RMID1027 Pricing Review 2021 Consultation Paper 1

Submission by the Australian Communications Consumer Action Network to the nbn Co.

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About ACCAN

The Australian Communications Consumer Action Network (ACCAN) is the peak body that represents all consumers on communications issues including telecommunications, broadband and emerging new services. ACCAN provides a strong unified voice to industry and government as consumers work towards communications services that are trusted, inclusive and available for all.

Consumers need ACCAN to promote better consumer protection outcomes ensuring speedy responses to complaints and issues. ACCAN aims to empower consumers so that they are well informed and can make good choices about products and services. As a peak body, ACCAN will represent the views of its broad and diverse membership base to policy makers, government and industry to get better outcomes for all communications consumers.

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# Responses to Pricing Review 2021 Consultation Paper 1

## Residential TC-4 Wholesale Speed Tiers

#### What data usage (Mbps) and Speed tier mix (%) is your organisation forecasting for the period between May 2021 and April 2023 and how does this compare to historical rates?

ACCAN does not specialise in forecasting consumer demand, however given that workers continue to work from home despite lockdowns easing,[[1]](#footnote-2) we have reason to believe that a permanent demand shift in online activity has occurred, increasing demand for capacity on residential services during business hours. This shift to working from home has also created greater need for higher upload speeds to be able to handle online activities such as uploading large files, using VPNs and videoconferencing.

#### What is your organisation’s preference considering the above options for the May 2022 to April 2023 roadmap and why?

Without certainty about future CVC demand, ACCAN’s preference would be for Option 1, which provides additional CVC inclusions with no increase in the bundle discount effective price for most wholesale speed tiers. This will ensure that households with a fairly stable usage requirement over the next 2 years covered by this consultation will not be required to pay more for their internet service.

Option 2 provides up to $2.80 of additional CVC inclusions, on top of Option 1, for an increased price of $2 to the bundle discount effective charge for speed tiers above 50Mbps. Whilst there has been a shift in online behaviours brought about by the COVID-19 pandemic, ACCAN considers that this will more likely affect demand during business hours. As CVC is billed based on peak CVC provisioning, we would anticipate that peak CVC demand will grow fairly consistently with historical rates. If it is necessary to increase CVC inclusions in order to meet growth in data demand, ACCAN considers that nbn is able to provision this at no additional marginal cost.

ACCAN is conscious of the impact that wholesale price increases can have on households. Whilst the low-income offering presents a partial solution to the issue of affordability, for households who do not meet the eligibility criteria or require a higher speed service, struggling to afford the service can result in the sacrifice of other goods and services in order to remain connected.[[2]](#footnote-3) Alternatively, households may continue to spend unsustainably due to the necessity of the service, increasing the likelihood of future financial stress.[[3]](#footnote-4) Broadband as an essential service should be priced to ensure that individuals and households are able to engage in the digital economy without having to forego other basic goods and services.

Given the economic climate and recovery from the 2019-20 bushfire season and pandemic, the issue of affordability will be more prominent for some households. 60% of Australians are concerned about the impact of COVID-19 on their financial wellbeing, with 20% stating they are worried about paying their telecommunications bills.[[4]](#footnote-5) We argue that now is not the time to be increasing the cost of an essential service.

## Business TC-4 Wholesale Speed Tiers

In answering questions in relation to Business TC-4 Wholesale Speed Tiers,[[5]](#footnote-6) ACCAN will solely focus on the needs of small and medium sized businesses. ACCAN hosts a Small Business Advisory Forum where we are able to hear from prominent members of the small business community in regard to small businesses and their telecommunications needs.

Small business owners often have a net income well below the Australian wage with 52% of small business owners registered with the ATO as individuals earning $0 to $25,000 per annum.[[6]](#footnote-7) Small businesses, particularly micro businesses, often find business grade broadband packages unaffordable, as well as enhanced service level standards. This results in business owners rolling the dice by purchasing a cheaper residential service and hoping that it will perform adequately, with no service issues in the future. ACCAN has received reports from small business that have lost $3,000-$4,000 in income as a result of unexpected disconnections. Yet the prices of enhanced service levels are a deterrent for small businesses, so they will often opt for a cheaper service which becomes costly when issues occur. Therefore, there is a need to raise awareness of the importance of enhanced service levels to small businesses as well as providing these services at an affordable wholesale and retail price.

