Submission 018
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From:
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To: Committee, IC (REPS)
Subject: NBN Submission

To whom it may concern,

I wish to make a brief informal submission in regards to the NBN. I am qualified in computer science and spend most of my time figuring out ways to leverage existing technology. Please forgive the lack of detail as I share these thoughts.

There are two areas where the rollout of this new infrastructure may bring significant ultility and opportunities in future which many people don't think of because they are not in wide use. This is a chance for Australia to significantly add new functions and opportunities. The two areas I refer to are:

1. Enhanced geo-location (using SDS-TWR)
2. Ubiquitous low-cost environmental sensor infreastructure.

Both of these technologies would provide massive benefits with negligible extra cost.

Existing GPS systems are innacurate and fail under many circumstances. As a data network is rolled out, there is the opportunity to significantly enhance location-based data by triangulating wireless data. It's hard to imagine a limit to the possible future applications. In spite of great objection, even such things as driverless cars and planes, street sweepers, road repairs or lawn mowing become imaginable with this enhanced accuracy. Business can potentially target push-advertising as customers walk past. The advantages of significantly enhancing the accuracy of real-time location applications is immeasurable. It opens an entirely new field of technology. It also provides a backup when the old satellite GPS system fails which can and does happen in several circumstances.

The provision of a grid of wireless access points in the network would also mean the critical task of deploying remote sensors for all sorts of applications becomes a negligible cost. At the climate change conference i Cancun, the urgent need for more detailed sensor data was flagged as a challenge which must be addressed. As soon as you have some wi-fi network signal available, that problem is laregely solved for little or no cost. Once again, there is no telling the scope of benefits which could flow from such a ubiquitous grid of sensors. Everything from air, water, soil, sound, temperature, humidity, traffic flows, crop growth, wildlife, fire, and toads could potentially be monitored with cheap off-the-shelf devices once there is a signal they can connect to.

I realise I have not addressed several issues involved in the deployment of these two technologies, but for the low cost of adding wi-fi data services across the country, the advantages are huge and open all sorts of exciting possibilities in the nation's future.

If you have any questions, please don't hesitate to contact me. I am happy to provide added technical details in more detail.

Regards,

Darren Merritt