

**Address by Gavin Williams
NBN Co Chief Development Officer Regional and Remote**

Canberra, 25 February 2025

1. Thanks and acknowledgements

Good morning everyone.

What a privilege to be here today, and to be part of this great event.

Thanks for the opportunity.

And thanks in particular to CommsDay.

Grahame and his merry band are such an important part of the fabric of Australia's telco sector.

They cover our many hits...

...and our occasional misses; thankfully few and far between!

...and all without fear or favour.

Of course, beyond the daily news they also bring us all together at important events like this Forum.

You only have to look at the speaker list to recognise the esteem with which the industry holds Commsday.

These events are so-often where we all come together... to share our thinking, to catch up and chew over the key issues.

And that's important, particularly at a time when demand for telecommunications services is going through the roof.

So thank you to Commsday, for all that you do and for catalysing this important conversation.

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Thanks also to the many industry colleagues, collaborators and partners that have travelled to be here today.



So much of what we do - as a sector; for our customers; and for our country - depends on our ability to respond quickly to a fast-changing market.

We need to be able to respond quickly because we live in a world where technology innovation never stands still and the demand for connectivity continues to grow so quickly.

2. Acknowledgement of Country

When it comes to connection, it is important to acknowledge the Aboriginal and Torres Strait Islander peoples, the Traditional Owners of these lands.

Here we recognise an ancient connection to Country, something sustained and nurtured through deep time.

I want to acknowledge and celebrate the Traditional Owners of the land we are on today, the Ngunnawal people, and pay my respects to their elders, past and present.

Connection – and particularly the connection enabled by modern telecommunications technologies - is the thread that runs through my remarks today but let me first zoom out and set the context.

3. Scene set – the ‘data drought’ has broken

Kristy Sparrow, who co-founded the BIRRR group – and who's here in the audience today; a great thought leader and advocate for bush broadband – in my mind, she coined the phrase “data drought”.

Half a decade ago, we used to talk about regional broadband in those deficit terms as a “data drought”.

Well, nobody’s talking about a data drought anymore!

I read Commsday with interest every day.

A few weeks ago – in fact in the Feb 11 edition - the top story had the headline: “Rivada eyes Australian entry for mass LEOSat offering”.

Another LEO constellation – in this case seeking to offer enterprise grade services.

The story went on to mention a raft of other new operators running LEOSat constellations with differing levels of focus, from IOT through to mass market.

The world is changing fast.



OK, that was the body of the newsletter but as an old hack, I always look at the “10 years ago in Commsday” section.

In that edition, there was also a note about NBN Co having announced the completion of its 10 satellite ground stations in preparation for the launch of its first satellite later that year.

At the same time nbn had, for the first time, begun enforcing the fair use measures for its interim service that were announced in April that year.

That last point referred to the fact that the nbn interim satellite was wildly over-subscribed and struggled in busy hours.

We decided to enforce the size of the plans that we’d actually built being about 20GB per month to enable us to deliver a functional service.

It wasn’t a particularly popular move but it was one that was necessary, I still contend, ahead of the launch of the Sky Muster service.

As an aside, I still shudder when I watch the interview I did with the Landline program around that time, and particularly when I run into the journo Pip Courtney, which I did recently.

This was my first outing on Landline and a tough interview with Pip on the sidelines of an ICPA conference in Brisbane.

Let’s just say it could have gone better!

And wow, since then how things have changed!

I’ll give you an update shortly about what nbn’s doing now.

But as a headline, Sky Muster was a game changer when we launched it in 2015 and since then we have increased speeds and added more data, and it’s now uncapped (subject to a fair use policy and shaping).

Meanwhile our Fixed Wireless service is pushing the boundaries of what’s possible on a 4G/5G network and of course we’re pushing fibre WAY deeper into our regional towns and cities.

All of that is great but there’s a but... and it’s a very BIG but...

4. A very big but...



The Australian Digital Inclusion Index 1 tells us that some Australians are still struggling to make the most of the Digital Age.

There is no question we have made good progress in addressing digital exclusion and that huge efforts continue to be made.

But if we want to get anywhere near the noble ambition - of making Australia the most connected continent on earth - then there is a lot more to do.

And that's part of what I want to focus my comments on today.

5. Three key points

Australia is a big country so forgive me if I want to cover a fair bit of turf today.

There are three key points I want to make:

First, I want to share an update on what nbn has been doing in regional and rural Australia, and why.

Second, with so much depending on our networks, I want to ask the question: is our regulatory framework still fit for purpose at a time when the sector is changing so quickly. Spoiler alert: it's probably not!