Another key issue ACCAN hears in relation to small businesses is that they are purchasing asymmetric services which are designed for residential use, despite upstream bandwidth being important to their needs. ACCAN hears from the small business community that there is a need for an affordable service with 50/50 Mbps and 100/100Mbps.

ACCAN agrees with the NSW Small Business Commissioner in that:

*‘Offerings may be developed and based on the needs of typical cafes or retail stores, with more symmetrical connections, guaranteed minimal downtime, a backup option and a dedicated support team, at a reasonable price. This would enhance productivity, assist in reducing the common sources of complaints to the Telecommunications Industry Ombudsman and support small businesses looking to boost digital engagement’.[[7]](#footnote-8)*

#### In your organisation’s view, how do the Business TC-4 high speed tiers complement your retail product portfolio and which market segments are they most effective in addressing?

ACCAN is concerned to see that the proposed prices of higher speed business bundles are significantly increasing. Between now and May 2022, the price of a B500/200 service and a B1000/400 service will increase by 23% and 28% respectively. [[8]](#footnote-9) [[9]](#footnote-10) Whilst the CVC inclusions have also increased, it is surprising to see that CVC inclusions on these bundles will be almost double in the coming years as this exceeds any other bundle’s CVC inclusion increase. ACCAN would like to understand the rationale behind such a steep increase in price, as it is likely to result in customers switching to cheaper lower speed tiers which may not be appropriate for their needs.

That said, ACCAN supports the proposal to establish the Business TC-4 wholesale speed tiers as Business Bundles, with the inclusion of eSLAs. As mentioned above, there is a lack of understanding amongst small businesses of the importance of eSLAs. ACCAN hopes that by establishing the business bundles, it will provide a signal to this market segment that these are the more appropriate services for them. ACCAN recommends including the B100/40 in the list of Business Bundles with enhanced service levels as well, as this will better serve micro and small businesses that may not require the top speed tiers.

#### In your organisation’s view, which product inclusions (e.g. TC1, TC2, CVC or eSLA) or customer experience attributes (e.g. business grade installation, service restoration) would be most effective in accelerating the take-up of these services?)

ACCAN considers that both business grade installation and service restoration are important features for businesses. However, the effectiveness of take-up of these services will largely depend on how well publicised the services are and increasing knowledge around why the product inclusions are necessary for businesses, as there is a tendency for small businesses to rely on residential services and in doing so not to factor in the cost of things going wrong. Furthermore, the complexity in choosing an appropriate service means small businesses rely on the internet provider’s advice. The TIO have identified this as a problem, with their complaints’ analysis showing that small businesses are receiving poor advice or being given misinformation about products.[[10]](#footnote-11)

Additionally, the service must be offered at the correct price. For small and medium sized businesses, costs are the salient factor in choosing products. Small business owners may not necessarily have the time or knowledge to distinguish between various product inclusions and customer experience attributes, and will often choose a service predominantly based on costs. There needs to be a balance between providing a service which provides appropriate attributes, and ensuring costs are not prohibitive.

## Basic CVC Price

#### How would reducing the CVC TC-4 List Price to $15.75/Mbps impact the relative cost and take up of “basic” and “bundle” services for your organisation and will this change affect your pricing, promotion and supply of those services and how will that in turn affect the end users of those services?

RSPs have the choice of purchasing wholesale services via the “basic” list price or “bundle” services. The bundles consist of CVC inclusions and if an RSP requires more than the included amount, they will be charged a $8/Mbps overage fee. Currently the majority of RSPs are purchasing services through the TC-4 bundles discounts as there are less than 4,000 fixed line services incurring the basic list price.[[11]](#footnote-12) This suggests that for fixed line services, it has been cheaper to purchase services through the bundled discounts. For Sky Muster services the basic list price charge is incurred as bundled discounts are not available for this technology.[[12]](#footnote-13)

On considering a price decrease of the list price to $15.75/Mbps, if an RSP is not having to purchase additional CVC and pay the $8/Mbps overage fee, then the bundles will continue to remain the most attractive offer to RSPs despite the decrease in the basic CVC price because it will cost them less. However, without knowledge of how much overage RSPs are paying, it is difficult for ACCAN to determine what impact a reduction in the basic CVC price will have on the decisions by RSPs to take up either ‘basic’ and ‘bundle’ services.

Nevertheless, ACCAN supports the proposal to reduce the basic CVC price to $15.75/Mbps as this will hopefully result in reduced retail cost of Sky Muster services given that all RSPs purchasing Sky Muster services incur the CVC TC-4 List Price.

