous false misconceptions about wireless:

- Wireless Local Loop has limited opportunities FALSE
- WLL and WLAN are the same FALSE
- WLL is unsuited for large-scale, high-density services FALSE
- 3G is better for WLL than WLAN based technologies FALSE
- No wireless technology has delivered beyond niche markets FALSE
- No wireless technology has been successful or profitable FALSE
- Wireless has security problems greater than wireline FALSE
- Wireline is better than Wireless or vice-versa FALSE
- No carrier has delivered on all of the above FALSE
- AirNet has delivered on all of the above TRUE

AirNet is a Next Generation Telecommunications Carrier which has developed a **SUCCESSFUL AND PROFITABLE WIRELESS BUSINESS MODEL** that provides a rapid return on investment within 9 months. AirNet employs 30 people. It delivers wireless broadband to Government, Education and SME's. AirNet's headquarters are in Adelaide. The company is about to expand into another three (3) states across Australia.

AirNet has **WORLD LEADING WIRELESS EXPERTISE** which was used to deploy Australia's largest WLAN system for use during the World Congress on IT 2002 (WCIT2002) recently in Adelaide. (more info<sup>1</sup>)

Telecommunication Carriers' expectations, market models and community interest to date are too ambitious. All parties need to slow down and be realistic. Australia is a country of 20 million people and does not have the funding resources or the population of the likes of the United States of America or Europe (for example) to warrant swift deployment of broadband services to the masses.

AirNet has now launched its **COMMUNITY BROADBAND MODEL** that benefits Communities, Government, Australia and the Carrier. (more info<sup>2</sup>)

**NO** Australian carrier has focused on this specific opportunity – **until AirNet**.

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AirNet provides Wireless at WCIT2002 - <u>http://www.airnet.com.au/press/20020220 pr.asp</u>
 AirNet Community Broadband - <u>http://www.airnet.com.au/community</u>



# **3.** AirNet Community / Rural Broadband

In light of current broadband growth, AirNet has been liasing with community groups to design a product specifically for them. Where Community groups wish to supply and deploy their own infrastructure, AirNet will work with each group on a case by case basis to assist and ensure that the network is legal and cost effective for members.

This product is also available for deployment to Regional and Rural areas.

This has led AirNet to produce one of the most exciting developments in Australia's Broadband history – A TRUE LOW COST COMMUNITY BROADBAND SOLUTION. (more info<sup>3</sup>)

It is not medium dependant but a model that works across both Wireline and Wireless mediums.

#### • Introduction:

"There is nothing else out there that is quite like this," quotes Daniel.

The AirNet Community Network strategy is designed to help community wireless groups get legal and off the ground. With already established repeater points in operation, AirNet's infrastructure is primed to catalyse sharing of unlimited amounts of information on a low latency broadband network. This is ideal for gaming groups, peerto-peer file sharing and much more. This will help any community group who does not have a telecommunications license but wish to provide exceptional value carriage services to members and clients.

#### • The Product:

A 512/512 kbps broadband connection.

This is not restricted to wireless technologies only, other services such as ADSL, ISDN, DoV and 56k modem will also be able to partake in the community networks (data rates will vary accordingly).

#### The Service:

Unlimited data transfer within the community network.

#### • Value Added Services:

Low cost Telephony, Video Conferencing and Video Steaming<sup>4</sup>.

The Cost:

Only \$499 bond for customer premises equipment . \$69 per month carriage fee. (conditions apply<sup>5</sup>)

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<sup>&</sup>lt;sup>3</sup> AirNet Community Broadband - <u>http://www.airnet.com.au/community</u>

<sup>&</sup>lt;sup>4</sup> Copyright issues need to be agreed with appropriate content providers

<sup>&</sup>lt;sup>5</sup> AirNet Community Broadband - <u>http://www.airnet.com.au/community</u>



# 4. The Terms of Reference

The Committee has been asked by the Minister for Communications, Information Technology and the Arts, to inquire and report on the current and potential use of wireless technologies to provide broadband communication services in Australia, including regional Australia, having particular regard to the following:

- The current rollout of wireless broadband technologies in Australia and overseas including wireless LAN (using the 802.11 standard), 3G (eg UMTS, W-CDMA), bluetooth, LMDS, MMDS, wireless local loop (WLL) and satellite (*Response - Section 5.1*);
- The inter-relationship between the various types of wireless broadband technologies (*Response Section 5.2*);
- The benefits and limitations on the use of wireless broadband technologies compared with cable and copper based broadband delivery platforms (*Response Section 5.3*);
- The potential for wireless broadband technologies to provide a 'last mile' broadband solution, particularly in rural and regional areas, and to encourage the development and use of broadband content applications (*Response Section 5.4*);
- The effect of the telecommunications regulatory regime, including spectrum regulation, on the development and use of wireless broadband technologies, in particular the Radiocommunications Act (1992) the Telecommunications Act (1997), and Parts XIB and XIC of the Trade Practices Act (*Response Section 5.5*);
- Whether Government should make any changes to the telecommunications regulatory regime to ensure that Australia extracts the maximum economic and social benefits from the use of wireless broadband technologies (*Response Section 5.6*);
- Likely future national and international trends in the development and use of wireless broadband technologies (*Response Section 5.7*).

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# 5. Response to The Terms of Reference

### 5.1. The Current Rollout of Wireless Technologies

There are numerous wireless technologies including:

- Wireless Lan (WLAN) based technologies
- 2.5G
- 3G
- Bluetooth
- LMDS, MMDS
- Wireless Local Loop
- Satellite

## 5.2. The Inter-Relationship of Wireless Technologies

Firstly, in this day and age most technologies are able to "talk" to each other, if not then they are too proprietary and therefore are vendor focused not consumer targeted.

No one technology will be suitable for everything.

A day in the life of Bob:

- 0700-0755 Bob is eating his breakfast while he watches the latest CNN briefing live on his set-top box, which is using ADSL broadband (supplied by AirNet) to connect to his IPTV broadcaster (supplied by ipaTV Solutions). He decides to rent a video to view when he gets home, so he views the list of latest releases via ipaTV and chooses Minority Report with Tom Cruise. His settop box starts downloading the movie.
- 0755-0800 Bob downloads his morning emails to his PDA (purchased from Tandy's) via WLAN (supplied by Integrity Data Systems) to his set-top box (supplied by ipaTV Solutions).
- 0800-0900 Bob drives to work, he's stuck on the freeway in a traffic-jam, so he decides to check his emails on his PDA. One of his emails is a security message from his house alarm stating the front door is unlocked. He connects his PDA via 3G (supplied by Telstra and m.Net) to the eHome website, he checks the webcam views in his house – all is okay. Bob then enters his password and locks his front door at the touch of a button (service supplied by eHome & Lockwood).

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- 0900-0928 He arrives at the office and synchronises his laptop with his network. His office network is connected to the internet via a wireless broadband link (supplied by AirNet).
- 0928-0930 Bob reads something disturbing in an email and rings his solicitor, Rick. His solicitor happens to be in the building across the road. The phone call finds the cheapest route - the AirNet Wireless Local Loop which both offices are connected to. Because no exchange is used and both Bob and Rick are AirNet customers they enjoy a 2 min free flagfall call.
- 0930-1030 Bob enters his meeting with PDA in hand. The boss drills Bob heavily on some pertinent issues. Bob answers everything with ease but for his own sanity wants to check something. He connects his PDA to the intranet via WLAN and checks the latest cashflow figures - he's right.
- 1030-1230 Bob continues with his everyday work schedule.
- 1230-1330 Bob goes out for lunch. Uses his PDA connected to a 3G device to make a webcam call to his home to check on his dog Bert. Bob can't find Bert yet, but keeps trying. Bob enters CIBO Espresso Café and doesn't want to spend too much on his 3G call so he switches his PDA over to a WLAN HotSpot in the café (supplied by AirNet). While Bob waits for his lunch, and Bert, he books tickets for the opera with his wireless PDA. A loud noise comes from his PDA and everyone in the cafe looks at Bob. It's Bert - he was hiding.