And finally, and respectful of the many efforts being made to address the digital divide - by Governments, by community groups, and indeed many telcos including nbn - I'd like to pose the question: might there be a better way?

If we take a more collaborative approach, might we get better results in closing the digital divide?

6. NBN – connecting the country

Let me start with what nbn has been doing, and why.

NBN's reason for being could hardly be clearer or less ambiguous: we're here to lift Australia's digital capabilities.

That won't happen by magic.

It takes a lot of hard work by a lot of people in a lot of places.

¹ Australian Digital Inclusion Index



Every day I have the real privilege of seeing nbn teams chasing ambitious goals, working damn hard to expand and improve our network, to make it faster, more reliable and easier for our customers to access.

And every day I hear our people talking about how proud they are that they are part of something Australians depend on and benefit from; digital advancement has never been about the tech, it's always been about the benefits it can bring.

Like all providers, Nbn operates in a world where Australians are consuming more data on more devices to do more things than ever before.

We've seen a tenfold increase in average household data consumption on the nbn network over the past decade.

Volumes have gone from 40GB a month before streaming services were largely available, to more than 400GB today.

And really this is just the beginning.

Within the next 10 years we expect the average Australian home to be downloading around 1 TB of data a month.

So if today is the 'Gigabit Era', it won't be too long before it becomes the 'Time of the Terabyte'.

Driving all of that is the continued rise in connected "smart" homes, 4K and 8K streaming, the mainstreaming of technologies like artificial intelligence and virtual and augmented reality, and the continued growth of hybrid working, remote learning, eHealth, eCommerce and more.

None of that is possible without a fast, reliable and affordable network, and that's what the nbn network provides.

Every day 20 million Australians use the nbn network and 80 per cent of Australia's internet traffic goes across it.

And with so much depending on it, it's critical we continue to invest...so it's as robust, as reliable, as affordable, and as fast as it can possibly be.

There is a huge and ongoing program of work underway and I wanted to quickly step through the key aspects of that now.

7. Fast fibre upgrades

Our network investment strategy is fundamentally about improving our ability to provide faster speeds, greater capacity and improved network reliability to more premises around Australia.



This strategy – and the program of work that sits behind it - means that today 82 per cent of Australian homes and businesses are now near gigabit capable².

That equates to over 9.4 million premises across the country.

We are on track to complete upgrades to the local fibre network that will enable 3.5 million homes and businesses served by Fibre to the Node, along with 1.5 million premises served by Fibre to the Curb, to upgrade to Fibre to the Premise by the end of December this year.

This will take the percentage of homes and businesses that are near gigabit capable to over 90 per cent.

In the two and a half years since we launched the Fibre Connect Program a total of 594,000 premises have upgraded to full fibre connections - gaining access to the most reliable, resilient and future-ready technology and the fastest available residential wholesale speed tiers.

In what was a very important milestone, last month the Australian Government also announced an upgrade path for the remaining 622,000 homes and businesses across Australia still served by FTTN technology by the end of 2030.

Why does this matter for the bush?

Because of these 622,000 homes and businesses, more than half are located in regional Australia.

It's a step-change program and when it's completed by the end of 2030, it will mean over 94% of all FTTN customers around Australia will have the option to upgrade to a full fibre connection, with the remainder having access to alternative upgrade paths.

So whether you're in Townsville or Torquay, you'll be able to access an upgraded service.

We've also significantly upgraded the capabilities of our Hybrid Fibre Coaxial, or HFC network, which offers services to around 2.5 million homes and businesses across the country.

HFC customers can now access the highest residential speed tiers and, alongside customers on FTTP, will be among the first that stand to benefit from the boost to our highest speed residential products.

8. Speed upgrades

² The 82% includes premises on nbn's HFC network, as well as those on nbn's FTTP network.



In September last year, we also announced we would turbocharge our higher home speed tiers, introduce our first mass market multi-gig plan.

Anna will step through this in more detail shortly but for residential customers that means there will be increased wholesale speeds on three tiers on HFC and FTTP and the launch of 2 Gigabit wholesale plans on HFC and FTTP.

For business, we will be reducing the effective wholesale price on three business speed tiers on FTTP as well as introducing a new speed tier on HFC and a new 2 Gigabit tier on FTTP.

And for new enterprise customers we will reduce the effective wholesale prices on higher enterprise ethernet bandwidths with improved service offerings.

All of that is planned to be available to participating internet providers from September 14, this year.

So whether you're in Bunbury or Bundaberg, you'll likely be able to get a faster connection if you want it.