## Long-term certainty

What changes, if any, would your organisation propose to the pricing construct and price levels to address the core objectives and guiding principles above, balancing improved outcomes for Australian consumers and RSPs with an expected net neutral commercial outcome for nbn in FY24?

It is ACCAN’s preference for wholesale prices to remain constant over time, and we consider that this is possible with the current price construct, therefore we do not recommend any changes to the pricing construct at this time.

ACCAN recognises the need for nbn to continue upgrading the network as well as improve performance and reliability. However, we would like to emphasise the importance of ensuring services remain affordable to all Australians. This will be partially achieved via the creation of a concessional service for low-income consumers, but also through ensuring prices do not increase for the rest of Australia. This will be possible as nbn is able to provision additional CVC at no additional capital and operational cost.

For bundled pricing, so long as CVC inclusions grow in line with data demand, wholesale and retail prices can remain constant. For unbundled pricing, the cost of CVC would have to fall as demand increases. ACCAN expects that as the network matures and more end-users connect to the network, nbn will be in a stronger position to provide more data, and cheaper data without it negatively impacting nbn’s commercial outcomes.

#### How does your organisation see the preferred construct, in your response to question 5.1, and price level evolving over time?

As mentioned above, over time the cost of CVC should fall, and CVC inclusions should continue to increase with demand to ensure that the cost of services does not increase, and service quality is maintained. As the rollout is complete and take up rates increase, the per unit cost of supplying the service should decrease, meaning nbn will be in a stronger position to provide additional data.

It is important to note that it is becoming more viable for consumers to seek alternative solutions if the price of NBN services become prohibitive. As 5G is becoming more accessible in certain areas, and Low Orbit Satellites services are beginning to take orders, in the future nbn will be required to provide competitive wholesale prices if it wants to retain customers in these areas. For nbn Co to maintain and grow its share of the market it will be very important that prices are maintained at an affordable level so that consumers can readily determine that they will be better off using an NBN based service than these alternatives.

#### What impacts would a pricing construct with higher fixed and lower variable changes have on data capped plans, high speed plans (Home Fast, Superfast, Ultrafast), and the overall supply of nbn based retail services to as many customer segments as possible?

##### Bundled services

In terms of bundled services, the fixed cost is the effective charge, and the variable charge is the cost of overage, the price RSPs pay when they require additional CVC than what is included in the bundle. For higher speed plans which usually provide unlimited data, a higher fixed charge and a lower variable charge is likely to provide more price certainty to retailers, as the additional cost when a consumer goes over the CVC inclusion is smaller. However, without knowing how much retailers provision for end-users going over their CVC inclusions or how much overage is being paid it is difficult to say how a change in the pricing construct such as this would impact retailers’ decisions. The impact will depend on to what extent the fixed charge is increased, how much the variable charge is decreased and what proportion of retailers’ costs are variable costs. If the uncertainty in CVC utilisation is pushing retail prices up significantly, then more certainty may result in an increase in supply of high-speed retail plans. This will be a positive outcome for end-users. However, if the higher fixed cost outweighs any benefit brought about by a lower variable cost then there is the chance that the supply of retail services will decrease.

In relation to data capped plans, the fixed charge is the majority of the retailer’s cost as overage will be minimal. ACCAN envisions the impact of this wholesale price increase may reduce the supply of data capped retail services and/or increase the price of retail services. This will negatively impact consumers who are purchasing the data capped plans.

##### Unbundled services

In regard to unbundled services, for high-speed unlimited data plans, the impact on RSPs decisions about an increase in the fixed charge (AVC) but a decrease in the variable charge (CVC) will depend again on the magnitude of the price changes and the volume of CVC being purchased. Therefore, ACCAN is unable to say for certain what effect this will have on the decisions of RSPs. For data capped plans, where RSPs are not purchasing much CVC, an increase in the AVC will represent an increase in total costs, potentially reducing the supply of the service and pushing prices up for consumers purchasing these services which would be a negative outcome.

#### What speed tier mix and data growth would your organisation expect by the end of FY24 based on the wholesale pricing construct in your response to question [1].5.1, and what is the likely driver of these changes and impact on customers?

As mentioned previously, ACCAN does not specialise in forecasting data demand however we would envisage that the change to working from home arrangements will result in a greater need for off-peak capacity on residential services.