Bob is running 5 minutes late for work.He's about 100 metres away from the café now but the AirNet HotSpot still works, so he decides to make a VoIP call to his personal assistant Debbie using his Wireless PDA through the HotSpot.

As Bob walks back to work he walks past a Virgin Music store. His PDA starts beeping. The message "George Harrison CD's on sale for \$9.95 now" pops up on the screen of his PDA. A bluetooth transmitter in the shop sent the message. After walking 5 metres away from the shop the message disappears.

- Bob returns and continues with his everyday work schedule. 1335-0600
- 0700-0900 Bob arrives back home. He decides to view his video he downloaded onto his set-top box (ipaTV Solutions). Of course he can only view it for 24 hours before he has to rent it again.

Most of these technologies and services are available now.<sup>6</sup>

Саналия в монительного славности и прости и противности противности собрание и проводили и противности и проводили и проводи Проводили и провод Проводили и про 20020627\_AirNet\_Public\_Submission\_016.doc

<sup>&</sup>lt;sup>6</sup> AirNet's broadband solutions are available now with AirNet HotSpots presently being rolled out across metro areas. IpaTV Solutions are presently trying to arrange copyright agreementss with movie houses but finds the Foxtel arrangement too cumbersome. Integrity Data Systems presently have stock of WLAN equipment. Ehome & Lockwood are furthering their R&D testing. The m.Net 3G network is still in its infancy with R&D testing.



It is therefore inevitable that the technologies will be able to inter-relate with each other, otherwise Bob will not be able to carry out his normal duties he takes for granted.

Secondly, this scenario has shown that a second tier carrier can provide more competitive telecommunications than an incumbent and that it is **consumer driven**.

## 5.3. The Benefits & Limitations

There are numerous benefits and limitations to the various wireless technologies:

Wireless Lan (WLAN) Technologies 802.11 (Indoor)

- Network cost is minimal \$1000's
- Bandwidth range: 0-11 Mbps (true throughput of 5.5 Mbps)
- Distance of operation: 0-150m radius (approx.)
- Good for: HotSpots, Schools, Homes & Offices
- Not Good For: Community or Commercial Networks

#### 2.5G

- 2.5G uses existing GSM infrastructure
- Network cost is minimal \$millions (over exisiting infrastructure)
- Bandwidth range: 0-50 Kbps
- Distance of operation: 0-20km radius (approx.)
- Good for: Mobile Salesmen
- Not Good for: High data downloads, too costly, too slow

#### 3G

- 3G offers higher bandwidth than 2.5G
- Network cost is very expensive \$billions (new infrastructure)
- Bandwidth range: 0-376 Kbps
- Distance of operation: 0-250m radius (approx.)
- Good for: High Level Exec's on the move
- Not Good for: High data downloads, too costly

#### Bluetooth

- Network cost is minimal \$100-1000's
- Bandwidth range: 0-256 Kbps
- Distance of operation: 0-10m radius (approx.)
- Good for: Synchronising PDA's, Mobile Phones and other portable devices
- Not Good for: High data downloads, high-density or long range

#### LMDS, MMDS

- Network cost \$100,000's-\$millions
- Bandwidth range: 0-11 Mbps
- Distance of operation: 0-5,000m radius (approx.)
- Good for: Alternative to local loop
- Not Good for: Other cheaper products available like WLL

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Wireless Local Loop Technologies (Outdoor)

- Network cost is minimal \$100,000's (easily expandable)
- Bandwidth range: 0-108 Mbps
- Distance of operation: 0-50km radius (approx.)
- Good for: "LAST-MILE" Broadband requirements for Government, Education, Business, Communities, Rural
- Not Good for: Long Haul Connections

#### Satellite

- Network cost \$millions-billions
- Bandwidth range: 0-3 Gbps
- Distance of operation: irrelevant
- Good for: Telcos and ISPs, Multinational companies
- Not Good For: Too costly for Small business

Satellite (Utilising Sun Wireless Technology)

- Network cost \$100,000's (normally \$millions<sup>7</sup>)
- Bandwidth range: 0-45 Mbps
- Distance of operation: 0-1000km radius (approx.)

