TELSTRA CORPORATION LIMITED

Telstra submission to ACCC Communications Sector Market Study Draft Report

Public version

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EXECUTIVE SUMMARY

Telstra agrees with the key draft findings in the ACCC's Communications Sector Market Study Draft Report (**Draft Report**) on its Communications Sector Market Study (**Market Study**) that the communications market is competitive and the regulatory framework fit for purpose. Telstra considers that there is strong evidence of competition between the major service providers of voice and broadband services, with new entrants and smaller providers placing competitive constraints on larger providers. We are seeing this reflected in our market share and growth, and expect increasing competition between providers to continue to the benefit of consumers in terms of price and value inclusions.

The Market Study has been undertaken at a time when the communications sector in Australia is fundamentally changing, not least with the transition to the NBN. While the Market Study considers products and services that are likely to impact on the communications sector in the future, such as the Internet of Things (**IoT**) and Software Defined Networks (**SDN**), it focuses on immediate concerns relating to the consumer experience in migrating to the NBN and when on the NBN. While this was not, in Telstra's view, the initial intent of the Market Study, it seems appropriate given the time critical nature of these concerns. We do, however, welcome further engagement with the ACCC on the appropriateness of the regulatory framework on a more forward-looking basis.

Telstra supports the ACCC draft finding that there are fundamental issues associated with the migration to the NBN which are directly impacting on the consumer experience and require immediate measures to address. In particular, Telstra shares ACCC concerns about NBN service level standards that impact on connection, fault rectification and recourse to appropriate compensation. Telstra's position is that customers should be no worse off on NBN then they are today on Telstra's legacy network. Current NBN service level standards do not support this position. Telstra welcomes the ACCC's recently commenced inquiry into wholesale NBN service standards.

At this critical point in the development of the communications market in Australia, investment to support technology innovation must be supported by a regulatory framework that reflects the risk being taken by network operators and that recognises the need to provide incentives to invest in new products and services. Such an approach has been adopted in other jurisdictions. For example, in its Strategic Review of Digital Communications, Ofcom considered that its strategy must be to "…*enable the evolution of digital communications in line with the expanding needs of consumers and businesses. In particular, we must support the new investment and innovation that will be required*."[1] Regulatory intervention, even where in the form of monitoring or information gathering, can be detrimental to incentives to invest in networks and/or new products and services. As acknowledged by the ACCC in the Draft Report "…*there is far less need…to step in and set terms and conditions up-front for new communications services*." Telstra considers that this position needs to be extended more broadly such that the ACCC does not engage in any form of *ex ante* regulation where there is no evidence to suggest that there is an immediate competition concern or evidence of consumer detriment.

There are a number of areas where the ACCC considers that some form of regulatory measure may be required but proposes to monitor or collect further information rather than adopt a more interventionist option. Regulatory reporting and information provision requirements are, however, a regulatory burden and a signal to service providers that there is a high risk of further regulation. In other jurisdictions, they are typically used to monitor the effectiveness of regulatory remedies rather than determine whether a regulatory remedy is required. This is particularly appropriate where

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[1] https://www.ofcom.org.uk/__data/assets/pdf_file/0016/50416/dcr-statement.pdf

markets are in the early stages of development. Telstra considers that the ACCC should therefore exercise caution in determining whether monitoring of these markets is necessary to avoid the risk of deterring ongoing investment and development to the detriment of wholesale and retail customers. At a minimum, the ACCC should obtain a robust view of the costs that it intends to impose on industry if the ACCC considers that information collection is necessary. This is particularly applicable to the provision of wholesale NBN aggregation services, which are developing in line with the transition to the NBN, and dark fibre, which is characterised by increasing competition and the entry of new providers.

Further, none of the markets considered by the ACCC as appropriate for the imposition of formal record keeping rules are monopoly markets, which are generally the subject of up-front terms and conditions of access. In Telstra's view there is a real prospect of effective sustained competition in these markets provided the regulatory environment supports this. Where allegations of misuse of market power or other forms of anti-competitive conduct arise, the ACCC has significant *ex post* powers available to it to investigate and, where appropriate, take action. That is, the ACCC should bias towards *ex post* rather than *ex ante* regulation in emerging or dynamic markets due to the risk of distorting rather than encouraging competition.

Consistent with the above, Telstra supports ACCC draft findings that regulation should not constrain competition, that is played out on a level field, with the NBN nor the development of services such as IoT and SDN. This finding also specifically applies to other services such as small cells. The ACCC suggestion that these may display monopoly characteristics that require open access requirements threatens the initial investments and ongoing development of small cell infrastructure which is in early stages of development.

At the same time, Telstra supports the ACCC draft view that there may be scope for removing existing legacy regulation that no longer appears appropriate. For example, Telstra agrees with the ACCC that the regulation of SMS termination should be reviewed given the competitive constraint of Over-the-top (**OTT**) messaging services, the fact that SMS is no longer the dominant medium for customers to message each other, and the absence of any demonstrable market failure or harm. This approach should also be extended to other legacy regulation which may no longer be appropriate given the increasing scale in NBN migration. As set out in our previous submission to the Market Study, the traditional view of competition and the existing regulatory framework does not adequately account for the developments in the communications sector nor how the market has evolved and will continue to evolve. With increased competitive intensity resulting from greater customer empowerment and the entry of global OTT players (and others) into the market, there is considerable opportunity for legacy regulation to be removed altogether.

INTRODUCTION

This submission is in four parts.

- Section 1 provides Telstra's views on the ACCC's assessment of the current state of competition in communications services
- Section 2 sets out Telstra's responses to the ACCC's views of immediate issues requiring action to promote competition
- Section 3 responds to the ACCC's positions on medium to longer term issues requiring monitoring and potential future action
- Section 4 sets out Telstra's views on the policy implications and priorities included in the Draft Report.

Telstra notes that the ACCC is also conducting – or intending to conduct - a number of related inquiries or consultations that are referenced in the Draft Report. Where appropriate, Telstra's views will be set out in more detail in response to those inquiries or consultations.

1. CURRENT STATE OF COMPETITION IN COMMUNICATIONS SERVICES

The Draft Report provides a comprehensive assessment of the current state of competition in the market, which the ACCC uses as a baseline against which they have identified potential competition, efficiency and consumer issues.

In general Telstra considers the ACCC has adopted a positive approach to its view of competition in the communications market. We support many of the draft findings made by the ACCC in its competition assessment, including:

- There is reasonably effective competition in the voice and messaging services market, with consumers benefiting from ongoing price reductions, product innovation and differentiation in non-price terms and conditions;
- There is strong price and non-price competition in the fixed line and mobile broadband services market, particularly for broadband services on the NBN;
- The nature of competition between access network technologies is evolving as fixed line and wireless networks increasingly converge, however the extent of future competition will depend on the degree of substitution in downstream voice and broadband markets;
- Issues with NBN prices and current service levels have the potential to distort competition and will continue to result in a poor consumer experience on the NBN if left unresolved; and
- Competition in the supply of transmission services, including to NBN Points of Interconnect (**POIs**), continues to develop.

There are, however, elements of the ACCC's findings in relation to the above which are not consistent with Telstra's experience. Further, there are other aspects of the ACCC assessment of competition in the market which Telstra considers do not reflect the state of current and likely future competition. These are set out below and in more detail in the relevant sections of this submission.

Competition in voice and messaging services continues to grow

As noted by the ACCC, there is significant structural and technological change occurring in the market for voice and messaging services. This includes the transition to the NBN; the increased reliance on, and preference for, mobile services; and the impact of OTT voice and messaging services. Telstra notes, however, that the latter two changes have been underway for some time.

Although the ACCC considers the market is relatively concentrated, this is not reflected by the current market structure nor the outcomes being experienced by consumers in terms of price and non-price competition. Telstra's experience is that consumers are benefiting from increasingly strong competition across voice and mobile markets, with ongoing declines in price accompanied by increases in value. For example, as set out in our submissions to the ACCC Domestic Mobile Roaming Declaration Inquiry, competition in the mobile sector is delivering world-leading outcomes to Australian consumers and businesses in terms of mobile coverage, price and value for money.[2] This is also evident in the fixed market, where prices have declined steadily and voice services are typically included as part of a bundle alongside broadband (and other) services. Telstra agrees with the ACCC that this is likely to be even more prevalent with the transition to the NBN, although Telstra will continue to offer voice-only plans for our customers who do not wish to acquire broadband services.

