

To: Senate Select Committee on National Broadband Network

I believe the following submission may be of assistance.

I have spent 20 years wiring telecommunication devices in houses, businesses and large blocks of units and have seen how taking the wrong approach can result in waste of time and money. I have seen first hand how bad the last street mile of our existing copper network is due to multiple companies and technologies used to try and keep it alive until a better alternative was agreed upon. What I am suggesting below may save a large amount of money and allow for any future technological advances.

The idea is to consider building the rest of the NBN fibre network using a similar approach used by Foxtel HFC

- Foxtel and Optus in the 90's used a very fast and efficient business model to build the Hybrid Fibre Coax network.
- What was key was they chose to connect ***only houses that wanted the service but with the capacity to connect every house.***
- Similar to what Google is doing in the USA <https://fiber.google.com/about/> wiring fibre down each road and only connect people who want it.
- I believe it would provide the best balance of speed and costs, give greater flexibility for consumers and therefore deliver a better outcome for all.

How could it be done

- Like Foxtel run the NBN fibre down the road, but design network with only 1 connector (fibre) for each property (instead of current 3 NBN fibres).
- Pass 3 million homes (~20% of houses) by replacing the old Foxtel copper HFC coaxial network with fibre back to the existing HFC optical fibre nodes (Sydney, Adelaide, Brisbane,Perth,Cold Coast).
- This would use the existing Foxtel pits and ducts originally designed to distribute pay TV, the exact same design the NBN needs to be distributed (NO DIGGING, NO ASBESTOS).
- Unit and town house developments would have FTTB, using the newest FTTB technology, still only 1 fibre to each property, (property may mean a block of 100 units / townhouses).
- FTTB only connect units / townhouses that want the NBN via jumpering across the MDF (Main Distribution Frame) in basement. All other units in building stay on old copper network.

- No need to have large cabinets on side of road or basements with battery back up to power existing old technology devices and the need to maintain 100's of thousands of batteries longterm.
- Each premises that gets the NBN wired, remove old copper / HFC cables from building and slowly decommission all old copper networks (Optus fibre is maintained to Optus mobile phone towers).
- As people move houses the old copper cable would be decommissioned, nobody can connect / transfer a copper telephone line.
- Properties that currently no longer have an active landline connected would have the copper cables decommissioned.
- This will allow for companies like Vodafone, power utilities, road authorities to no longer install their own fibre networks like Ausgrid, Endeavour Energy and others are currently undertaking costing 100's of millions of dollars hidden in everybody's power bills.

Customer Effect

- Similar to Foxtel, only customers who want the NBN, would enter a contract. Key is to give everyone that choice.
- If a premises wants the NBN in the future, connection would be exactly the same as somebody who currently gets Foxtel connected today.
- Apart from units with FTTB the existing NBN Network Termination Devices and other pre-contracted NBN products could still be used.
- Whoever takes out a 12 or 24 month contract with one of the providers (TPG, iinet, Optus, Telstra ect.) would get free connection.
- In the first 12 or 24 month contract if the customer is not happy with the initial provider they are able to change once but must continue contract with new provider.
- Everybody who does not want NBN stays on existing copper network back to the Telstra exchange until they want the NBN.
- Products used on the old copper network would no longer be sold in Australia.
- People with existing devices that currently need a PSTN network (personal medical devices, alarm systems, ISDN, lift phones, fire systems etc) would be able to use these units without the need to replace straight away due to not being compatible with new FTTN technology.
- Consider charging everybody on the NBN maybe a \$1 per month to keep the old copper network maintained until it is no longer viable because every household is either on the NBN or does not want a telephone line in the house because they are

using new wireless technology delivered from an antennae on the nearest power pole by the NBN.

- Everybody currently with Foxtel would be connect back up free and not able to change providers for a minimum of 12 months.

Financial Benefits

- *Clearly, this needs to be costed but numbers can be run to see if the cost is comparable to FTTN.*
- This may save a large amount of money and allow for any future technological advances.
- Recalculate costings to initially wire into less than 33% of premises (Only people who pre-sign up to the NBN).
- This would save a large amount of money and time not wiring more than 66% of properties that currently do not want the NBN and is slowing down the rollout.
- Consider choosing which suburbs to wire first by asking households to pre-register and if more than a certain percentage commit then wire that suburb first.

Yours faithfully