## 5.4. The "Last-Mile" Potential

#### "The correct technology for each application," AirNet.<sup>8</sup>

Most of the technologies above are suitable for "last-mile" deployment, BUT not all are suitable for all applications.

It is this Customer Centric approach that AirNet employs. AirNet views the medium as mostly irrelevant, because that's how the customer sees it.

The customer requires a solution for their needs and does not want to be puzzled by the various arrays of technologies.

#### 5.5. The Regulatory Regime – Present

AirNet believes the current scheme works well and has been created with consideration to technical and political interests. Second Tier carriers are only new and still require time to be able to demonstrate how well the existing regulatory regime can work.

Some of the proposals to allow hobbyists and not-for-profit organisations to create wireless broadband networks over which normal people, with no special qualifications, can link their computers threaten many of the great successes the existing regulatory regime has achieved.

Certainly in light of recent world events and the formation of the Business-Government Task Force on Critical Infrastructure (<u>http://www.cript.gov.au/cript/</u>) it is very beneficial to foster networks with a

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<sup>&</sup>lt;sup>7</sup> See Sun Wireless – <u>http://www.sunwireless.com.au</u>

<sup>&</sup>lt;sup>8</sup> AirNet's only approach to broadband delivery



high level of redundancy and reliability. Wireless Local Loop technologies allow for this with appropriate co-ordination and know-how. AirNet is actively fostering and incrementally approaching community groups to assist in creating a co-ordinated, highly reliable network, which also has provision for interception capability. This assists Australian Law enforcement agencies to protect the national interests.

Allowing community groups to deploy networks in a rogue fashion would be a great opportunity for persons wishing to act in an untoward nature against the interests of the Australian public to create their own infrastructure without knowledge to Australian law enforcement agencies.

Interception capability at the levels currently employed for Australian agencies would reduce to a minimum and would be very difficult to achieve.

#### 5.6. The Regulatory Regime – Future

Spectrum is a limited resource.

AirNet agrees with Integrity Data Systems' approach for the registration of links, whether by the carrier, the installer or the user.

This would curtail some of the present illegal practices by some suppliers, installers and ISP's.

Therefore enabling both the ACA and the Second Tier Carrier to be more informed of possible interference by existing links.

AirNet is willing to work with Community Groups such as "Melbourne Wireless" (Appendix A).

AirNet is keen to discuss this issue further in a private consultative session with the ACA.

#### 5.7. Future Trends

Wireless technologies in all their variant forms will continue to improve over time, as will the skills and knowledge base of organisations deploying wireless networks.

A co-ordinated approach will allow for multiple networks to exist with minimal interference to each other, giving rise to a competitive telecommunications environment.

Already wireless technologies are delivering ADSL performance at the same price point, such implementations could quite readily be deployed in regional areas – all that is required is for the right people to be involved who have ability and realistic expectations.

"Dreams are faithful interpreters of our inclinations; but there is art required to sort and understand them." (W.C. Hazlitt 1580-88)

●●包括小器化制造管理器的服装,从生产部门的原始,创作、保留的原则、从外外的、用户的中心、行用的制造部分的进行管理部分的 网络网络戴



## 6. Who is AirNet

#### 6.1. History

AirNet Commercial Australia Ltd is a licensed Next-Generation Telecommunications' Carrier founded in Adelaide in 1999 (Carrier Number 43).

The Company is well advanced in rolling out its national wireless broadband network commencing in Adelaide that provides organisations and individuals with fixed and roaming broadband access between office locations and the Internet.

