



Commsday Wholesale Congress keynote speech
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Regulatory reboot: critical infrastructure

Good morning everyone, and thank you for the opportunity to speak today. I'm Tristan Clash, GM of National Wholesale at Vocus, and I'm delighted to be here among industry colleagues and leaders.

You might have heard in the news yesterday that Vocus and our shareholders Macquarie Asset Management and Aware Super have signed on the dotted line to acquire TPG's Enterprise, Government and Wholesale fixed business and fibre network assets.

This deal is transformative for Vocus – it will strengthen our position as a key digital infrastructure operator in Australia and drive stronger competition in the sector.

Post acquisition, we will operate a network of more than 50,000km of owned or leased fibre under IRU arrangements, nearly 15,000km of international submarine cables, and close to 20,000 connected buildings.

Investment and competition in our industry is critical for Australia's future and that's why today I want to talk about something that's key to all of our work – and that's the regulatory settings around critical digital infrastructure.

You might not know me as a regulatory guy – but the truth is as the GM for national wholesale, it's very important to me to have a product to sell.

I spend many hours each week in meetings about the infrastructure we're building and hearing about how our teams are working through the challenges.

I wish I could say that the biggest challenges they face are drilling through very hard rock in the Pilbara.

The truth is that the largest amount of time is spent boring through layer upon layer of a very complex regulatory landscape.

At Vocus, our purpose is 'Building Critical Connections. Enabling Better Possibilities.' It's not just a tagline -- it really is at the core of what we do.

We are about delivering digital infrastructure that forms the backbone of Australia's modern economy and everything it makes possible.

We're a critical infrastructure provider -- and we love that.

It's literally our right to play -- Vocus is the owner of secure, trusted and reliable mission critical connectivity to Australian industry and government and increasingly to global content providers and carriers.



Now, a bit of context about why we want to talk about the regulatory landscape for critical infrastructure.

Let me take you back to CommsDay 2021: and the key cable infrastructure announcements.

Vocus announced several projects under a \$1 billion dollar network expansion, including new terrestrial and submarine cable builds.

HyperOne announced a new \$1.5 billion dollar 20,000km terrestrial backbone network for Australia, with a focus on delivering high capacity infrastructure to regional areas.

And Telstra, perhaps encouraged by fresh competition, followed up within a few months with its own 14,000km intercity fibre network build.

On this very stage, a colleague of mine noted that the economics of building Submarine cables has changed so that it was now more cost effective to build fibre between capital cities underwater than on land.

He warned that if the right regulatory setting were not put in place to retain investment on land then regional Australia would miss out on this vital investment round.

Now, let's take a look at what has happened 3 years later:

HyperOne pulled out of its terrestrial builds after – and I don't want to speak on their behalf – but I can only assume Bevan's team experienced the same difficult permitting process as the rest of us.

Their solution was SMAP – intercapital segments all under sea.

And in Telstra's August update they announced that they have completed 2,000km of their 14,000km network.

At Vocus, we have completed our submarine segments in the north-west of Australia connecting Darwin to Perth and Singapore.

And we have further announced two additional submarine segments in partnership with Google between Melbourne, Sydney and New Zealand.

Now, as much as Vocus loves terrestrial fibre – and we've just passed the halfway mark on our Project Horizon terrestrial build between Geraldton and Port Headland – there's a clear trend here.

Lots of new cable in the water, and not so much **progress** on land.

What is clear here is that – as warned back in 2021 – regional Australia is missing out on this industry investment round, because the regulatory settings are wrong.

The importance of critical infrastructure



As everyone in this room knows, fibre networks are the arteries of our economy and the lifeblood of our society. They carry the data that enables every sector to function.

Without always-on high-capacity fibre infrastructure, critical services simply can no longer operate in the way a citizen of 2024 expects.

I listened with interest to Brendon Riley's speech last year on energy resilience, where he talked about the challenges around power resiliency for the Telstra mobile network.

They closely mirror the ones we face in the fibre industry. Extreme weather events – both here on Earth and even out in space as my colleague Jonathan Gleeson recently presented at AusNOG, put increasing pressure on our networks.

Rapidly rising energy infrastructure costs and the complexities of the transition to clean energy all challenge our ability to deliver uninterrupted, high-quality service.

Our strategic data centre partners put as much effort into securing power for their facilities as building them.

Australia's critical infrastructure for power and data are deeply interconnected and an outage in either one of them can set off a domino effect to critical services.

The significant outages we've seen in Australia and around the world recently have shown how unavailability of infrastructure can cripple businesses, essential government services, and communities.

The stakes in building and securing critical networks are higher than ever, and it's something the team at Vocus understands intimately.

That's why we've focused on critical connectivity as the centrepiece of our business strategy and our key differentiator in the market.