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[2] https://www.accc.gov.au/system/files/Telstra%20main%20submission1_0.PDF

Given the changes in how voice services are being offered to customers, the ACCC proposes to review its competition and price monitoring activities to ensure that they appropriately capture the evolution of voice and messaging services, and report on this in the annual telecommunications report (**Action 1**). Telstra agrees that this is an appropriate proposal. It is, however, likely that service providers will increasingly seek to differentiate their service offerings through varying inclusions or bundling which will continue to make it difficult to compare and monitor pricing. The ACCC will therefore need to be cautious in reaching any conclusions regarding the state of competition in the market based purely on bundle comparisons.

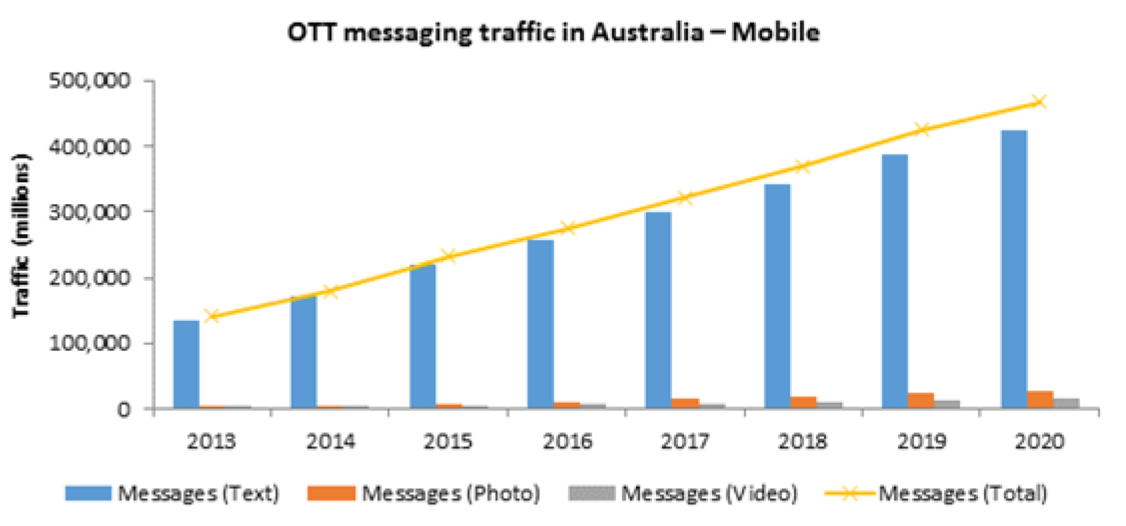
Telstra agrees with the ACCC that voice and messaging services face competitive constraints from OTT offerings, such as Skype, WhatsApp and Facebook Messenger. Even where there may be some barriers to full substitution, consumers tend to use multiple services and competition between messaging platforms has resulted in SMS being overwhelmingly offered on an unlimited basis.

Telstra also agrees with the ACCC that there is a need to examine the messaging services market to determine the need for ongoing regulation of SMS termination services in the next regulatory review of the mobile terminating access service (**Action 2**). Telstra has consistently argued that the regulation of SMS services is unnecessary as there are no bottleneck features or other market failures present in the provision of this service in either upstream or downstream markets.

Since the regulation of SMS termination services under the Mobile Termination Access Services (**MTAS**) declaration in 2014, the traditional messaging services market has continued to develop. As was the case in 2014 SMS is part of a much broader messaging market, facing competitive pressure from OTT messaging services such as Facebook Messenger and WhatsApp and data services including smartphone email applications. This market has only increased in competitiveness, with further smartphone penetration and consumer behaviour strengthening the competitive constraint placed on SMS by other services, as well as the substitution between all messaging services.

Ovum's 'OTT Messaging Forecast: 2016-20' report reveals the number of unique registered users of OTT messaging applications in Australia increased by 56.19% between 2013 and 2017. Ovum estimate this trend to continue, predicting an increase in unique OTT messaging users of 31.26% between 2017 and 2020[3]. This is illustrated in Figure 1 below.

Figure 1 OTT Messaging traffic in Australia



[3] Ovum, OTT Messaging Forecast 2016-2020, September 2016

OTT messaging now operates as a full substitute to SMS for some customer segments and Telstra expects this to be the case for an increasing number of customers. Further, OTT messaging applications such as Facebook Messenger and iMessage now allow consumers to access SMS and OTT messages through the same interface.

Telstra considers that the high level of competition between SMS and OTT messaging services suggests there is no need to continue to regulate SMS termination services. As noted by the ACCC in the Draft Report, OTT messaging services provide a competitive constraint on SMS messaging services, most clearly indicated by the fact that the majority of service providers now offer customers unlimited SMS as a standard feature of mobile plans. This is a sharp decrease in price when compared to historical charges of, for example, $0.25 per SMS. These substantive developments are evidence of a competitive market that is functioning well and producing positive outcomes for customers. Telstra looks forward to engaging with the ACCC on this issue as part of the upcoming MTAS Declaration Inquiry.

Future competition in broadband services will be influenced by the efficiency of the NBN

The Draft Report assesses competition in the provision of broadband services across the spectrum of network technologies over which broadband services are supplied, including legacy fixed line, fibre, mobile, fixed wireless and satellite. The ACCC notes that, as with voice services, *"…the distinction between fixed and wireless services is increasingly blurred as consumers demand seamless, ubiquitous internet connectivity, disregarding the underlying network technology*." Similar to voice services, the provision of broadband services is undergoing significant structural change. The most notable of these is the transition to the NBN which is having flow-on impacts to broadband services provided over alternate technologies.

The ACCC finds that there is a significant degree of price competition in the market for broadband services delivered on the NBN, although considers this may not be sustainable over time. Telstra agrees that price competition is increasing in intensity across all NBN (and non-NBN) service providers and we expect this to continue in the short term as the rollout reaches its peak. The competitiveness of the market is demonstrated by the fact that, since the release of the Draft Report, Telstra has introduced unlimited data on many of its broadband bundles as well as a limited $80 broadband bundle. This is in contrast to the view in the Draft Report that Telstra "…*offers less data for a higher price*" and "…*is able to charge a premium for its plans*." Telstra is clearly responding to the high level of price and non-price competition which has impacted on growth, despite the ACCC view there is less competition at the 'premium' end of the market.

However, as pointed out by the ACCC, there are concerns that the current level of price competition may not be sustainable over the long term. This is due to the current and expected pressure on margins associated with the provision of broadband services over the NBN. This is discussed in more detail in Section 2. This is likely to shift the focus of competition for broadband to non-price elements, which is already evident in the shift to unlimited data inclusions and content services as noted above. The ACCC notes that non-price competition has a limited focus on differentiation by speed, service quality and performance despite the enhanced technological capabilities offered by the fibre networks. Telstra considers that this will likely remain the case until the speed and service quality concerns with NBN are resolved. However, there have been some developments with respect to non-price service offerings recently including Telstra's announcement that we are committed to buying more NBN capacity, which would allow 80 percent of maximum network speed to be delivered even in peak times. This indicates a clear focus on the customer experience on the NBN rather than price alone.

The Draft Report examines the extent of non-price competition among providers of broadband services across a number of dimensions, including data quotas, bundling, network coverage, contracts, speed, customisation and service quality. Telstra's views on the ACCC findings in relation to these dimensions, as well as substitution between different technologies, are set out later in this submission.

Substitution between access network technologies will be heavily influenced by the NBN customer experience

The ACCC has also considered the state of competition at the network infrastructure level, including the implications of competition and conditions for competition in voice and broadband services markets. The Draft Report sets out the network operators, wholesale services and service providers for each network technology – legacy, next generation, mobile and fixed wireless – which shows that all these networks are supporting a high number of service providers. Significantly, the ACCC notes it is observing substantial convergence between fixed line and mobile markets due to network improvements and technology advancements, which means there is now greater opportunity for competition at the network level. Telstra agrees with the ACCC that this is more evident now than ever before but considers there is still some way to go before fixed and mobile networks can be viewed as complete substitutes. This is discussed in further detail in section 3.

Importantly, the ACCC acknowledges that the extent and nature of competition between networks, particularly NBN and non-NBN, will be influenced by consumer substitution between services in the downstream broadband services market. Such substitution will be influenced by a number of factors, not least the consumer experience on the NBN encompassing price and non-price dimensions. As set out elsewhere in this submission, Telstra considers that the price of NBN services will be a key influence on the take up of alternate network technologies by consumers. Absent changes to the NBN price levels in particular, Telstra considers it possible that increasing numbers of consumers will seek to access broadband services via other means.

