

Speech to Submarine Networks World 2024, Singapore
Guy Congerton, General Manager – International, Vocus

25th September 2024

Shrinking the Pacific

Good morning everyone, and thank you for the invitation to speak today. It's an honour to be presenting alongside our partner Google and amid the world's foremost experts on submarine networks.

The Google Pacific Connect project is such a game changer. In fact, in the submarine cable landscape, the Asia Pacific region is seeing rapid transformation.

Right now, a series of globally significant submarine cable projects are pulling Australia to the centre of the APAC telecommunications map.

In fact, I'd like to propose that new cable systems are shrinking the Pacific.

We're not managing to shift the entire continent of Australia closer to the US. And we're not bending physics to make light go faster.

What we're doing is giving customers more capacity and more options into and out of Australia.

As you have seen from Nigel's presentation and I can reaffirm, our existing network will be transformed in the next few years.

Pacific Connect has long been an ambition at Vocus and follows a decade where, with our Australia Singapore Cable and Darwin-Jakarta-Singapore cable has built more capacity to connect Australia to the world.

In fact, point of trivia – we've built more submarine cables to and around Australia in the last 15 years than our other three chief competitors combined.

But our two newest cable projects are on another level entirely.

First, we're delivering the trans-Pacific cables of the future in partnership with Google.

The Pacific Connect system will link Australia and the US with a multi-terabit ring network through and between Fiji and French Polynesia, landing in Sydney and Melbourne.



The recent addition of a branch to Auckland will allow Vocus to provide 30Tbps on trans-Tasman capacity.

This project with Google catapults Vocus into the top tier of global submarine operators and validates the calibre of our subsea planning and delivery teams.

Pacific Connect complements our existing network both in Australia and internationally brilliantly. It enables Vocus to provide our customers with extraordinary capacity and redundancy between Asia, the Pacific, and the US.

So, why exactly does Australia need all this capacity?

What are we going to do with it?

Around the world, what we are seeing is nothing short of an arms race in submarine cable building.

Operators are seeking new routes to connect Asia and the US and they're looking for routes further afield, staying away from highly congested cable chokepoints.

Australia has traditionally suffered from the tyranny of distance. We all know laying subsea cables is not easy and is incredibly expensive.

Australia being a relatively small market has meant we have been underserved with subsea capacity options in the past.

However, these new cables are dragging Australia right into the thick of the action between Asia and the US.

Historically, Australia may have lacked market demand to store and process data.

But not anymore.

Hyperscale cloud providers are pouring vast amounts into new Australian data centres.

Case in point – Google is investing \$1 billion plan to bolster Australian cloud infrastructure.

These investments are a resounding vote of confidence in Australia's stability, security, and sovereignty as a destination for data.

And the arrival of AI is only accelerating this trend. The amount of data generated by AI is staggering.

Chat GPT-4 has an estimated 1.8 trillion parameters.

That's 10 times more than Chat GPT-3.

And OpenAI is already working on ChatGPT 5, which if you believe the rumours, might have as many as three to five trillion parameters.

Globally, the amount of data created is expected to double to 181 Zettabytes – 181 trillion Gigabytes – by the end of next year.

'Moore's Law' states the transistors on an integrated circuit doubles every two years -- today, compute demand on the largest AI models is doubling every three to four months.

These factors are driving an unprecedented investment race in fibre, data centres, and energy to deliver the data processing power required.

And this is only the beginning.

If 80% of government and enterprise processes still need to migrate to the cloud, and if AI continues doubling compute demand every few months, well, we are truly in uncharted waters.

Vocus is leading from the front to deliver the digital infrastructure needed to bring AI and cloud to life.

In addition to Pacific Connect, Vocus is extending our network's reach, through projects like the Darwin-Jakarta-Singapore Cable and Project Horizon linking Australia's resource rich Pilbara area to the world.

Put together, these cable systems make connectivity across the whole region more resilient.

If you've ever been in an airport when the airline check-in system loses its connection to the cloud servers, you'll know that modern society can't really function without connectivity.

Every major provider is looking to add further redundancy to guard against these kinds of society-disrupting scenarios.

Our new Darwin-Jakarta-Singapore Cable is the first to connect Australia's north directly to Asia. No more tromboning down to Perth or across to Sydney.

This means that cloud services running in Singapore can have redundancy running out of Darwin – or the other way round.

In fact, this \$500 million cable has unlocked Darwin as a major new data hub for the whole Asia Pacific region, with a low latency hop to South East Asia, coupled with major data centre investment and plentiful energy.

The system connects the North West Cable System to a branching unit on the Australia Singapore Cable, establishing a direct link from Darwin to Singapore via Christmas Island and Indonesia.



It's capable of 40 Terabits of capacity and establishes a new low-latency route to Singapore, which traditionally has been the region's key data centre hub.

Terrestrially, it connects to our 'Terabit Territory' fibre backbone from Darwin to Adelaide and Brisbane, which we upgraded with a 25-times capacity increase in 2021.

It's strongly backed by the Territory Government, which is intent on attracting new businesses to the Territory, particularly data centres serving Singapore and South-East Asia.

We're also continuing our work for the Government of Timor-Leste to extend our North West Cable System to Timor-Leste, in what will be the nation's first international submarine fibre optic cable connection.

The Timor Leste branch will establish new network pathways between Timor-Leste, Indonesia, Singapore, and Vocus' entire Australian fibre backbone.

We're matching our submarine cable capacity with industry-first upgrades to our national intercapital network capacity, with 400 gig and 800 gig upgrades across our backbone, and a [commitment to go to 1.6 terabits](#).

And we're enriching our internal digital capability, using AI ourselves to monitor network performance and security, analyse customer data, automate processes, and develop new products.

This strategy forms the bedrock of how we're establishing Vocus as the network of choice for AI.

If you've ever been Australia, you'll know we love a "big something". The "big pineapple". The "big banana". The "big prawn".

And in the submarine cable industry, we traffic in superlatives. Fastest cable. Highest capacity. Lowest latency.

But perhaps nothing is bigger or more remarkable than the shift we're witnessing in Australia in the global connectivity landscape.

In the span of a few short years, a nation once viewed as a nice-to-have remote outpost is rocketing to the centre of the Asia-Pacific telecommunications landscape.

Submarine cables are critical digital infrastructure, and by establishing new diverse landings throughout Australia, New Zealand, Fiji, French Polynesia and the US, Vocus is massively uplifting the resilience of Australia and the broader Pacific region.

Vocus is immensely proud to be leading this transformation through our partnership with Google and investment in the Pacific Connect system.



And we're here to talk more about what it means for you and your customers. Please come to our stand and meet the Vocus team.

Thank you.