From: To:	Infrastructure And Access
Subject:	Consultation on Telstra request for extensions to Ministerial exemptions for its South Brisbane and Velocity networks
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Hello,

You can sign up to Telstra Velocity online. When you do so you will notice that the speed boost button is greyed out. You can be a Telstra Velocity customer. If you click the speed boost button, it will revert after a day with no notice whatsoever. Telstra may or may not charge you despite that, that's an issue I encountered. The Velocity team went rogue and just refused to actually process the speed boost back when I upgraded about three years ago, so I guess the current situation is an improvement of sorts?

Without a speed boost, the maximum upload speed that Telstra offers on Velocity is a nominal 1 Mbps. In practice Telstra has set it up so that it will do 1.5 Mbps. Because people's eyes glaze over when one mentions the term 'bit', we can put this into real world terms by placing it in an international comparison. OOKLA, the people who run <u>speedtest.net</u> regularly publish statistics on the speed of internet in various countries, the 'Speedtest Global Index', the relevant one here being the fixed broadband one. It lists 174 countries.

The only one currently performing worse - on average! - than Telstra Velocity's nominal - maximum! - upload speed is Algeria at 0.92 Mbps. The ones between 1 Mbps and 1.5 Mbps are Yemen and Venezuela. Now third-last among 174 countries might sound like an amazing statistic, but in fact those countries had slowdowns due to COVID-19. Until March Telstra Velocity was dead last.

Fairfax papers ran a headline last year: "Australians would have faster, cheaper internet had NBN not been built: Telstra chairman". Here we've got the perfect example, a wholly Telstra owned and operated network. Telstra has complete control over every aspect of it. And does it place faster or cheaper? Well, it's third from the bottom in the middle of a global pandemic during which everyone was kindly asked, nay, required to telecommute. It doesn't take a genius to figure out that upload speeds are kind of critical to telecommuting.

Now if you undergo a three month long process you may or may not be able to get a speed boost, which will raise it to 5 Mbps. It took me three months. A large amount of that time involved shipping me a box whose contents truly did not matter. It's a Telstra process that just required the box itself to be shown as delivered. I disposed of its contents because I had no use for it. I asked whether we could pretend the box had been shipped. They didn't want to. I asked whether I could get its contents from a local Telstra Store as they showed plenty of that particular item in stock. No. I asked whether they could ship me a different thing in that box that they could ship sooner, even if I'd pay more? No. That's the sort of kafkaesque procedure one is forced to engage in to get not the slowest upload speed in the world, but something that's only a third worse than Syria's (7 Mbps).

Now I get it if this were different infrastructure, if it were ADSL or HFC. But this is a fibre-to-the-premises network using GPON. This is essentially the same technology as the NBN. At a protocol and infrastructure level the network can support an upstream speed of 1.244 Gbps over a distance of 20 km. I don't expect that sort of capability. Economics demand that the end-user connections are passively split, like with the NBN. But the NBN does 40 Mbps. Telstra Velocity seems to do a whopping 97.5% less, or if you undergo

THE PROCESS only 87.5% less. All of this wouldn't matter as much if you could just pay more to get more speed, but the process seems to be closed off and the ceiling's abysmally low.

Again with the international comparison? New Zealand is now starting to rollout a symmetric 8 Gbps on a trial basis, with 8 Gbps becoming more broadly available towards the end of the year. Sheep shaggers. Who cares. we're the lucky country!

Under Telstra's governance the Velocity network is in such a state that saving onto Dropbox is as fast, in terms of bytes per second, as saving onto a 3.5 inch floppy drive on Windows 3.1. When is the last time you even held a floppy? Well, with Velocity you can have that experience every agonising working from home day.

Another fun fact? Telstra, NBN and the Australian government are all members of the ITU, the International Telecommunications Union. And somewhere deep in its standards it publishes what it considers to be "broadband". That definition? A symmetric 2 Mbps. 2 downstream, 2 upstream. There's another way to define broadband by the more traditional definition, which is based around using multiple carrier frequencies to transmit the data, which doesn't apply to this kind of network. And because all that seems to be sold on Telstra Velocity we're arriving at a truly ludicrous situation.

All three parties agree on what "broadband" means officially, legally, with international relevance, but here we have the NBN saying that "adequately served" doesn't actually mean broadband (because only a minimum downstream speed of 25 Mbps is mandated, upstream isn't mentioned). And Telstra has a fixed line monopoly on broadband services but does not appear to be selling fixed line broadband services. And this is not in inconsiderable areas, this is in brand new estates all over the country and South Brisbane.

Enough about upload speeds I hear you say? Well, in Telstra's words "With Telstra Velocity, you'll enjoy typical minimum speeds of 10Mbps between 7pm and 11pm." This one is more of an apples to oranges comparison (i.e. minimum vs average instead of maximum vs average), but 148th place. Still not really what you'd be wanting, and the top end is still well below the global average.

Telstra also keeps mentioning that other providers are free to sell services on the Velocity network, that it's thus not a monopoly. First of all, Telstra does have a monopoly on the infrastructure, to the explicit exclusion of the NBN and the implicit exclusion of everybody else. Telstra does essentially have a monopoly on the services because they are the ones that sell wholesale access and because the Velocity network is so fragmented there's no profit anywhere in sight for anyone wanting to attempt that venture. And all the money goes to Telstra anyway.

And just this past Sunday all of South Brisbane seemed to have been essentially disconnected from the world at large because somewhere Telstra's infrastructure flipped to provide less than 1 Mbps downstream, in some cases substantially less. With the NBN this would be much less of a problem because all of that side of the infrastructure is the responsibility of the RSP. There's a choice, there's diversification, so that if one RSP goes offline not all the rest of them do. With Telstra also the only ISP able to economically provide a service you're putting all your eggs in the one basket and all of South Brisbane is on the phone with the newly outsourced Velocity team (they literally just got rid of their NT or North Queensland team, wherever they were based, btw). And they don't get a reply until Monday morning when someone finally makes his way into the office, enters a command and it's back working. Not the thing you want to hear about critical infrastructure in the middle of a pandemic in one of the most economically important areas

in the country, but it's just the internet, who cares. Telstra sure doesn't seem to. Plus, judging from what's on CrowdSupport, you can just tell people to keep restarting their equipment ad absurdum.

That all said, I would like to present the Department of Communications with some important mathematics that will surely make the case for a much superior service to Telstra Velocity. That is, if you're not going to do anything about Telstra Velocity by having the NBN take it (and odds are that increased productivity may well pay back that purchase just from additional tax revenues is how abysmal the upload speeds are) or getting some minimum service standards on the thing. And that's carrier pigeons.

To transfer 1 TB between Brisbane and the Gold Coast, including save and load time onto a MicroSD card:

Telstra Velocity: 92 days. That's a season. A quarter year. A third of a baby. Telstra Velocity (with a speed boost that took me 3 months of phone time to get): 19 days. NBN FTTP: 2 days. Carrier Pigeon: 6 hours. FTTP in New Zealand: 6 hours. FTTP as being upgraded in New Zealand this year: 20 minutes.

I believe that if the Department of Communications makes a consumer hostile decision in this instance, it should at the very least strongly consider funding an avian internet service to provide a much much superior service. Given the Telstra's chairmans words of providing better value to areas where the NBN had not been built, I'll be expecting my shipment of pigeons eagerly. Or, you know, you could just stop behaving as Telstra always does when faced with a monopoly situation.

Eagerly anticipating Optus 5G and its inevitable crash as 5G can't really handle that many <u>demand from literally</u> every Telstra Velocity household,