AirNet provides an alternative broadband first-mile-last-mile<sup>9</sup> means of interconnecting businesses and people to each other and the online economy.

AirNet WLL infrastructure provides a 100% coverage of the Adelaide CBD and a 65% (approx) coverage of the greater metropolitan Adelaide (Diagram 1).

Rooftop access has been secured at key CBD buildings and metropolitan locations in and around Adelaide. The company is servicing a growing number of Government, education and business subscribers who have formed the core of its customer base and revenue stream. The front-log of orders is growing significantly faster than the current rate of fulfillment and opportunities to expand the rollout interstate have emerged.

The company has not diverted from its original business plan since 1999.

## 6.2. Technology Overview

AirNet's broadband carriage services are being delivered cheaper, faster and more reliably than many conventional methods of data exchange by utilising new wireless technology to form a TCP/IP based Wireless Local Loop (WLL) data network to service clients in CBDs, suburbs and regional areas.

The network comprises of technology that operates in a combination of licensed and unlicensed frequency bands. It has been purposefully designed to deliver high-speed data services at prices that are significantly less than competing services such as ISDN, Frame Relay, DDS Fastway and LMDS and which outperform DSL offerings.

The company has developed an innovative approach that delivers broadband services at lower price points using RJ45 ethernet tail circuits that can easily be connected into client networks in a user friendly method.

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<sup>&</sup>lt;sup>9</sup> the distance between the client and the service provider



**DIAGRAM 1** AirNet's present WLL Coverage of Adelaide, S.A.



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6.3. Highlights of The Wireless Opportunity

AirNet is a licensed Australian Telecommunications Carrier, number 043.

The Company has positioned itself to take advantage of the rapid growth in Fixed Wireless broadband.

"The global market is projected to see a 140 percent compound annual growth rate over the next five years and will generate over \$16 billion in revenue."<sup>10</sup>

**NO** Australian carrier has focused on this specific opportunity – until AirNet. The company is 9-12months ahead of its competitors.

The company has deployed the first phase rollout of wireless technology which provides high speed data access in both directions unlike common satellite and Asymmetric Digital Subscriber Line (ADSL) services which generally have slower upload speeds.

A unique wireless roaming service (WLAN) had been introduced by the company in 1999 ahead of any other company in Australia. It was this specific Intellectual Property that AirNet developed between 1999 and 2002 that was used to deploy Australia's largest WLAN system for use during the World Congress on IT 2002 (WCIT2002) recently in Adelaide. (Contracted by m.Net Corporation Ltd to deliver the service.)

"More people will be accessing the Internet via Wireless Net devices than via wired connections." <sup>11</sup>

The company has developed a **SUCCESSFUL AND PROFITABLE WIRELESS BUSINESS MODEL** that provides a rapid return on investment within 9 months.

"The Internet services revenues in Australia will grow from \$127.3 million in 1997 to over \$16 billion in 2002."<sup>12</sup>

Alliances have been formed with technology providers to source best-in-class technology.

The company is securing rights to deliver additional valued-added services to its clients over its broadband network.

Currently AirNet has a cost advantage due to innovative systems development, which of course stems from AirNet's in-house R&D.

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<sup>&</sup>lt;sup>10</sup> study by the Strategis Group

<sup>&</sup>lt;sup>11</sup> study by International Data Corporation

<sup>&</sup>lt;sup>12</sup> study by IDC Australia



#### 6.4. Future Expansion

AirNet planned for its future expansion carefully. Unlike others before it, AirNet has succeeded in its model and is now Cashflow positive.

It is this innovative model that AirNet is now releasing in the Eastern Seaboard states concurrently as of June 30<sup>th</sup>.

From June 30<sup>th</sup> AirNet releases its Community Broadband Products concurrently in three (3) major states of Australia:

- South Australia;
- Victoria;
- Queensland.

#### 6.5. Employment

AirNet has grown from 3 FTE in 1999 to 30 FTE in 2002. A growth rate of 1000% in 3 years. The company also employs numerous consultants on a full-time basis.