In considering the impact of networks on downstream competition, the ACCC also raises a concern that competition on the NBN may be inhibited by the availability and accuracy of NBN rollout information. Telstra has stated its position on the rollout information provided by NBN Co as part of the ACCC's consultation on the NBN Special Access Undertaking (**SAU**) variation. Specifically, that the rollout information provided by NBN Co is insufficient and that proposed amendments to the SAU fail to achieve an appropriate balance between accurate and timely provision of rollout information to stakeholders. This balance is critical for service providers in network planning activities and, ultimately, in providing their customers with high quality NBN services. Telstra would welcome further engagement on how rollout information could be enhanced to improve competition in the provision of services over the NBN.

Regulatory intervention in other markets risks investment and innovation

The ACCC also considers the statement of competition in several other markets including NBN wholesale aggregation services, dark fibre, internet interconnection, OTT content services, cloud computing, and data centres. In general, the ACCC does not find that there are competition concerns in these markets which are continuing to develop in size and competitiveness. However, in some instances, the ACCC considers there is potential for future competition concerns requiring the imposition of formal record keeping rules. Telstra does not consider that regulatory intervention in any form is appropriate in markets which are still developing. Rather, such intervention (even that considered 'light touch') poses a risk of deterring further investment and innovation in these market. This is discussed in more detail in the relevant sections for each market in this submission, as well as in Section 4.

2. IMMEDIATE ISSUES REQUIRING ACTION TO PROMOTE COMPETITION

The ACCC has identified a number of issues with significant and material concerns that require immediate attention, either in the form of regulatory intervention or further detailed consideration. These issues, directly or indirectly, relate to the NBN and cover the retail, wholesale and consumer experience.

While the transition to the NBN is undoubtedly a significant change for the communications sector and there are a number of important issues - specifically those relating to pricing, service standards and the consumer experience - that require short-term action, Telstra considers the ACCC should not assume that all aspects of the NBN require regulatory intervention. In particular, the NBN wholesale aggregation and dark fibre markets are relatively new yet increasing in competitiveness. Any form of regulatory intervention at this stage of the development of those markets – even in the form of formal monitoring or information requirements – only threatens ongoing investment and innovation to the detriment of customers.

Price and speed of NBN broadband services

NBN pricing is a key issue discussed in the Market Study. As noted by the ACCC, this is an issue that has attracted significant attention from industry, stakeholders and the public more generally. Affordability of the NBN is undoubtedly important as the migration to the NBN increases in scale. While it is reasonable to expect there will be transitional factors affecting the consumer experience, the fact remains that consumer expectations and willingness to pay for NBN services (relative to legacy services) are placing increased pressure on service providers and NBN Co.

At this stage, the ACCC preference is for an industry-led solution to pricing concerns, strongly encouraging NBN Co and service providers to continue to engage constructively to address issues raised about NBN wholesale access pricing within the existing regulatory framework (**Action 3**). The ACCC considers that this is essential if there are to be improved outcomes for NBN Co, service providers and consumers. Accordingly, the ACCC has delayed its decision on varying NBN Co's SAU in order to give NBN Co and service providers' flexibility to continue their discussions in relation to pricing. Further, the ACCC will carefully examine any outcome of NBN Co's current pricing consultation, including the need for consequential changes to the SAU or other regulatory response to promote positive outcomes for consumers and the market generally (**Action 4**).

Telstra is committed to working constructively with NBN Co to address issues raised about NBN wholesale access pricing within the existing regulatory framework, as well as being focussed on providing a quality experience to our customers as they transition to the NBN. However Telstra shares industry concerns regarding NBN wholesale access pricing levels. Ongoing industry engagement by NBN Co and Retail Service Providers (**RSPs**) through various forums, including the Product Development Forum (**PDF**)[4] and most recently the Pricing Evolution Consultation[5], has resulted in NBN Co announcing new short term discounting and bundled plans. They are intended to improve the customer experience and encourage RSPs to offer higher speed plans. These changes do not overcome the fundamental issues requiring NBN Co to fully recover the cost of investment (and achieve commercial returns) through its wholesale prices.

The 2016 Statement of Expectations affirmed, "*The Government is committed to completing the network and ensuring that all Australians have access to very fast broadband as soon as possible, <u>at affordable</u>*

[4] https://www.nbnco.com.au/sell-nbn-services/industry-consultation/product-development-forum.html
[5] " Pricing Evolution" Industry Consultation Paper May 2017

prices, and at least cost to taxpayers."[6] (emphasis added). But, currently neither NBN Co, RSPs nor customers are realising the intended benefits of the NBN due to issues regarding NBN wholesale access pricing. Specifically, there is widespread industry concern regarding:

- NBN Co's commerciality and the returns it is seeking to achieve;
- The significant margin pressure RSPs are currently under which will only exacerbate as NBN seeks to meet its Average Revenue Per User (**ARPU**) objectives; and
- Whether NBN Co's recently announced price reductions are sufficient to overcome the tensions between RSP economics and the requirement for NBN Co to meet its commercial targets.

The commercial viability of the NBN is uncertain

There has been widespread commentary about the commercial viability of the NBN. CEO Bill Morrow, has himself acknowledged that NBN Co is unlikely to make a positive return stating publicly, "*The current revenue per user coming from the RSPs will not generate enough total revenue to produce a positive return on the investment made to build the network*."[7] In NBN Co's most recent submission to the ACCC in relation to the 2016-17 Regulatory Information and LTRCM Determination, NBN Co report a large and growing accumulated loss base (as evident by the Interim Cost Recovery Account (**ICRA**)). The 2016-2017 ICRA closing account is $14,014,956,000.[8] That is, NBN Co has to date over $14 billion of unrecovered revenue (and accumulating interest) that will ultimately need to be recovered from consumers within the current regulatory and policy framework.

Secondly, if a positive Internal Rate of Return (**IRR**) is to be achieved, Morrow posits that there must be a significant shift in the services RSPs choose to supply and customers demand, particularly in relation to speed. However, as highlighted in the latest NBN Wholesale Market Indicators report[9], there is a significant bias (83 percent) toward the two lowest tiers (12/1 and 25/5) across all technologies. NBN Co forecasts that there will be a significant shift in the wholesale speed tier mix toward higher speed tiers in the coming years, however, there appears to be limited evidence to support this assumption.[10]

RSPs face significant margin pressure in providing broadband services over the NBN

The economics of the NBN are challenging for all RSPs who are under significant margin pressure in providing broadband services over the NBN in a very competitive environment. As detailed in NBN Co's Corporate Plan 2018-21, Australian consumers are demanding more and more data and this demand is expected to continue to grow at a compound annual growth rate of 20-30 per cent to 2025.[11] Aligned to this data growth and consistent with NBN Co looking to achieve its commercial targets, NBN Co is also expecting to increase its ARPU, from $43 in 2016-17 to $52 in 2020-21.[12]

NBN Co's expectations of growing ARPU (and in particular growing Connectivity Virtual Circuit (**CVC**) revenues) will put further pressure on RSP margins. In addition, the current price structure does not allow industry to support this increased data consumption. This is evident from the stagnated average CVC consumption recorded across the industry. From Q1 2016 to Q2 2017, NBN Co reported a very modest uptake of average CVC per user, which increased .08 Mbps from 1.01 to 1.09 Mbps.

[6] https://www.nbnco.com.au/content/dam/nbnco2/documents/soe-shareholder-minister-letter.pdf
[7] https://www.nbnco.com.au/content/dam/nbnco2/documents/is-nbn-cvc-charge-to-blame-position-paper-170731.pdf
[8] https://www.accc.gov.au/system/files/NBN%20Co%20%E2%80%93%20SAU%20%E2%80%93%202016-17%20Regulatory%20Information%20and%20LTRCM%20Determination%20%E2%80%93%20Supporting%20Submission.pdf, p.10
[9] For period up to 30 September 2017
[10] https://www.nbnco.com.au/content/dam/nbnco2/documents/Corporate-Plan-2018-2021.pdf, p.53
[11] Sourced from Cisco Visual Networking Index 2016 and nbn internal forecast. https://www.nbnco.com.au/content/dam/nbnco2/documents/Corporate-Plan-2018-2021.pdf, p.14
[12] https://www.nbnco.com.au/content/dam/nbnco2/documents/Corporate-Plan-2018-2021.pdf, p.53

This can be contrasted with the significant amount of data downloaded by customers. The ACMA recently released its 2016-2017 Communications Report, which noted that Australians are "…*downloading, consuming and creating more data and content than ever before*…"[13] The ACMA reports that the volume of data downloaded increased by 43 per cent between the June 2016 and June 2017 quarters to over 3.1 million terabytes, with 2.9 million terabytes delivered over fixed-line broadband.

