

# SIMON SAYS

While we are looking at our digital future from inside the profession, who better to ask about the really big picture than Simon Hackett? Simon is internationally recognised as a “thinker and a doer, a businessman who proudly wears his tech-savvies on his sleeve”. He’s won more awards for his leadership and innovation in technology than you can shake a laser pointer at, and early on in his career was involved in the establishment of the Australian Academic and Research Network (AARNet), which laid the groundwork for the commercial Internet in Australia.

Simon went on to found a little business called Internode, which by 2011 grew into Australia’s largest privately-owned broadband company, winning a slew of awards and consistently topping independent customer satisfaction surveys. He also established Agile Communications, turning his attention to pioneering internet protocol-based communications in regional Australia. He sold Internode in 2012 to iiNet (he’s now a non-executive director of that company) and is currently setting up a new facility to foster the exploration of even more technological innovation, called Base64.

Right now, through his ongoing involvement with Internode, Simon keenly supports the roll-out of free high speed WiFi across the City of Adelaide. Adelaide is now on track to be the first capital city to have free WiFi access throughout the CBD and the city’s famous parkland-based festivals, including the Fringe, Adelaide Festival, WOMADelaide and the Tour Down Under will be supported with temporary coverage by Internode.

Simon says the free wireless network coverage is an essential piece of urban infrastructure for modern cities. So what does he think about a few other IT hot topics? INCITE’s questions for Simon were compiled for us by State Library of Victoria’s Director Digital Strategy, Peter McMahon.



## IN MID-JULY LAST YEAR, YOU LAID OUT A LIST OF WAYS THAT NBN COULD DELIVER BETTER VALUE - WHICH IS THE MAIN ONE YOU WOULD TAKE TO GOVERNMENT NOW?

The network will now be built in the first instance using a hybrid of technologies but the ultimate end game - sooner or later - will be fibre to all. It (ultimately) has to be, even if some parts are completed with other technologies now on an interim basis.

In the meantime, the proportion being built using fibre ‘up front’ can best be maximised by having NBNCo focus extremely closely on any and all ways to make the fibre rollout more cost effective in terms of cost ‘per premises passed’.

There is no single silver bullet. Rather, there is a whole set of ways to make the network build - still with a high proportion of end-to-end fibre - happen faster and at a lower cost.

(For more detail on this check out Simon's presentation at the CommsDay Wholesale and Data Centre Summit in Sydney from last July, The Ideal Wholesale NBN Market at [simonhackett.com/2013/07/17/nbn-fibre-on-a-copper-budget/](http://simonhackett.com/2013/07/17/nbn-fibre-on-a-copper-budget/).)

## WHERE DO YOU SEE THE NEW EMERGING TECHNOLOGY HOT SPOTS? DO YOU HAVE A PARTICULAR SPECIALITY IN MIND FOR BASE64 PROJECTS?

There are continuing developments occurring at the intersection of 'fixed' and 'mobile' networks. Neither is a panacea, and there are many beneficial outcomes starting to be created by various new technologies that play in the realm where the two approaches meet. Almost all modern forms of network access are hybrids - using high capacity fixed line networks to bring broadband to some form of wireless distribution point. Home broadband networks using WiFi are one example of this - where the wireless and the wired parts of the network are complementary and interdependent.

I don't have a particular speciality in mind as yet for projects to be incubated at my new facility, Base64. (Base64 is still being constructed at this point, and expected to be completed early in 2014). Rather, I'm going to cast the net wide, when we do open the doors - and see what interesting innovations we find.

## WHAT SINGLE GREATEST ADVANCEMENT OR CHANGE IN TECHNOLOGY WOULD YOU SEE HIGH-BANDWIDTH CONNECTIVITY (NBN OR OTHERWISE) BRINGING TO AUSTRALIAN HOMES?

A long term benefit of the presence of internet style networks is various forms of the overcoming of physical distance. The NBN, with its key improvement of offering high upstream data rates (not just high downstream ones) enables high-fidelity two way 'telepresence' conversations between people at vast distances, and with 'high def movie' video quality.

The technology in our lounge rooms (big flat screen TV's and powerful home computers) is already there - it's only the upstream network capacity that is holding this back.

Today this sort of telepresence hook-up is the preserve of large corporates, but in an NBN-enabled world, conversations where you see someone, life-size and clearly, becomes something you can look forward to in your lounge room.

Another major shift in the technology world in the presence of high-capacity two-way NBN data links to all homes and businesses will be a major rise in the deep adoption of 'cloud' technologies. Today, 'cloud' generally refers to remote access at low bandwidth to vast data stores. But with an NBN fibre connection, the speeds available are so fast that it becomes possible to operate a local computer in your home or business with a remote disk storage system 'in the cloud' - and without any hard drives being needed at your location.

In essence, NBN high-speed, two-direction broadband links at fibre rates allow more of your computer system to disappear to a distant location - leaving only the screen and human interface devices left at your end of the link. There was an old Sun Microsystems slogan from the 1980's, "The Network \*is\* The Computer". It wasn't quite true then. In the fibre NBN era, it will become the truth that changes everything, in terms of what the internet is, and how it works, for people in their homes and businesses.

## DO YOU THINK THAT 'THE INTERNET OF THINGS' IS VIABLE OR IS IT JUST A MYTH?

It already exists. A high (and increasing) proportion of new devices being sold around the world have fully-functional Internet Protocol access technology built right into them. The challenge with such a spread of internet-enabled gadgets is going to be around how to harness the resulting, and pervasive, mesh of sensors and controllable objects in a 'human friendly' way. As always with computers and their interactions with people... getting the hardware to be cheaper is the easy bit. Making it all easy to use... that's the harder part. It always has been. Perhaps it always will be.

## DO YOU STILL OWN YOUR TESLA ROADSTER? ARE AUSTRALIAN ENVIRONMENTALLY-FRIENDLY CARS LIKE THE VOLT CATCHING UP TECHNOLOGY-WISE?

Yes, my Tesla Roadster remains my 'daily driver', and I just love driving it. I also generate more power each day from the roof of my home than is consumed in a 24 hour period by the house and that car. I haven't visited a petrol station to put hydrocarbons in a car for...quite a while now.

We are on the verge of widespread adoption of 100% electric vehicles. There are some smart interim hybrid approaches also turning up - with the Volt being a great example of that. But the end point, especially for urban motoring, is pure electric vehicles. The next Tesla vehicle, the 'Model S' Sedan, is already on sale in the USA and will be on the market here in Australia around May-June 2014. Most major car manufacturers are already either selling or working on pure electric vehicle models right now.

Tesla, though, is leading the charge, with cars that are effective, incredibly efficient, have very long driving range, and that also look great. I love their work.