So let's talk about the challenge of designing, permitting, building and maintaining thousands of kilometres of this critical infrastructure – long-haul fibre.

It's a complex, capital-intensive undertaking, with logistical, financial and regulatory hurdles.

The physical realities of fibre deployment in Australia are challenging.

Vast terrain, extremely hard rock, nothing around for hundreds of kilometres and extreme climate conditions.

But that part is fine. That's the job, and our teams are very good at pushing through each different physical challenge faced.

But what I want to focus on today are how we can change the regulatory conditions to better support building and maintaining critical infrastructure in this country.

Unfortunately, the carrier powers created under the Telecommunications Act 1997, are now all but useless in accessing land and securing rights of way for fibre routes.



Subsequent State and Territory laws have diluted rights of way and created significant processes for obtaining environmental and cultural heritage permits and approvals.

Most of these approval processes were designed for individual buildings, but when you are building across hundreds of areas there are literally thousands of government and community stakeholders with potentially competing interests that all need to be aligned.

Inconsistencies between federal, state and local regulations mean there's not always a clear path toward resolution.

Vocus estimates that any delay after project mobilisation costs around \$20,000 per crew, including management overheads.

When we're operating on multiple work-fronts with multiple crews, delays of just a few weeks can lead to substantial budget over-runs and introduces project funding risks.

And if it's happening to Vocus, it's likely happening to all of us.

We often find ourselves in a win-lose environment where regulations are either protecting community interests or facilitating the rollout of new infrastructure. We think regulatory intent should be to protect and facilitate.

We have seen some improvements to Australian legislation over past decades.

NBN Co made a significant contribution to achieving the Low-impact Facilities Determination in 2018 which allows low-impact installation activities to be carried out, without telcos having to otherwise reference State and Territory laws.

Without it, the build cost for the NBN would have been exponentially higher and taken years longer due to the negotiations required for each individual building.

But long-haul network operators aren't able to take advantage of these critical exemptions.

As we highlighted in our recent response to the Regional Telecommunications Independent Review Committee, carrier powers and immunities and the low-impact facilities regimes designed to facilitate network rollouts are increasingly facing challenges from state, territory and local governments seeking to reassert their own planning rules.

The most recent example is the delay to 176 projects under the Mobile Black Spot Program.

Some of these were originally approved for funding back in 2019, but are still stuck in state and local approvals for as long as five years.

We think the rules need to strike a better balance between the community's need for connectivity while giving property owners and local authorities a say.

If critical infrastructure is funded but deployment is held up in planning for five years, then we would argue that the regulation isn't serving the community – it's actually preventing Australians from getting access to services they need.



As is often the case, the law lags a decade or more behind the technology landscape.

All of us here know the demand for high-speed data is ballooning.

Cloud applications might appear lightweight on the surface, but behind the scenes, require vast amounts of data to be replicated between cloud regions throughout Australia.

The amount of data being shuttled around relies on high-speed infrastructure being available and more being built all the time.

Here are some stats that give some perspective to the scale of the growth in data.

According to Gartner, global spending for the AI network fabric alone will hit \$11 billion US dollars by 2028.

That's a 27% compound annual growth rate.

Goldman Sachs estimates that electricity consumption will rise by 160% by 2030 to support AI.

And UBS estimates that data centres could consume 15% of Australia's total power supply by 2030.

These are unprecedented numbers for the telco and energy industries.

But the genie is out of the bottle and it's certainly not going back in.

AI will quickly become embedded in Australian organisations' workflows and become an essential service the community relies on.

Meeting the demand for that amount of data requires rollout of infrastructure at an unprecedented speed.

As I mentioned earlier, we're doing our part at Vocus by embarking on the largest regional fibre infrastructure rollout in our company's history – \$1.5 billion in new fibre projects.

This including the highest capacity submarine cable system ever deployed between Australia and the US to reinforce Australia as the geopolitically stable AI hub for the Asia Pacific, in partnership with Google.

Challenges in submarine routes

Submarine cables are the lifeblood of our global digital economy, carrying over 99% of the world's data.

For an island nation like Australia, submarine links aren't just important - they're existential.

Have you seen what happens when an airline check in system loses its connection to its cloud servers?



Modern society can't really operate without protected connectivity.

Given the critical nature of submarine infrastructure, Australia needs robust regulatory safeguards in place to protect these vital assets.

But the reality is that our subsea cable regulations are long overdue to be updated.

Most of Australia's existing submarine cable infrastructure was deployed 20 years ago, in a very different technological and geopolitical era.

At that time, we had a handful of cable systems linking Australia to the world, controlled by a few incumbent players, sometimes backed up with some very slow geostationary satellite capacity for redundancy.

Fast forward to today and the landscape has changed dramatically.

Bandwidth demands have exploded with the rise of the hyperscalers and data-intensive applications.