While Telstra welcomes the progress NBN Co has made to address industry concerns in terms of its recently announced pricing changes,[14] we remain concerned that the combination of pressure on NBN Co to produce a high commercial return and a regulatory pricing mechanism that prioritises this return over socially efficient pricing, will not allow the benefits of the NBN to be fully realised. That is, while NBN Co's commercial targets remain unchanged there is likely to be continued concerns about price levels. Like other RSPs, Telstra considers that unless there are significantly improved price outcomes to support increased data usage, current industry issues concerning the customer experience will persist. To this end, we note that NBN Co has flexibility to further address pricing issues raised by the industry through the introduction of new plans and by the use of targeted discounting on existing plans. In the latter case plans/prices put forward by NBN Co are not subject to any regulatory oversight – they can be withdrawn or altered at any time.

NBN Co's SAU is a key part of the regulatory framework that governs the price and other terms upon which NBN Co will supply its services to access seekers until 2040. While Telstra supports the ACCC's decision to delay its decision on varying the SAU in order to give NBN Co and service providers' flexibility to continue their discussions in relation to pricing, Telstra remains concerned that the SAU does not allow the ACCC to appropriately deal with pricing issues. As noted in Telstra's previous submission, "*The formal ability of the ACCC to address concerns associated with NBN pricing is limited to the price controls and rebalancing mechanism contained within the SAU, both of which are unlikely to have any long-term significant impact.*"[15]

Further, as noted in our recent submission regarding NBN Co's variation to the SAU, Telstra remains concerned that the price constraints/caps have not been appropriately set given the changed delivery model to multi technology mix (**MTM**). Telstra considers that the ACCC must consider if the variation as proposed by NBN Co should be more extensively altered to consider these changing dynamics.

The requirement for full cost recovery needs immediate review

The ACCC considers that, given the cost issues with the NBN mandate alongside the multiple objectives and complexity of the task given to NBN Co by the Government, commercial and regulatory developments may not be able to provide a complete solution to broader economic efficiency objectives in the medium term. The ACCC view is that there may be a need for Government intervention to enable NBN Co to charge lower prices for its services. Accordingly the ACCC proposes that, in the medium term, and depending on future developments, the Government should consider whether NBN Co should continue to be obliged to recover its full cost of investment through its prices (**Action 5**). The ACCC considers that further work could be done by the ACCC and the Department of Communications and the Arts (**DoCA**) to examine this issue and in particular possible options that may provide NBN Co greater flexibility regarding its cost recovery objectives for example direct budget funding arrangements for non-commercial services, debt relief measures or an asset revaluation.

Telstra supports a broader consultation by the ACCC and the DoCA to examine the issue of whether NBN Co should continue to be obliged to recover the full cost of investment through its prices, including assessing whether other options would provide NBN Co with greater flexibility to ensure affordable universal access to broadband.

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13 https://www.acma.gov.au/theACMA/communications-report
14 NBN Co, "Pricing Evolution" Industry Consultation Paper, December 2017
15 Telstra, Submission to ACCC Draft Decision on Variation to NBN Co Special Access Undertaking, September 2017.

Telstra notes that, under the SAU, recovery of the full cost of the NBN investment will amount to more than just recovery of the expected $49 billion investment. Full cost recovery includes repayment of NBN Co's ICRA account which includes a significant compounding return on capital. For example, with a current ICRA balance of approximately $14 billion and a regulatory WACC of 6.5%, a return on capital of $910 million will be added to NBN Co's ICRA account in 2017-18.[16] These additional "costs" are ultimately recovered by NBN Co, i.e. end users pay for these costs. Based on current projections, it will be many decades (if ever) before the full cost of investment is paid back, by which time Australian consumers would have paid tens of billions of dollars in ICRA return on capital.

It is also worth noting that there are social benefits to the community that the roll out of the NBN will achieve. These benefits include improved social engagement and access to services (e.g. health and education), expanded work opportunities through telework and greater access to online services.[17] There are also the expected benefits to economic output. For example, in 2015, a study suggested that the "*NBN roll out can boost Australia's Gross Domestic Product (GDP) by about 2% in the long term and…importantly, add to our national welfare by improving real household consumption by 1.4%*."[18] Taking these broader benefits into consideration when assessing the ongoing cost recovery requirement would lower the commercial return targets NBN Co is presently pursuing and could allow for important price relief to be achieved, ultimately accelerating these additional benefits.

Given the issues associated with NBN economics and pricing, RSP margins and customer experience, Government consideration of whether NBN Co should continue to be obliged to recover its full cost of investment through its prices may need to happen sooner than the medium term.

NBN wholesale service standards do not support the customer experience

The Draft Report sets out concerns that have been raised about wholesale service levels associated with access networks that are used to supply fixed line broadband services, specifically those services supplied using the NBN. The most significant concerns relate to the appropriateness of wholesale service levels; associated recourse and compensation when those service levels are not met; and coordination and information flows to assist service levels being met.

Telstra's position with respect to service levels is that customers should be no worse off on the NBN than they are on the current legacy network. We are concerned that this is not currently the case, and that current service level standards proposed by NBN Co therefore do not enable a positive customer experience. The anticipated significant increase in the scale of the NBN rollout, and associated increase in the number of customers who will be connecting to and receiving service over the NBN, means that it is critical that these issues are resolved as soon as possible.

The Draft Report included a proposed action (**Action 6**) that the ACCC examine the non-price terms of access, particularly the service standards being proposed for access to NBN services, and the impact that these may be having on delivering positive customer experiences on the NBN. Since the Draft Report was published, the ACCC has commenced a public inquiry to determine whether NBN wholesale service standards are appropriate, and consider whether regulation is necessary to improve consumer experiences.

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[16] https://www.accc.gov.au/system/files/NBN%20Co%20%E2%80%93%20SAU%20%E2%80%93%202016-17%20Regulatory%20Information%20and%20LTRCM%20Determination%20%E2%80%93%20Supporting%20Submission.pdf, p. 10

[17] See for example the following Deloitte research, https://www2.deloitte.com/content/dam/Deloitte/au/Documents/finance/deloitte-au-fas-benefits-highspeed-broadband-v2-240914.pdf and https://www2.deloitte.com/content/dam/Deloitte/br/Documents/technology-media-telecommunications/ValorConectividade.pdf.

[18] http://ceet.unimelb.edu.au/publications/downloads/ceet-economic-impact-nbn.pdf as quoted in http://www.theaustralian.com.au/business/business-spectator/how-the-nbn-could-boost-australias-gdp-by-2-per-cent/news-story/7ff25263b40a734e921e68d56164a859

Telstra supports the commencement of the inquiry and will respond to the concerns raised by the ACCC in the Draft Report as part of that inquiry. Telstra notes that it is anticipated that the inquiry will be completed in December 2018. Given the critical nature of some of the concerns raised, the ACCC may wish to consider whether there are short term actions that it can take to address these in a more timely manner pending completion of the inquiry.

Critical wholesale inputs for the supply of fixed line broadband services do not require regulatory intervention

The Draft Report identifies a number of services that are essential components in the communications supply chain which enable services to be provided to consumers, including wholesale aggregation, transmission and dark fibre services. Transmission services are well-established in Australia, with regulated pricing applying to routes which the ACCC considers do not meet criteria for competitive supply. However, wholesale aggregation and dark fibre services are relatively new although developing at a fast pace. While Telstra understands that the ACCC may be seeking to ensure that these services are (and will continue to be) supplied on a competitive basis, the ACCC should exercise caution in considering whether any form of *ex ante* regulation should be applied to these services given the relatively nascent and evolving nature of the markets.

This is discussed in more detail in Section 4 of this submission.