9. Game changing Fixed Wireless upgrades

Turning to Fixed Wireless, which is so important beyond the areas where fibre is available in rural and regional Australia.

We have just completed an upgrade program that means the fixed wireless footprint is now over 345,000 sq kms, up from 220,000 sq kms before we started.

For geography buffs, that's roughly the equivalent of adding an area the size of Ireland to a network that was already the size of Great Britain.

What we have delivered is a game-changer.

In fact, we've over-delivered, and connected way more areas than I thought we would when we were awarded that \$750 million Commonwealth grant – made up of \$480 million from the Australian Government and a further \$270 million from nbn.

The broadband load per user on this network leaves mobile networks in the dust.

We've deployed 2300 towers with physical upgrades and significant capacity through new spectrum.

But the real breakthrough has been in how we've optimised spectrum reuse and minimized premises per cell.



This wasn't just a matter of buying something off the shelf.

We had to work closely with our vendors to ensure advanced antenna systems and massive Multiple-Input, Multiple-Output (MIMO) were tuned for a fixed wireless rather than a mobility application.

Nbn is among the first in the world to deploy 5G technology on this sort of scale for a dedicated Fixed Wireless network and it's designed to deliver more reach by extending the range of the towers from 14km to up to 29kms, where possible.

We've delivered a lift in speeds over 100Mbps wholesale download in the typical busy period, more than double our commitment to deliver typical speeds of 50Mbps download.

We've introduced higher speed tiers and are over-delivering on speeds compared to current fixed line technologies.

We've also introduced Fixed Wireless Home Fast which doesn't run at 100Mbps but rather a potential maximum of up to 250Mbps wholesale download.

That's available to around 90% of the footprint.

And our premier plan, fixed wireless Superfast, runs a potential of up to 400Mbps wholesale download and our aim is for that to be across around 80% of the footprint.

And we're not done.

We will be upgrading our core, and we have a pathway to 5G stand-alone over time.

Ultimately, the upgrade delivers a fourfold increase in network capacity, which will serve us well for the next decade.

So whether you're in Mortlake or Mount Isa, if you are in nbn's Fixed Wireless footprint you now have access to a Fixed Wireless network that is absolutely world class.

Just before I move on from Fixed Wireless, I want to announce some very big and important news. We have conducted live field trials with Ericsson involving the latest 5G mmwave technology.

I can report that we have achieved download speeds of more than 1 Gbps and wholesale upload speeds of more than 100 Mbps at a distance of around 10 kilometres.

They are incredible numbers and really speak volumes about the incredible work we've been doing with our technology partner Ericsson.



They also speak to our commitment to deliver vastly improved broadband capabilities to eligible homes and businesses in parts of regional and rural Australia over time.

10. Satellites

And then there are satellites.

Terrible pun but the growth in LEOSat technology has been out of this world.

So too has been the hype; so I wanted to bring a bit of perspective to the conversation.

The big picture for NBN is that we need a range of technologies to provide connectivity in a country as big and diverse as Australia.

Fibre, HFC, Fixed Wireless, GEO and LEO Sats... we need them all.

There is no silver bullet.

It's important to understand that for the vast majority of our customers, our fibre network is the best solution.

Its speed, reliability, capacity and scalability are unmatched – it is the best solution, pure and simple.

When compared to LEOSat for example, fibre is currently five times faster, has unlimited data and incredibly low latency.

In parts of regional and rural Australia not covered by the fixed line network, the upgraded Fixed Wireless network that I've just talked through is a world class solution.

And in the more remote, isolated parts of the country there's our Sky Muster Satellite Premium Plus service offering access to uncapped data usage (subject to fair use policy and shaping) with a choice of plans to suit different budget needs.

I can talk with personal experience about Sky Muster because I use it myself at home.

Most of you probably don't know, but I own a hobby farm of 45 acres in Southwest Victoria at Peshurst, near Hamilton and Dunkeld.

It's postage stamp by Australian regional property standards but it keeps me plenty busy.

I've been in this industry a long time, and it's important to me that I can control some of the things in my home when I am travelling for work.



I use Sky Muster for my internet connectivity and also have a mobile booster antenna to help with mobile connectivity in some areas of my house.

What it's allowed me to do is effectively setup my own smart home.

I have Wi-Fi based video alarms that I can monitor remotely.

I have switches and sensors for heating, cooling and other devices I can turn on and off through different apps.

I also have a generator and back-up to keep things running in times of natural, or other disasters that can occur and impact my ability to connect with the outside world.

None of this would have been possible 15 years ago – before there was the nbn network.

Sky Muster Plus Premium plans have changed all of that.