## Low-income offering (incl. Older Australians)

ACCAN has long been advocating for a targeted service aimed at making the cost of telecommunications more affordable for Australians. The role of affordability as a barrier to internet take-up is widely recognised as a problem in Australia and internationally.

Last year, telecommunication bills were rated as a major household expenditure by the majority of waged poor households in Australia,[[13]](#footnote-14) with almost half (46%) of households with an NBN or other home broadband service reporting having trouble paying for the ongoing costs of the service.[[14]](#footnote-15) For waged poor households that were renting accommodation, the proportion of respondents struggling to pay was larger (53%). Cost of services resulted in a significant proportion of households cutting back on telecommunications services in the last year (28.2%). Similar research in 2016 showed that 41% of respondents on low incomes (mainly via Centrelink payments) would limit their use of the internet as a copying strategy to manage financial pressures.[[15]](#footnote-16)

Making the service affordable will ensure more Australians connect and stay connected to the network. Having more premises connected will improve the return on investment for nbn. Additionally, as individuals’ circumstances improve, they may upgrade to full price higher speed plans once they have experienced the benefits of a high-speed home broadband service.

##### Desired maximum retail price range

ACCAN appreciates nbn Co’s financial constraints and whilst a wholesale price of $18 - $22.50 is a good starting point, we are concerned at the suggested retail price of $40-$50, where the cost will remain prohibitive for many low-income consumers. ACCAN has previously called for a retail price of $30 for a broadband service,[[16]](#footnote-17) therefore we would hope to see the retail mark up for this product being lower than what is presented in the consultation paper. This will ensure that low-income consumers are paying a similar proportion of their income towards their broadband bill as the average Australian.[[17]](#footnote-18)

Whilst the offering is a step in the right direction, ACCAN is concerned that the suggested retail price would still remain unaffordable for many low-income households, particularly once factoring in additional costs of getting connected such as devices and modems.

##### Wholesale speed tier

ACCAN considers that the speed tiers on offer as part of the Low-income offering are not adequate for the modern day needs of the majority of households. ACCAN recommends providing a 50 Mbps service as part of the offer. This will allow all households accessing the offer, included households with multiple users who need to be connected simultaneously, to engage fully with the digital economy.

##### Retail data allowance

There should be no data caps on the service as this will limit the ability for households to engage with everyday online activities such as accessing government services, health services, online learning, and working. Households with multiple users will quickly utilise the data allowance available and be forced to restrict their internet usage.

If data caps are necessary, we consider that general web browsing as well as certain websites should remain uncapped to allow for unlimited use. For example, websites for the purpose of education or government services (any website with the *gov.au* domain name) should be unmetered. Some services use video in order to convey essential information and this type of usage shouldn’t be metered – for example, online education resources. In particular, the online National Relay Service should remain unmetered, this has come up in previous discussions with NBN in regard to the Sky Muster Plus service. Other websites to be included should be Domestic and Family Violence services as well as health and mental health services websites.

ACCAN also has concerns that an unintended consequence of the data cap is that consumers end up paying more if they exceed their monthly allowance, making the service unaffordable. There needs to be safeguards put in place so that this does not occur.

##### Eligibility

ACCAN understands that the purpose of the first eligibility criteria, that the premise has never been connected or has been unconnected for a period of time (>3 months) is to ensure that consumers who are already connected are not able to access the discount so that the offer remains commercially sustainable. However, it will be deeply unfair to penalise a low-income consumer who has just moved into a premise that was previously connected by excluding them from the offer. Additionally, there will be some households, who despite being low income, are already connected to the network even though it puts them into financial stress. Additionally, some low-income households will already be connected to NBN through the educational offer introduced during the COVID-19 pandemic, and subsequent *Illuminate* offer. It is important for NBN to retain these customers by removing the first eligibility criteria, as ACCAN has previously estimated that there are 1 million households at risk of disconnection.

ACCAN supports the second eligibility criteria, that the offer be targeted towards recipients of specific Centrelink benefits. ACCAN has undertaken research into which groups face the greatest affordability challenges and have identified the following groups that should be eligible for the service:

* Individuals and families with members on JobSeeker payments
* Individuals and families on Disability Support Pension payments
* Individuals on Youth Allowance payments
* Families on Parenting Payments
* Individuals and couples on the Age Pension
* Indigenous Australians on income support
* Families on Family Tax Benefit A

Lastly, whilst the consultation paper does not specify, ACCAN recommends that the service be made available for Fixed Wireless and satellite services as well. A concessional service for satellite users should be the Sky Muster Plus service. It is inequitable that households in regional Australia be excluded from the opportunity of becoming connected to the NBN due to the issue of affordability. Previously, research has shown that living in rural or remote regions is associated with a higher expenditure share on telecommunications, conditional on income.[[18]](#footnote-19) Nbn Co’s initiatives aimed at raising the digital capability of regional and remote communities[[19]](#footnote-20) will have limited impact if households in these areas continue to struggle with the cost of connectivity.