NBN wholesale aggregation services are increasingly competitive

The ACCC made the right decision to have a high number of NBN POIs to allow competition to further develop on transmission routes that were already competitive. Today there are four providers of aggregation services that resell NBN services on their own infrastructure. The ACCC should be encouraging that competition and looking at how it can be further expanded. While some parties have called for a reduction in the number of NBN POIs, reduction would only have the effect of severely harming existing competition and, at worst, would be a move to monopoly supply. Telstra's view is that the ACCC should focus on developing an environment that encourages competition at the fringes of NBN Co's network.

The market for NBN wholesale aggregation services emerged, at a high level, as a way for smaller service providers to supply NBN services to customers where it is otherwise not cost effective to directly connect to the NBN. Telstra commenced providing these NBN wholesale aggregation services in 2012, offering our customers the option to connect to aggregated NBN (and ADSL) services at a single point of presence. Our experience is that, despite competitive supply and a high level of interest from wholesale customers, the market for these types of services has only recently experienced an increase in demand. However, this is to be expected given the NBN rollout is only now reaching a level of connection that would encourage entry of smaller providers.

The ACCC outlines a number of concerns that it has with the current state of the NBN wholesale aggregation services market, including wholesale and retail pricing relativity, pass-through of NBN pricing changes, and delays in wholesale products coming to market. But there does not appear to be any evidence indicating that these are concerns requiring regulatory intervention. At the same time, the ACCC acknowledges that the market supplying NBN wholesale aggregation services is relatively nascent and evolving and there may be technical complexities currently limiting the types of services supplied. Nevertheless, the ACCC proposes to consult on the need to obtain information from industry via a record keeping rule to monitor the supply of wholesale aggregation services to determine whether regulatory intervention is required (**Action 7**). To the extent the market does not evolve, and the information the ACCC collects points to a lack of competition, the ACCC will consider (following further consultation) the publication of competitive benchmarking information.

In an emerging market that is showing real prospects of effective competition (see below), yet has no significant profits, Telstra considers that it would be harmful to impose a formal record keeping rule. Record keeping rules are typically applied in markets where revenues are significant and the cost of compliance is relatively low, however in this market the cost of complying with a record keeping rule could easily be significant relative to the profits earned by aggregators. It could also act as a signal to service providers of a risk of further regulation and thereby deter participation or investment to the potential detriment of the very competition that should be encouraged.

Evidence of a competitive market dynamic under the current regulatory settings is highlighted by:

- A strong and diverse contingent of wholesale providers[19], including the recent market entry of Wideband;
- The success of a sub-wholesale structure from some providers, such as Telco in a Box;
- The growth in the size of the market over time as the NBN rollout progresses; and
- Increasing product differentiation and lower prices over time.

On the demand side, to the effect that there is low demand for wholesale aggregation services, this reflects that cost and complexity may be preventing some providers from establishing NBN retail services or that providers are preferring to establish direct connection. Telstra also highlights that the pace of development of the wholesale aggregation market will be in part a reflection of the low barriers to entry (in terms of economies of scale) for direct connections to NBN POIs, especially in metropolitan areas[20]. Any perceived sluggishness on the demand side does not reflect a lack of competition at the wholesale level and is also consistent with the pace of the NBN rollout to date.

To the contrary, on the supply side, effective competition is leading to increased differentiation of products. To this end, Telstra is focused on product innovation in response to customer demands. Key product development activities currently underway include:

- A recent upgrade to IT capability to support more Ethernet Virtual Circuits (EVCs) on the network in order to meet customer requirements for higher capacity services;
- A new aggregation solution utilising an optical-wavelength service as the next phase technology to support higher-bandwidth services;
- A 'Virtual Enablement' solution which may facilitate the entry of brand extenders (e.g. Coles, Woolworths) into the NBN market as the typical ISP functionality required to provide broadband services will be managed by a third party, further reducing any barriers to entry; and
- A broadband aggregation solution that allows customers using it to deliver DSL today, can seamlessly transition to deliver NBN as the same physical interface can be used to deliver both DSL and NBN traffic with a single price point applied across both services;
- A broadening of Telstra's enterprise grade Ethernet services utilising the Traffic Class 2 offering from NBN Co.

A competitive market ensures that if NBN Co discounts were not passed through to wholesale customers, offers would not be market relevant and a provider would lose market share accordingly. As such, Telstra Wholesale passes on any benefits to our customers that are the direct result of pricing changes in NBN services including dimension based discounting and other special discounts. Telstra's products are also differentiated to allow our customers to differentiate at the retail level. Key value adds that Telstra offers include:

- Extensive reporting capabilities that allows monitoring of speeds on services, augmentation of CVCs and traffic throughput;

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[19] Refer to list of NBN Co wholesale providers at https://www.nbnco.com.au/sell-nbn-services/wholesale-providers.html. As at 7 December 2017, 16 wholesale providers were listed

[20] ACCC Market Study Draft Report, p84.

- A true national solution, which lowers barriers of entry for small providers because they only need to maintain physical infrastructure in one State to provide NBN services across Australia;
- The ability for customers to flexibly manage their service by shaping/limiting traffic (controlling how much traffic passes through the aggregation network), thereby controlling the variable cost component to the product;
- The ability for customers to provide their own differentiated gateway and to customise delivery options to achieve the desired customer experience;
- The flexibility for customers to choose between different cost structures, either based on usage per end-user in one bundled price or based on the separate cost components in the aggregation network.

Further, Telstra makes every effort to align wholesale product launches with retail so as not to disadvantage our wholesale customers. The same approach will be taken for the launch of FTTC in 2018.

To the extent there are some "…*inherent limitations of network services supplied over a shared wholesale network*", there will not be material disadvantage for wholesale customers seeking to compete in the retail market. For example, while Telstra cannot currently allow its customers to control CVC because we acquire CVC on a corporate basis (aggregating Retail, Wholesale and Belong requirements on the same CVCs), our wholesale customers benefit from the best practice CVC management Telstra employs to support our Retail broadband products. Telstra does not differentiate between business units, such that wholesale customers will benefit equally from Telstra's recently announced plans to acquire additional CVC capacity to deliver 80% of the maximum speed during peak times, significantly ahead of the ACCC guidelines.

The market for wholesale aggregation services will continue to evolve and this process of competitive market development should be allowed to continue unhindered by formal reporting requirements. As a market participant, we welcome an ongoing dialogue with the ACCC about this market as it develops, including about the technical and commercial constraints in providing wholesale NBN aggregation services.

Although there is no finding that the wholesale aggregation market is not competitive, the ACCC considers that an aggregation service could be supplied by NBN Co to provide "…*a further competitive dynamic*…" Specifically, the ACCC proposes that NBN Co should consider supplying for no longer than the NBN build period, transitional products or pricing measures that facilitate the entry of smaller or niche service providers to provide a further competitive dynamic (**Action 8**).

Telstra does not support the view that there is an *"…absence of a genuinely competitive wholesale aggregation market*" nor is there any apparent evidence to support this finding. The NBN wholesale aggregation market is characterised by increasing levels of competition as it continues to grow. Telstra is investing in ongoing product development activity for our wholesale aggregation services in order to respond to customer requirements, particularly for higher capacity aggregation utilising the latest network technologies. The number of NBN access lines serviced by customers utilising Telstra's NBN wholesale aggregation product has grown markedly over the past 12 months in line with the transition to the NBN. In Telstra's view there is a real prospect of sustained effective competition in these markets provided that the regulatory environment supports this and does not, for example, encourage entry of a monopoly provider, with strong incentives to leverage market power from other areas of its business into nascent competitive markets, to supplement competitive service provision. It would be inappropriate for NBN Co to enter the market for wholesale aggregation services given the number of suppliers that currently exist and the increasing levels of competition between those suppliers. Any such intervention by NBN Co risks distorting competitive markets, creating uncertainty and undermining continued investment and innovation in networks and products to the ultimate detriment of wholesale customers and consumers.

The current regulatory framework effectively supports provision of transmission services

Although noting concerns raised in relation to the supply of transmission services, particularly where these may be creating a barrier to directly connecting to the NBN, the ACCC does not consider that there is a need to intervene or specifically monitor the supply of transmission services to NBN POIs beyond those considerations that will occur as part of the review of the Domestic Transmission Capacity Service (**DTCS**) declaration and Final Access Determination (**FAD**) (**Action 9**). The issues the ACCC expects to cover in those processes include:

- Consideration of transmission services in regional and rural areas in general;
- The level of competition in the supply of transmission services to NBN POIs (including the extent of any further entry by tier 2 service providers supplying retail fixed line broadband services by directly connecting to the NBN);
- Whether transmission services to NBN POIs need to be examined separately from other DTCS services and in particular whether there is a need to add a specific NBN POI transmission route classification.