On LEOSats, we are currently exploring options and want to have an offering in place before our Sky Muster GEOSats reach the end of service in the early 2030s.

That work is ongoing, so watch this space!

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I'm conscious I've thrown a lot of dollar figures, numbers and programs of work around.

The question I want to turn to now is whether our currently regulatory framework is fit for purpose.

11. A regulatory framework fit for purpose

It's a big question.

And answering it is no simple thing particularly given how quickly the connectivity needs and expectations of our customers continue to change.

I know there'll be a lot of discussion around the USO over the next few days, including in a panel session tomorrow.

I don't want to steal the oxygen from that conversation, but I do want to offer a view!

When the current USO was first introduced, Australians relied primarily on fixed-line voice services.

To state the very obvious, that is assuredly no longer the case!



The telecommunications needs and expectations of virtually all Australians today – and particularly those in regional and remote areas - have changed dramatically.

Voice connectivity is still important, but today the vast majority of Australians have access to multiple connectivity pathways, including the nbn network, a swag of mobile networks, and GEO and LEO satellites.

It's against this backdrop that we now have an opportunity for industry and Government to work together on a pathway towards a more modern universal services framework.

What we need is something that reflects the communication market and technologies available today, and something that will provide for and protect Australians now, and into the future.

12. Call to action - collaborating at a unique moment in time

I wanted to finish my remarks today by circling back to digital inclusion and offering a view on how we might bring a step change in addressing the issue.

Many of us are active in the space – as network builders and integrators of connectivity; as supporters of emerging technologies; as enablers of new opportunities and possibilities; as supporters of all manner of community digital inclusion programs.

The question is: what else can we do to build the momentum we have?

Creating a more digitally inclusive Australia means we have to partner with customers, with community leaders, with governments and, critically, with each other to co-create solutions to what is a complex challenge.

This requires a mindset shift.

I've been in telco for decades and I've seen opportunities pass by because we were focused on our own activities instead of thinking about the larger opportunities that could be created if we worked together.

All of us are sometimes guilty of running our own races.

That point wasn't lost in the recent Regional Telco Review.

It called on the sector to use simpler, more accessible, more consistent language so customers could better understand the technology and the options available to them.

Connectivity Literacy is a key issue for regional and remote communities and as an industry we need to do better.



So, to a complex problem I wanted to offer a relatively simple solution to, at the very least, start a conversation.

One of the keys to building digital inclusion is collaboration – finding new, innovative and unexpected ways to work together to continue to build a more digitally inclusive Australia.

It might mean we need to get comfortable with not controlling all parts of the solution end to end.

It might mean we need to make sure we are consistent in the way we communicate with customers around technologies and connectivity options.

It might mean that we need to find better ways to work more closely with great advocacy groups...like Better Internet for Rural, Regional and Remote Australia...the Isolated Children's Parents Association....and the Low Income and Digital Inclusion Forum...and the Regional Tech Hub and others.

It might mean a lot of things, but at the end of the day it must mean we collaborate more to the extent that we legally can, to work more closely on community-based, community-focussed digital inclusion and connectivity programs, rather than running our own race.

I'm not going to stand here and prescribe exactly how that conversation should take place.

But I will say that nbn is passionate and committed to being part of it.

It's an exceptionally complex problem but I'm convinced that many of the answers are in this room – and I look forward to working with you all.

13. Conclusion

I started my remarks today talking about digital inclusion – and I wanted to finish there too.

Let me share a personal story.

I love my job and one the biggest reasons for that is I get to see some of the positive impacts we've made.

Like the impacts for families with distance education kids when we first launched Sky Muster, with a special data allowance as part of an education push.

The relief that parents had, that they now had an effective broadband solution so their kids could keep pace.

Fast forward to the families in the Torres Strait islands who have recently been able to avail themselves of the School Student Broadband Initiatives.



The stockyards on outback stations that are now being lit up with a WiFi link back to the farmhouse, so the stockyards are safe.

The impact of video conferencing versus voice calls for remote telehealth.

The impacts of enterprise grade telco products supporting innovative regional businesses to be truly globally competitive.

And the list goes on, and on.

Creating these are the sorts of opportunities are why most of us get out of bed in the morning.

Changing lives for the better, making Australia a better place, and making the world of difference - and that's why we're here.

Thanks again to CommsDay for the chance to speak here today – and for bringing us all together.

And thank you again to all of our many partners and collaborators across the sector and beyond.

I look forward to continuing to work with you all to aim to build a connected nation where no one is held back, and no one is left behind.

Thanks again, and I hope you enjoy the rest of the conference.

<ends>