New cables with far greater capacities are in fact being underwritten by hyperscaler requirements.

And with heightened geopolitical tensions, the potential for cable infrastructure to be targeted for espionage or sabotage has markedly increased.

Yet the protection and security measures for submarine cables entering Australia are inadequate and inconsistent.

Most of Australia's critical international cable links are vulnerable to anchor drag, fishing trawls, and deliberate attack.

We only protect cables coming into Sydney and Perth, leaving other cable landing points around Australia totally unprotected.

Vocus does what it can ourselves to combat this threat, even funding expensive on-water patrols monitoring shipping activity in some particularly high-risk areas.

We do this because maritime activities are a far greater threat to cables than most people realise.

According to the International Cable Protection Committee, anchor damage and fishing activity account for over 60% of all cable faults globally.

It's estimated that there are over 200 subsea cable faults globally every year.

In Australia, we've seen the real-world impacts of this regulatory failure. In 2021, our Australia-Singapore Cable was damaged by a suspected anchor drag incident, just 10 kilometres offshore from Perth.

We managed to repair the cable within a really fast timeframe of just two weeks, but that's still two weeks where businesses and consumers faced a risk of losing international connectivity.

Yet despite these known risks and vulnerabilities, Australia's submarine cable regulations are many years old.

“So, that’s a lot of ‘constructive feedback’, Tristan... what are the solutions?”

Firstly, we really commend the Australian Government for establishing the Cables Connectivity and Resilience Centre to look at these issues. It's early days but the intent is great.

We're working with the Government to explain how extending cable protection zones across all major cable corridors is of national importance.

We also need more meaningful penalties for cable damage to incentivise more careful behaviour at sea.

Here's the Sydney submarine cable zone. One significant maritime event close to shore could take out a huge chunk of Australia's international connectivity.

So we think it's essential that Australia establishes a more diverse set of cable landing points – different landing sites all around Australia, and even different sites within the same state.

We're all telco people here. We know a thing or two about single points of failure and the power of diversity.

So let's apply that not just to the data centre, but to the whole country.

We also need a central registry of submarine cables entering Australia and clear roles and responsibilities set between industry and government agencies for coordinating cable repairs and incidents.

And, on land, local governments, states, territories and the Commonwealth need to come together to solve the issue of permitting.

Because while it's 'nobody's' individual problem to fix right now, it has become everybody's problem, and it's clearly restraining investment in terrestrial infrastructure.

We should look beyond our own industry and borders for inspiration and guidance about how to fix some of these issues.

The European Union, for instance, made a bold decision with its Renewable Energy Directive, which was adopted last year.

This recognised the importance of renewable energy projects, designating them as being of overriding public interest.

In practical terms this meant the EU streamlined permitting process, setting a maximum two year time limit for approvals.



They also limited the grounds people could use to raise legal objections.

They recognised the critical importance of clean energy infrastructure and provided a clear and predictable regulatory framework.

What was the net effect?

After just 12 months, wind-farm generation projects increased by 48 percent.

That shows the power of the right regulatory landscape.

In Australia, we often we find ourselves restrained by regulatory factors outside of our control.

Fixing this will require a concerted effort from industry and government to achieve a step change in regulatory settings and we need to start now.

And to make this all happen, we need a whole of community and government understanding that digital infrastructure needs to be prioritised as much as health, education and disaster resilience – because it underpins them all.

Conclusion

In closing, I want to leave you with three key points.

The first is that Australia's economy rises and falls on the resiliency of our critical telecoms infrastructure.

Our networks aren't just business and IT assets - they're now the foundation of Australia's economic machine and national security.

Securing and strengthening critical infrastructure is an absolute imperative.

Vocus embraces the challenge and we wouldn't be here today if we didn't think that there was a real opportunity to solve these issues.

The second is that we urgently need modernised regulations and policy settings to match the importance of infrastructure.

Our current regulatory frameworks for fibre and submarine cable protection and resilience are outdated and putting Australia's critical networks at risk.

It's going to take a concerted effort from government and industry to modernise these settings to prioritise the rollout and resilience of our critical digital infrastructure.

The third key point is that building and securing Australia's critical infrastructure is a team sport.

No one company can do it alone.



We all need to come together to uplift the regulatory environment to better support the whole industry's efforts.

I'll close by reiterating Vocus' commitment to building and securing the critical digital infrastructure Australia needs for the twenty-first century.

We will continue to invest to bring more high-capacity, resilient fibre to more places.

We will continue to work closely with government on regulatory reform and permitting to facilitate that investment.

We will continue to work with our industry peers to fortify our infrastructure investments.

And we will absolutely continue to embrace the responsibilities and rigour of being a critical infrastructure provider - because we know that our networks are the foundation on which Australia's digital future will be built.

Thank you.