The market for transmission services (including to NBN POIs) is characterised by increasing competition and growth with a positive effect on wholesale customer outcomes, including in regional and rural areas. Ongoing industry investment has led to greater breadth and depth of competitor representation on transmission routes and a trend of decreasing prices. Telstra does not feel there is a need to add a specific NBN POI transmission route classification as there is no evidence that access to transmission services is a barrier to entry into downstream NBN markets. We welcome further engagement with the ACCC on these issues through the DTCS declaration process.

Dark Fibre is characterised by increasing competition and new entry

The Draft Report sets out ACCC views on the development of the market for dark fibre services, noting that it has limited information about the market in terms of suppliers, availability, and price and non-price conditions. Throughout the course of the Market Study the ACCC has also been presented with a number of perspectives relating to whether the market is working effectively or not. Notwithstanding the mixed views, the ACCC considers that dark fibre is potentially important in promoting competition in the supply of fixed-line broadband services and is therefore seeking to better understand the market in which dark fibre is being supplied to NBN POIs. Accordingly, the ACCC proposes to consult on the need to obtain information from industry via a record keeping rule to monitor the supply of dark fibre services to determine whether any regulatory intervention is required (**Action 10**).

Telstra does not consider that there is any need to impose a formal record keeping rule on industry to monitor the supply of dark fibre services. The market for dark fibre services is characterised by increasing competition and the entry of new providers (including smaller service providers and providers from other industries) who have been successful in winning business from larger providers. This competition is driving an expanded product range and footprint, responding to customer demand for increasing data and geographic capability. Telstra supplies dark fibre services for specific use cases where there is a commercially rational business case to do so. In the market segments in which it is seeking to grow, Telstra has had limited success in recent tender processes due to a highly competitive environment.

As set out elsewhere in this submission, in an emerging market, Telstra considers the ACCC should exercise caution in determining whether monitoring of these markets is necessary to avoid the risk of deterring ongoing investment and development to the detriment of wholesale and retail customers.

Further, the structure of the broadband market in Australia, both in terms of downstream and backhaul services, is distinct to the structure of markets the subject of regulatory case studies referred to by the ACCC in the Draft Report. In the Netherlands, justification for regulating dark fibre for open access was a market with only one large fibre infrastructure provider with substantial market power in residential fibre services. In Sweden, there is a unique market environment characterised by many local municipality networks, each with a dominant position in their local geography. The distinct nature of these markets means their comparative value is of limited utility.

Formal regulatory reporting and information provision requirements are a cost impost on industry and it is not clear that there is any benefit that would outweigh this burden. Market understanding can be obtained via alternative means, including stakeholder engagement which the ACCC has used to great effect previously.

Internet interconnection does not require regulatory intervention

The ACCC notes in the Draft Report that the peering arrangements between Telstra, TPG, Optus and Verizon (**TTOV**) have not changed materially since they were entered into in the late 1990s and early 2000s, following the issuing of a competition notice to Telstra in 1998. The ACCC goes on to state that, *"…in a dynamic market, we would expect these peering relationships to change with the relative value of traffic on each network*", and links the enduring nature of the peering arrangements to the fact that TTOV do not currently publish their peering criteria.

Accordingly, the ACCC has proposed that TTOV make available on their websites a comprehensive set of criteria and other policies to which they have regard when assessing peering requests (**Action 11**).

Telstra is generally supportive of, and aims to promote, transparency in its dealings with customers and potential customers. In response to the ACCC's proposed recommendation, and given the nature of the concerns expressed by the ACCC in section 4.6 and 5.3.4 of the Draft Report in relation to the supply of downstream broadband internet services, Telstra is currently considering publishing criteria for assessing peering requests from ISPs in Australia, including the form that such a publication may take. Telstra would welcome further engagement with the ACCC on this issue. Telstra notes that the proposed recommendation is premised on, and Telstra's willingness to publish is contingent on, the publication of peering criteria and policies by each of Telstra, TPG, Optus and Verizon.

Telstra notes that while its peering criteria are not currently publicly available, if a party makes a formal request to peer with Telstra, relevant peering criteria are likely to be referred to in the course of discussions with that party about their request. In this way, there is already a degree of transparency around Telstra's peering criteria in the context of specific peering requests which may be received from time to time.

More broadly, Telstra notes that the basis for settlement-free peering between ISPs appears to be understood within the industry. It is generally considered appropriate to enter into a settlement-free peering arrangement in circumstances where each party provides and receives approximately equal value. In other words, 'settlement-free peering' does not mean 'free internet interconnection' – rather, it means that peering parties do not charge one another for interconnection in circumstances where there is otherwise an exchange of approximately equal value from the relationship. As the ACCC notes in the Draft Report, typical peering criteria relate to the scale, coverage, quality and traffic characteristics of the relevant networks, as these criteria provide a basis for assessing the value of interconnecting with a particular network. In Telstra's view, an awareness of the basis for settlement-free peering also provides a degree of awareness about the circumstances in which ISPs may be likely to peer with one another.

As part of its continued assessment as to whether the supply of internet interconnection services is available on competitive terms to support effective competition in downstream markets, with a particular focus on the market for the supply of services to corporate customers (**Action 12**), the ACCC proposes to:

- Further assess the extent of competition in the supply of transit services by TTOV.
- Investigate further the pricing and structure of prices for transit services.

- Examine key corporate internet markets including assessing changing transit requirements and the component cost of transit in the supply of these services.
- Investigate any specific allegations of anti-competitive conduct by TTOV.

Telstra will continue to engage with the ACCC as part of its ongoing assessment. However, we have set out below some high level views regarding the concerns raised by the ACCC about the supply of transit services and the impact on the supply of downstream services.

The supply of transit services is competitive

Telstra does not agree with the ACCC's draft finding that TTOV are collectively relatively unconstrained in determining their price level and structure in the supply of transit services, and that they enjoy a degree of market power in relation to access to their networks.

A comparison between revenues from transit services, and revenues from the supply of internet services, should be sufficient to demonstrate the point. In FY2017, Telstra's revenues from the supply of its Telstra Wholesale Internet (**TWI**) product were approximately [c-i-c] [c-i-c]. By contrast, for example, industry revenues from the supply of internet services to consumers, businesses and government via fixed lines in Australia are estimated to be over $5 billion dollars.[21] In these circumstances, it is difficult to see how transit pricing could be said to be impeding competition in downstream markets for internet services.

In addition, there is further, more direct evidence that the supply of transit services in Australia is competitive.

As the ACCC notes in the Draft Report, transit services have become a largely homogenous wholesale product offered by each of TTOV, as well as other suppliers including aggregators such as Vocus. In circumstances where there are a number of alternative suppliers of largely homogenous transit services, and smaller ISPs need only acquire transit from one supplier in order to obtain access to the networks of the other peers and the broader internet, it can be expected that the various suppliers of transit services will compete vigorously for the business of smaller ISPs.

The way in which Telstra sets its transit prices also demonstrates the competitive nature of the supply of transit services. For example, in reviewing and updating its pricing framework for transit services, **[c-i-c] [c-i-c]**.

In its Draft Report, the ACCC acknowledges that transit prices have been trending downwards. However, it attributes that trend to the declining costs of inputs such as technology, and notes submissions to the market study that transit prices in overseas jurisdictions like Europe and North America are lower than transit prices in Australia.

Consistent with the Draft Report, Telstra's average unit prices for transit services have declined significantly over recent years. For example, in respect of Telstra's TWI product:

- For the period November 2013 to June 2017, average unit prices for transit services declined from approximately [c-i-c] [c-i-c]. [22]
- At the same time, the total capacity provisioned for transit customers increased significantly, [c-i-c] [c-i-c].

[21] IBISWorld Industry Report J5911, Internet Service Providers in Australia, November 2016.
[22] [c-i-c] [c-i-c].

While technological improvements and scale efficiencies may be contributing to a reduction in average unit costs to supply transit services, competition between suppliers of transit services means that any cost savings are passed on to customers in the form of lower transit prices. This demonstrates the market is competitive rather than indicating that there is a market failure.

