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Voice & Data Communications Infrastructure as a Major Pillar in Developing Northern Australia

Submission for The White Paper on Developing Northern Australia

Submitted By:

The Forum 4 Business Growth

http://f4bg.com.au

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Voice & Data Communications Infrastructure as a Major Pillar in Developing Northern Australia

The Forum 4 Business Growth (F4BG) is an association of Micro & Small Businesses located in Cairns, Queensland.

We make this submission in response for input as requested in "The Coalition's Vision for Developing Northern Australia" published in June 2013.

The thrust & scope of this submission is to highlight the importance & benefits to business of the roll out of the NBN in these rural and remote regions. The NBN should be noted in "The White Paper" as a **Major Pillar** for the development of the region.

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Voice & Data Communications Infrastructure as a Major Pillar in Developing Northern Australia

- * The F4BG notes that Communication Infrastructure is not noted as one of the 5 Pillars of this initiative and we feel it should.
- * There is passing mention on page 11 entitled "Advanced Services" as one of 5 Pillars. We feel that NBN Data & Voice Communications should be the 6th Pillar for the reasons mentioned in this, our submission.
- * Just to mention the importance of good communication infrastructure is not enough. The governments of Australia now have the opportunity to collaborate and give priority to the NBN model. Not much will happen in the region without confidence in our voice & data infrastructure and this could be delivered using the already established NBN initiative.

- Businesses will will be able to promote themselves using photos and videos over faster internet. ("pictures say 1000 words")
- * Businesses will **save money on IT support** with higher speeds for remote support agents (no call out fees)
- * The NBN will be more reliable and more robust than our old copper infrastructure (less outages)
- * Even if the government changes hands and results in a completely different NBN, online growth in Australia will continue. (Internet speeds will have to get faster to supple Bandwidth Demand)

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- * 92% of online Australians who have a web presence (a web site), have a home connection and 93% use the internet daily. Time spent on the internet was 21 Hours, 54 Minutes per week in 2011. (Source: Neilson's Australian Online Landscape Report 2012) The more users on the net the greater the bandwidth needed.
- * For **online shopping, graphics and/or video are a very necessary** features to promote your products & services online (The extra bandwidth the NBN offers will help the web servers produce the desired results)
- * According to the Nielson's Report, one in five Australians shop or browse online between 6.00 PM and 10.00 PM (peak time for users online) thus causing "sag & lag" on slow existing infrastructure. Businesses all waste time reloading browsers and resetting routers. Not so with NBN speeds.

- * With more people connected to the NBN, businesses will be able to promote themselves using video technology such as You Tube for free. The more businesses that use these modern technologies the more people will be forced to use a greater band with such as that provided by NBN bandwidth.
- * If a business is on the tail end of the NBN roll out and it has a slow connection, it can host it's e-Commerce Website in "The Cloud" where the host has access to a fast internet server as a temporary measure until it can connect to NBN to host your it's own e-Commerce web presence.

- * Telephony over the Internet has been around for some time. A few system integrators have mastered the art of providing quality communications, over the existing ADSL infrastructure.
- * So in regard to telephony, what will the NBN provide business that it does not have already?:
 - * No need for an extra dedicated ADSL broadband for voice services
 - * Both Voice and Data services can use the one NBN connection
 - * They can connect more business phone handsets to the one NBN service, thus providing more simultaneous sessions.
 - * No ADSL outages will provide less reliance on copper failback services (less line rentals and capital outlay for hardware interfaces)



- * NBN will reduce the high cost of IT maintenance with complex in- house Computer Networks, as business will now be able to use cloud based server facilities in fully maintained data centres.
- * Higher NBN speeds means that business will be able to **conduct backups to** and from Cloud Based Data Centres, 24/7.
- * High definition and reliable Video conferencing means businesses can reduce travelling costs. Businesses will now be able to hold face to face group meetings online.



- Greater NBN bandwidth means business could save on expensive commercial floor space by decentralising staff or contractors in a work from home business model.
- * Business could recruit better, more qualified staff, not limited by the geographical location of the employee or contractor. (less cost of desk)
- NBN Co is a wholesaler thus providing a level playing field for retailers to be in competition with one another (This means prices are driven down with competition)
- * The NBN can provide speeds greater than 100 MBPS/40MBPS but most businesses will find this more than sufficient as it will be approximately 8 times greater speed than the existing ADSL2+ speeds.

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NBN Bits and Pieces

NBN Co will provide all the equipment that is needed to connect business premises or homes to the service. The internal equipment that will be provided is called a network termination device (NTD) Pictured Below.

The back of your Network Termination Device will have a row of ports like this;

Voice (UNI-V) Ports		Data (UNI-D) Ports	Power	Fibre Optic
A THUN 1 2	RESET	2 S 4	POWER	- Company of the Comp
The two voice (UNI-V) ports are to connect telephones, using RJ-11 cables.		The four data (UNI-D) ports are to connect data and in-band video services, using Ethernet RJ-45 cables.		DO NOT DISCONNECT this cable unless instructed to do so b your service provider



- Businesses should place the NTD near their computer server and/or network
 switch
- * They will need to keep at least two copper PSTN lines for around 6 months after the NBN is connected. This is so they will be able to have a failover mechanism and/or ADSL to allow for any teething problems with the NBN implementation.
- * They need to temper their expectations re the speed of the NBN with the knowledge that some websites they browse will not be any faster. This is because those websites are hosted on slower connections. However connection to them will have better latency thus providing a more reliable connection with less drop outs.
- * Even if some businesses are scheduled for a late roll out it is important for them to prepare now! (avoid the rush on the system integrators and professional services)

- * If a business does not have a web presence, **now is the time to develop it with graphics and video and/or "flash" content.** (Even if the current speeds are not conducive to this media)
- * If a business ships products and services they need to develop an online shop now (markets are moving to online purchasing)
- * When a business gets an online presence, they will need reasonably priced merchant facilities for credit card transactions. Service providers such as PayPal, Poli Payments or eWAY are amongst a few.
- * If a business is on the tail end of the NBN roll out and has a slow connection now, it can host its e-Commerce Website in "The Cloud" as a temporary measure.

- * High definition and reliable Video conferencing means business can reduce its travelling costs.(Applications such as "Citrix GoToMeeting" are available for a free trial)
- * NBN Co is a wholesaler providing a level playing field for retailers to be in competition with one another. At this point the retail players are as follows:
 - * Internode
 - * iiNet
 - * Optus
 - * I Primus
 - * Telstra
 - * Exetel
 - * MynetFone
 - * Eftel
- * Businesses should **Move to VoIP (IP Telephony) now** as maintenance of the existing copper phone network will be given a lower priority

- * The NBN backup power facilities will only provide power to two PSTN copper lines. Therefore businesses get a UPS (Uninterrupted Power Supply) for business servers, workstations and router. This will depend on how "Mission Critical" is their business and voice data.
- * Now is the time for business to ensure cabling is properly patched and terminated. This is a precaution against speed bottlenecks caused by poor cabling work.
- * Businesses should ask a systems integrator to project manage migration to the NBN. This will **help businesses choose tailored call plans and carriers** to provider appropriate services across all their users.
- * Open Source platforms provide a very low cost of ownership. Users can be trained to administer and program their own systems.

Written by Mark Glann in collaboration with F4BG 23rd February 2014

END OF SUBMISSION