ACCAN considers that there are some valuable learnings to be taken from the COVID-19 Educational offer. These include:

* Collaborating with RSPs to ensure that the offer is successful in the market.
* Making sure marketing materials are appropriate as a higher proportion of low-income consumers are from CALD communities.
* Creating a long term offer to provide retailers enough time to take the product to market, as well as give consumers certainty that the service will continue.
* Identifying and reaching households who have not previously been connected proved difficult. Therefore, ACCAN supports the suggestion in the consultation paper than NBN work with trusted 3rd party organisations to nominate households which may be eligible for the offer.

#### What does your organisation propose as a commercially viable low-income construct?

ACCAN considers that to make a commercially viable service available to low-income households at a retail price of $30, a gap payment contribution will be required by Federal Government. We have detailed this proposal in our *No Australian Left Offline* policy position,[[20]](#footnote-21) and recent Pre-Budget Submission to the Federal Treasury.[[21]](#footnote-22)

#### What barriers does your organisation currently face in offering a long-term retail low-income offer (including required margin), and which low-income segment (e.g. Age Pensioners, families on income support), if any, would your organisation seek to focus these constructs for?

N.A

## Simplicity

#### Would your organisation prefer a single calendar month aligned billing period?

If moving to a single calendar month aligned billing period reduces complexity and cost for retailers, this could benefit consumers by a possible reduction in retail prices.

#### If so, what challenges does your organisation expect to face and what length of time would your organisation require to move to a new billing period?

N.A

##### TC-1

#### What, if any, would be the impacts, now or in the future, of withdrawing the 2Mbps and 5Mbps TC-1 tiers and is the TC-2-5/5 Mbps a suitable alternative?

TC-1 is designed for business grade voice services, whilst TC-2 is designed to provide high-performance business grade data services, which are also capable of delivering voice services. For the TC 2 service to be a suitable alternative to the TC-1 service, end users should not have to pay more for the alternative and should receive the same (or better) quality of service.

Small businesses may benefit from the switch of service so long as the quality is maintained. The recurring charge for AVC TC-1 2 Mbps and 5 Mbps is $132.00 and $333.00 respectively, whilst the charge for a AVC TC-2 5/5 Mbps is $32.00. Therefore, ACCAN would expect end-users to pay considerably less for a TC-2 service than they are currently paying for the TC-1 service. However, the withdrawal of such services should only occur if the service quality can be maintained, and the end-user is given sufficient notice of the removal of the service. Additionally, the switch to a different product or tier should not result in any disruption to the voice services, as this could be costly to the businesses which rely on them.

##### TC-2

#### Compared to high speed TC-4, what additional value does your organisation see in low speed (20/20 Mbps and below) TC-2 symmetrical committed services over the next 3-5 years and to what extent will these services be delivered over contended networks using SD-WAN?

As mentioned previously, TC-4 services are services designed for general internet and standard data services. TC-2 services are prioritised over TC-4 services as they are designed to provide high-performance business grade data services

As far as ACCAN is aware, small businesses generally do not purchase TC-2 services, despite offering high performing business grade data services and symmetrical speed tiers, given it is significantly more expensive than a TC-4 service. Some businesses may not value the performance differential provided by TC-2 over TC-4, or there is likely some confusion amongst consumers of the practical differences between the traffic classes. However, if a consumer is generally basing their decision on the value of download and upload speeds, TC-4 appears to offer better value for money.[[22]](#footnote-23)

#### With respect to TC-2 50/50 Mbps and above services what additional value does your organisation see compared with similarly price nbn Enterprise Ethernet services?