To the extent that Australian transit prices are higher than those charged in overseas jurisdictions, there are several factors which are relevant to consider, including Australia's geographical location and population density. On the first point, Telstra notes the ACCC's comment that the "…*international transmission costs incurred in providing bundled domestic and international transit products may be one factor contributing to comparatively higher transit prices in Australia*". Consistent with that statement, the TWI average unit prices referred to above relate to the supply by Telstra of connectivity to domestic and global internet routes. On the second point, Australia's large land mass and concentrated population centres are clearly very different from the USA and Europe, thereby making meaningful comparisons between the transit prices in these jurisdictions somewhat difficult.

Overall, Telstra does not believe there is any basis to conclude that TTOV have weak competitive incentives in relation to the supply of transit services, or that they are collectively unconstrained in their supply of transit services.

More generally, Telstra notes the broad range of interconnection options now available to smaller ISPs to access key content, particularly given the significant growth in consumption of OTT content and the distribution of content through CDNs and carrier-neutral data centres/IXPs. In Telstra's view, this simply reinforces the view that TTOV do not have market power, individually or collectively, in relation to the supply of internet interconnection services.

Downstream markets are competitive

In light of the discussion above, Telstra does not consider that the supply of transit services is adversely impacting competition in downstream markets, including in relation to the supply of internet services to corporate customers.

While Telstra and the other peers do not pay one another for internet interconnection services, it does not necessarily follow that they have a cost advantage in supplying downstream internet services compared to other service providers which do pay for transit services.

There are a range of upfront and ongoing costs associated with establishing and maintaining peering connections and arrangements. More broadly, Telstra has made (and continues to make) significant investments in its core IP network. **[c-i-c] [c-i-c]**.

These are costs which smaller ISPs do not necessarily have to incur. Rather, ISPs that acquire transit from Telstra interconnect with Telstra's network and in that way obtain access to the benefits of the network, including the associated economies of scale and scope as well as access to the broader internet, without having to build their own internet backbone. A transit customer only needs to interconnect at one of Telstra's Points of Presence across Australia to obtain access to all internet-connected devices across Australia and overseas, without needing to build or pay for access to an inter-capital network of their own, or other means of carrying traffic across a geographically dispersed country.

In this context, it is relevant to note that there are a number of ISPs who attained a significant presence in the market for fixed broadband services without having a peering arrangement in place.[23] This includes:

[23] ACCC, Competition in the Australian telecommunications sector, February 2017, page 25.

- Vocus, which has a market share of approximately 9%.
- TPG, before it acquired AAPT in late 2013 and obtained the benefit of AAPT's peering arrangement, had a market share of approximately 11%.
- iiNet, before it was acquired by TPG in late 2015, had a market share of approximately 14%.[24]

Since TPG and iiNet have been part of the TPG group (giving them access to AAPT's peering relationship), their combined market share has remained steady at approximately 26% in the period between June 2012 and June 2016.[25] Over the same period, Telstra's and Optus' market shares declined slightly, despite both parties having peering arrangements in place over that period.[26]

Looking specifically at the impact of transit prices on competition in downstream markets, as the ACCC notes, it is relevant to consider the quantum of transit costs as a proportion of the total costs to supply those downstream services. While this will vary between different service providers, there are several factors which suggest that the quantum of transit costs as a proportion of total costs is likely to be relatively small, and may be declining:

- As discussed above, there has been a significant (and ongoing) decline in Telstra's average unit prices for its TWI product. At the same time, the bandwidth provisioned for transit customers has increased significantly. [c-i-c] [c-i-c].
- As discussed in the Draft Report, there are a range of substitutes to acquiring transit from TTOV. In particular, changes in the volume and nature of internet traffic have led to changes in possible interconnection arrangements. Since the ACCC last considered internet interconnection arrangements over a decade ago, there have been significant increases in internet traffic driven largely by growth in the consumption of streaming and multi-media content, including OTT content services like Netflix and YouTube. Smaller ISPs may be able to access this type of content by connecting directly with a CSP/CDN, rather than through a traditional transit services provider. Indeed, it is estimated that approximately 70 percent of total internet traffic will be carried by CDNs by 2021, up from approximately 50 percent in 2016.[27]

The ACCC states in the Draft Report that this means smaller ISPs are effectively able to bypass TTOV (and other transit providers) for a significant proportion of internet traffic consumed by end customers, thereby reducing their input cost profiles. It suggests, however, that this is likely to be more relevant to the supply of internet services to residential customers rather than corporate customers. In that respect, Telstra notes the following:

- Like residential end-users, corporate end users are also likely to wish to access content supplied by or through CSPs/CDNs, for example, Microsoft, Amazon, Google and Akamai.
- In any event, to the extent that direct interconnection with CSPs/CDNs lowers input costs, then smaller ISPs supplying services to both residential and corporate customers will have lower transit costs as a proportion of total costs to supply internet services.

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[24] Ibid.
[25] Ibid.
[26] Ibid.
[27] Cisco, The Zettabyte Era: Trends and Analysis, June 2017.

The ACCC remains concerned, however, that smaller ISPs supplying services to corporate customers may have an increased need to acquire direct access to, and pay to exchange traffic with, TTOV. For example, the Draft Report suggests that corporate end users may increasingly require networks to acquire direct access to TTOV because:

- Key content may be hosted on TTOV, including popular cloud applications and services used by smaller networks' corporate end users. There is a strong focus in the Draft Report on cloud computing services, which are becoming increasingly important for corporate customers, the majority of which use cloud services for at least some of their software or storage requirements.
- Market consolidation amongst ISPs has increased the proportion of end-users connected to TTOV.
- There is an increasing trend for staff to work remotely, and those staff may be customers of TTOV.

In relation to the provision of cloud computing services:

- As the ACCC notes in the Draft Report, a number of ISPs in Australia are entering the cloud computing market or partnering with global cloud computing providers. Telstra, for example, resells the services of a number of global providers including Amazon Web Services (AWS) and Microsoft Azure, both of which host content themselves. Telstra expects that reseller arrangements are also an option for smaller providers wishing to enter the cloud computing space.
- Telstra also has its own cloud platforms / infrastructure, but these are typically supplied to corporate customers through a private network for the provision of services to internal staff.
- Telstra does not generally seek to supply web hosting services to enterprise customers, which means we do not tend to host websites for enterprise customers which the end users of other ISPs may wish to access.

In relation to market consolidation increasing the number of end users connected to TTOV, Telstra notes that:

- The roll-out of the NBN is significantly changing the way broadband services are delivered and leading to a proliferation of service providers resupplying services on the NBN.
- NBN Co recently announced the launch of a number of product and service updates designed to help internet providers meet market demand for medium, enterprise and government businesses migrating to the NBN.[28]

Lastly, and more generally, Telstra considers that the market to supply internet services is competitive, and both residential and corporate end users are getting the benefit of that competition through lower prices and/or higher data and other inclusions. In particular:

- There are a large number of providers of internet services, including peers Telstra, Optus and TPG, as well as other providers with a significant presence such as Vocus, Exetel and Macquarie Telecom. According to the Australian Bureau of Statistics, as at June 2017, there were 22 ISPs with between 10,000 and 100,000 subscribers, and nine ISPs with over 100,000 subscribers. [29] NBN Co's website lists over 160 phone and internet providers reselling NBN services.[30]

[28] https://www.nbnco.com.au/corporate-information/media-centre/media-releases/enterprise-grade-enhancements.html.
[29] http://www.abs.gov.au/ausstats/abs@.nsf/mf/8153.0.
[30] https://www.nbnco.com.au/connect-home/service-providers.html.

- Customers, including corporate customers, are benefiting from competition in the supply of internet services. As the ACCC noted in its draft report, "*…[n]otwithstanding the high level of market concentration there is evidence of competition between the vertically integrated major service providers in the markets for voice and broadband services, over both fixed and mobile access technologies. This is particularly evident in the price competition between suppliers of both fixed and mobile services*".
- **[c-i-c] [c-i-c]**.
- At least in part, Telstra considers that **[c-i-c] [c-i-c]**.

Overall, there is no basis to conclude that the supply of transit services is adversely impacting competition in downstream markets, including in relation to the supply of internet services to corporate customers. The differences in market position of different service providers may be accounted for by a range of factors such as brand, network infrastructure (including quality, scale and scope), price, service offerings and inclusions, and customer service levels – all of which are points of differentiation between service providers and bases on which they compete with one another.

Information and facilitating more informed consumer choice

Providing consumers with the information required to make informed purchasing decisions is critical to the ongoing development of competition in the communications market. Telstra is committed to ensuring that our customers, and potential customers, have the information available to choose the products and services that are right for them. We are consistently reviewing the type of, and way in which we provide, information to our customers. At the same time, it is apparent that customers have access to more and more trusted information now than ever before through, online comparison sites, internet forums and social media. The ACCC considers that there are a number of issues which may impact on the ability of consumers to access information and make a more informed choice. These are examined in more detail below.