The company is about to emabark on employing local people in Victoria, New South Wales and Queensland for our interstate expansions.

It is envisaged that the company will be employing approximately 40 FTE by end 2002 and 50 FTE by end 2003.

### 6.6. Innovations

AirNet has been leading the Wireless arena with its competitive Wireless Local Loop systems.

Simple innovation has brought about price points which compete with existing wireline technologies such as ADSL and ISDN. AirNet offers WLL services 4 times faster than ISDN at the same price, and ADSL performance for the same price as competitors ADSL.

#### 6.7. Alliances

AirNet has numerous Alliances in various complementary fields, including:

Collaborative Consortium - m.Net Corporation Ltd, SA

m.Net Corporation aims to give Australia a global lead in the exciting new world of the wireless Internet and mobile commerce. m. Net - a consortium of multinationals, Australian IT and Telecommunication companies, Government and research organisations - has been established to create new opportunities in the wireless arena including: 3G, WLAN and WLL opportunities.

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Satellite & Terrestrial Technologies - Sun Wireless, SA

Sun Wireless Communications Pty Ltd offers a complete modular range of integrated, flexible and affordable communications solutions and services, including:

- Award-winning "dishless" satellite antenna technology;
- Super efficient up/down signal converter products for a range of bandwidth efficient applications;
- Advanced CDMA modems and cards;
- Digital switches in small, medium and large arrays using the latest CDMA technologies.
- Core Network Infrastructure Cisco Systems, Multinational

Network infrastructure vendor for core equipment to AirNet. Also provider of wireless hardware for the World Congress on IT 2002 recently held in Adelaide.

Network Systems Provider – Microbits, SA

Government provider of IT infrastructure to the South Australian Government and SME's.

• Education Solutions – CSM, NT & SA

Government provider to the Education Department of the Northern Territory for IT infrastructure.

• Research & Development – RMIT University, VIC

An innovative and forward thinking university with some globally leading wireless research teams in the fields of 3G, Satellite and Terrestrial systems.

Research & Development - Project Eclectic, SA

An innovative locally based R&D team providing leading edge solutions in Wireless and Core Network technologies to AirNet.

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# **7.** Other Points to Consider

### 7.1. Interception Capabilities

Interception capabilities have been overlooked dramatically in all the submissions to this inquiry to date. Recent media releases, including the following <u>http://www.theage.com.au/articles/2002/06/15/1023864366638.html</u>, help to promote unregulated hobby and non-profit WLL networks will undermine the large amount of effort and resources which have been invested in ICP.

AirNet is keen to discuss this issue further in a private consultative session with the ACA.

#### 7.2. Service Levels

Without service levels broadband to the masses will be akin to the Wild West.

Community Groups are crying out for broadband and further lapsing of rules. If an uncontrolled or unregulated approach is chosen only the vendors will benefit at theend of the day.

Systems and frequencies will be so oversubscribed and haphazard that there will be no quality of service.

Thus the broadband dream will become a broadband nightmare.

Service levels can only be employed through regulatory measures involving the ACA, the Carrier and the community.

### 7.3. Employment

Adverse decisions (like the easig of regulations) by the Government will send a shockwave through the Telecommunications Industry with unfavourable employment repercussions.

There are numerous Telecommunications Carriers that are still trying to become cashflow positive (except for AirNet and a handful of others).

Employment within these companies range in the 1000's across Australia.

Companies genuinely trying to further Australia's interest in broadband would be drastically effected.

Such companies are involved in leading edge R&D including m.Net Corporation Ltd.

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## 7.4. Government Kudos

The Government should consider the argument of "Easing of Regulations for Community Groups <u>vs</u> Realistic Quality Broadband to the Australian public" keeping in mind quality of service and interception capabilities.

The Government has a commitment to ensure that all Australians gain maximum economic and social benefits from the use of broadband technologies.

"Maximum economic" benefits also imply quality.