N/A

1. As of December 2020, 2 in 5 Australians continue to work from home <https://www.abs.gov.au/statistics/peo130ple/people-and-co130mmunities/household-impacts-covid-19-survey/dec-2020> [↑](#footnote-ref-2)
2. TASCOSS, Understanding Digital Inclusion in Tasmania (2019). [↑](#footnote-ref-3)
3. Bruenig, R and McCarthy, O. 2019. *Household telecommunications expenditure in Australia.* Telecommunications Policy. [↑](#footnote-ref-4)
4. Consumer Policy Research (2020), *COVID-19 and consumers: from crisis to recovery*. <https://cprc.org.au/app/uploads/2020/09/Consumers-and-COVID-19_summary_25June2020_compressed.pdf> [↑](#footnote-ref-5)
5. T-C4 refers to the traffic class designed specifically for general internet and standard data services. TC-4 is available across all access technologies and provides asymmetrical download and upload speeds. TC-1 is designed for business grade voice services and TC-2 is designed to provide high-performance business grade data services. [↑](#footnote-ref-6)
6. Australian Small Business Family Enterprise Ombudsman (2019*) Small Business Counts* <https://www.asbfeo.gov.au/sites/default/files/documents/ASBFEO-small-business-counts2019.pdf> [↑](#footnote-ref-7)
7. NSW Small Business Commissioner, 2020, *Submission to the Joint Standing Committee on the National Broadband Network. Inquiry into the Business case for the NBN and the Experience of Small Business.* [*https://www.smallbusiness.nsw.gov.au/sites/default/files/2020-09/Submission%20to%20the%20Joint%20Standing%20Committee%20on%20the%20NBN.pdf*](https://www.smallbusiness.nsw.gov.au/sites/default/files/2020-09/Submission%20to%20the%20Joint%20Standing%20Committee%20on%20the%20NBN.pdf) [↑](#footnote-ref-8)
8. B500/200 current wholesale price is $130, the proposed price is $160. (160-130)/130 = 23% [↑](#footnote-ref-9)
9. B1000/400 current wholesale price is $180, the proposed price is $230. (230-160)/180 = 28% [↑](#footnote-ref-10)
10. Telecommunications Industry Ombudsman, 2020, Addressing the cause of small business complaints. <https://www.tio.com.au/sites/default/files/2020-06/TIO%20Addressing%20the%20causes%20of%20small%20business%20complaints%20-%20Systemic%20Investigation%20Report%20June%202020_4.pdf> [↑](#footnote-ref-11)
11. Nbn co, 2021, Pricing Review 2021 Consultation Paper 1. Pg.12 [↑](#footnote-ref-12)
12. Noting Sky Muster Plus services do not incur the basic list price. [↑](#footnote-ref-13)
13. Waged poor referred to households that have a source of income (wages and salaries) but fall below the poverty line (50% of median equivalized household disposable income). [↑](#footnote-ref-14)
14. SACOSS, 2020, *Connectivity Costs II: Telecommunications Affordability and Waged Poor Households.* <https://www.sacoss.org.au/sites/default/files/public/Affordability%20and%20Waged%20Poor%20Report%20final%20Web.pdf> [↑](#footnote-ref-15)
15. SACOSS, 2016, *Connectivity Costs : Telecommunications Affordability for Low Income Australians* <https://accan.org.au/files/Reports/161011_Connectivity%20Costs_accessible-web.pdf> [↑](#footnote-ref-16)
16. ACCAN, 2019, “*No Australian Left Offline: ACCAN pushes for affordable broadband*.” <https://accan.org.au/media-centre/1572-nalo-media-release> [↑](#footnote-ref-17)
17. The latest figures show that the lowest 10% and 20% of earners pay on average around 10% and 6% of their disposable incomes on communication services. In comparison the average household pays around 3.5% of their disposable income on communications. <https://www.communications.gov.au/documents/trends-and-drivers-affordability-communications-services-australian-households-0> [↑](#footnote-ref-18)
18. Breunig & McCarthy, 2019. [↑](#footnote-ref-19)
19. Nbn Co, 2019, *“NBN Co announced major initiatives to boost commitment to regional and remote Australia”.* https://www.nbnco.com.au/corporate-information/media-centre/media-statements/regional-announcement [↑](#footnote-ref-20)
20. ACCAN, 2019. [↑](#footnote-ref-21)
21. ACCAN, 2021, *Prebudget Submission.* <http://accan.org.au/files/Submissions/2021/ACCAN%20Pre-budget%20submission%202021-2022%20final.pdf> [↑](#footnote-ref-22)
22. Currently the wholesale cost of a TC-2 20/20 Mbps service is $128.00, whilst the wholesale cost for a TC-4 250/100 Mbps is $100.00 [↑](#footnote-ref-23)