Quality requires some form of control and co-ordination.

Control requires all parties to form a set of mutually agreed benchmarks.

Parties adhering to benchmarks will then deliver quality.

Thus the Government delivers a true "social" benefit.

#### 7.5. Incumbent Unfair Advantage

Telstra was recently quoted that they are interested in integrating some of these low cost Wireless technologies in their consumer and business product offerings.

The Government should be wary of this as Telstra would have an UNFAIR advantage over other smaller carriers who have pioneered such services.

Should Telstra wish to offer such services it may be forced to use the services of a Second Tier Carrier to help deployment. This would provide greater benefit to all parties.

An example would be to contract the services of AirNet through a consortium like m.Net where both Telstra and AirNet are common members and shareholders.

Why should Second Tier carriers always be on the backfoot to Telstra? – There is no reason why such a behemoth should be allowed to continue with such practices if Australia is genuinely attempting to have a competitive telecommunications environment.

Telstra is provides very good National Backbone Telecommunications Carrier, however its processes are too cumbersome and timely to overcome for any Second Tier Carriers to benefit from the wide reaching national network.

AirNet is available to discuss this issue further in a private consultative session with the ACA and the ACCC.

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#### 7.6. Grace Period

The Government should allow a 24 month "Grace Period" for the existing selfregulation model to be duly tested. An opportunity should be given for 2<sup>nd</sup> tier carriers to prove that the existing regulatory model can work for community networks and can be adopted across Australia.

AirNet is happy to discuss this issue further in a private consultative session with the ACA.

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# 8. Win-Win Solution for All

#### 8.1. Win-Win For All

The AirNet proposed solution provides a win-win playing field for all the participants.

AirNet Community Broadband is available **today**.

## 8.2. Benefits to The Community

- Broadband
- Realistic pricing<sup>13</sup>

### 8.3. Benefits to The Government

- Economic and Social benefits
- Ease of communications deployment to Rural and Regional areas

#### 8.4. Benefits to Australia

- Realistic Broadband technologies
- Mass market appeal for interglobal communication via the Internet

## 8.5. Benefits to AirNet

AirNet benefits in the following ways:

- Employment levels rise
- R&D increases rapidly
- Business remains competitive and stable
- Opportunity for Export increases

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<sup>&</sup>lt;sup>13</sup> AirNet Community Broadband - <u>http://www.airnet.com.au/community</u>



## 9. Appendix

Below is a copy of the email following a discussion between the Community Group, Melbourne Wireless, and the Carrier, AirNet:

-----Original Message-----From: Colvin Burgess Sent: Friday, 28 June 2002 12:17 PM To: 'president@wireless.org.au' Subject: Community Wireless Networks.

Hello Steven,

Following our conversation, I would like to meet with you the next time I am in Melbourne. AirNet is a licenced telecommunications carrier which has been operating for about 2 years and we focus upon WLL broadband services. AirNet also provides DSL services and standard dial up products.

AirNet's philosphy is quite different from the larger incumbents and we supply our services with 'economy' and value for money in mind.

I would like to explore with you symbiotic opportunities. These may include AirNet issuing a nominated declaration allowing Melbourne Wireless to operate legally within a short time frame.

Most importantly I would like to foster a constructive relationship between hobby/non-profit networks and commercial activities. Together I believe we can fast track a legal environment for enthusiasts to experiment legally and devolop technologies sensibly and with a win-win outcome. I am a strong believer in the benefits a community network can deliver (this also includes using wireline technologies) especially with unlimited amounts of data transfer within the community network.

Should we be able to find a way to work together, then opportunities for community members to utilise commercial services such as VoIP gateways to PSTN networks and peering with other community networks in other areas and states is possible - all for very economical rates.

I look forward to hearing from you.

Kind Regards

Colvin Burgess http://www.airnet.com.au Voice: +61 8 8211 8211 Fax: +61 8 8211 9333 Email: <u>colvinb@airnet.com.au</u> "One day we'll all communicate this way."

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