Consumer switching

The ACCC considers that "…*consumer switching is evidence that consumers are making active choices about products and services based on good information*." However, the ACCC notes that Australian households are not active switchers of fixed line services which could be the result of consumer preferences or may signal underlying issues such as a lack of sufficient information to facilitate switching or high switching costs.

Review of the critical information summary will support more informed decision making

As noted above, the Draft Report examines whether consumers are able to take advantage of the high level of competition in the communications market, through the ability to easily switch providers and products as well as having sufficient information to make informed purchasing decisions.

Telstra agrees that consumers should be able to access the information required to enable them to make informed decisions when purchasing telecommunications products and services. It is critical that the information provided to consumers is timely and relevant, particularly in terms of the amount of information provided at point-of-sale. As noted in ACCAN's research 'Confident, but Confounded: Consumer Comprehension of Telecommunications Agreements':

> *"Studies have indicated that presenting too much information to consumers at once can cause 'information overload', preventing them from properly comprehending it (Amoriggi 2007; Hillman 2006a; Leong, Ewing & Pitt 2002). Consumer attention is limited, such that an excess of*

information diminishes the attention consumers are able to pay to extra information (Xavier 2008)."[31]

The Critical Information Summary (**CIS**) provides a range of clear, comparable information about products, plans and services to allow customers to review what is being offered by telecommunications providers. It is an important document which, in Telstra's view, has to date assisted customers to make informed decisions regarding telecommunications offers. That said, given the changes occurring in the communications market, it may be that the CIS requires review to ensure it remains relevant and useful.

As noted by the ACCC, the review of the Telecommunications Consumer Protections (TCP) Code provides an opportunity to review the effectiveness of the CIS (**Action 13**). The Communications Alliance Working Committee set up to review the TCP Code will commission research to consider the structure, format and content of the CIS so that it continues to communicate useful information to consumers at the pre-purchase stage of their research for new plans. The research will also consider whether additional information should be added and in what format customers prefer to receive the CIS. This research will directly inform any changes to the structure and content of the CIS.

Telstra notes the ACCC's comments regarding supplier's compliance with their obligations in the provision of the CIS to customers. It is the ACMA's role to monitor compliance with the CIS and its 2016-17 annual report outlined the compliance activities it undertook to review CIS compliance. We note there was a decline in the percentage of the 'immediately compliant' CISs. In recent times, Telstra has not received any advice from the ACMA regarding CIS compliance concerns. However, we also note *"the review focused mainly on NBN telecommunications offers due to the significant growth in the number of new providers in this market sector and the acceleration of the NBN rollout"* and that there was a 68% increase in the number of Service Providers audited in 2016-17 (79) compared with 2015-16 (47).

Telstra considers it appropriate that the ACMA continue its risk-based compliance monitoring activities in relation to Supplier's compliance with the provision of the CIS and to ensure that new entrants are aware of their TCP code obligations. This will ensure that consumers continue to benefit from the information provided by the CIS and support informed purchasing decisions.

[31] Harrison, P., Hill, L., Gray, C., 'Confident, but Confounded: Consumer Comprehension of Telecommunications Agreements, 2016, https://accan.org.au/files/Reports/Confident%20Confounded_accessible%20WEB_03.11.16.pdf

Comparator Websites

The Draft Report draws on previous research undertaken by the ACCC on the comparator website industry in Australia, noting that third-party comparator websites can help to overcome information issues for consumers by presenting like-for-like comparisons of products and services. Further, in providing such information, the ACCC considers that comparator websites may ultimately assist to promote greater competition and even create downward pressure on prices.

The ACCC also notes that these sites may also benefit businesses by providing an additional sales and marketing channel. Telstra can confirm that we have arrangements with several comparison sites which include our product offerings. However, our relationship with these sites has been developed on the basis that comparison sites are required to comply with ACCC guidelines to facilitate honest, like-for-like comparisons, be transparent about commercial relationships and clearly disclose who and what is being compared.

The Draft Report also sets out a number of concerns with comparator websites, including that commercial relationships may not actually be transparent, particularly where they may bias the results presented to consumers. Further, comparator websites may also fail to acknowledge the extent of their market coverage, leading consumers to believe that the websites compare all offerings from all service providers in the market when this is typically not the case. These concerns have recently been highlighted in ACCC action against Finder, relating to the number of health insurance policies actually compared by the website versus the number claimed by Finder.[32]

As a result of these concerns, the ACCC proposes to review the scope, transparency, and ease of use of comparator websites for communications services and consider the need for further intervention in addition to existing guidance for comparator websites (**Action 14**). If intervention is needed, the ACCC confirms that it will consult with industry and government to develop an appropriate course of action.

Telstra supports any review to ensure an appropriate level of transparency and information disclosure is available to consumers making use of comparator websites.

Potential barriers to switching

In the Draft Report the ACCC identifies a number of potential barriers to switching for consumers which it considers may disadvantage some consumers and potentially inhibit future competition in communications markets. These include contracts, which may lock customers in and prevent switching, and early termination fees (**ETF**), which may act as a deterrent for switching. As a result, the ACCC proposes to monitor consumer complaints about unfair terms in communications contracts (**Action 15**). The ACCC also proposes to work with industry and government stakeholders to ensure consumers are informed about the potential benefits of short-term or no contract options when migrating to the NBN. Further, the ACCC will also consider whether service providers should be obliged to more clearly identify the contract end date to consumers.

There are a number of consumer protections in place to ensure that consumers are informed of the choices they are making at the point of sale. The Australian Consumer Law (**ACL**), as well as the telecommunications-specific TCP Code, include obligations on Suppliers to ensure contract terms are fair and that customers are aware of the terms of their contract – including any ETF - at the point of sale.

In Telstra's experience, consumers are familiar with the practice of signing up to telecommunications contracts with fixed terms and charges for early termination and there are a number of benefits associated with fixed term contract offers. In return for the guarantee of income over a fixed period of time, businesses are often willing to include additional value to customers associated with the

[32] http://www.smh.com.au/nsw/findercomau-misled-and-deceived-users-over-roughly-65000-comparisons-claim-accc-20171122-gzqncy.html

acceptance of contract terms. Telstra is mindful of its legal and regulatory obligations when developing its product offerings. Industry-wide tools like the CIS ensure key information on service plans is readily accessible to consumers, including on matters like ETFs. As noted earlier, the structure and format of the CIS is currently under review, with consideration being given to how it can facilitate even greater transparency on key terms.

In addition to mandatory documents such as the CIS, Telstra makes a number of bespoke tools available to customers to ensure they have easy access to important information like contract terms, pricing, and applicable ETF amounts - both before signing up to a contract and during the contract term. Examples include Telstra's 'Order Estimator' tool, which helps customers understand initial and recurring charges that will apply for relevant products and services they take-up (and which, due to the purchase of multiple products and pro-rata charging aspects, may not always be clear to customers just from a CIS), and Telstra's 24/7 application, which customers can access at any time to obtain information on the ETFs and contract end-date for relevant services.

Email Portability

The ACCC considers that barriers to switching service providers for consumers and businesses may exist where an email address is tied to a service provider with no ability to "port" that email service. The ACCC notes that many service providers, including Telstra, allow consumers to retain their mailboxes/email addresses after switching, albeit usually with an associated charge. In the absence of choosing to retain an email address, a consumer may be faced with loss of stored emails and the need to update linked accounts which can be time-consuming and difficult. Further, where a consumer is not able to easily migrate contacts and email archives, this may pose an additional barrier to switching. As a result, the ACCC proposes to review the email retention options that service providers offer to consumers and determine whether the charges they impose are reflective of the underlying cost of providing the standalone email service (**Action 16**). As part of this review, the ACCC propose to consider the potential costs and benefits of introducing an email portability regime.

Carrier email management at Telstra

If a Telstra customer with an active Telstra email address (name@bigpond.com) exits their Telstra service by contacting Telstra customer support, they are given the option of retaining their Telstra mailbox. If they choose to retain their mailbox they are required to accept a nominal charge of $79 per annum.

If the customer exits their service without contacting Telstra customer support (ie their request is made via the gaining RSP), or if the customer does not wish to retain their Telstra mailbox, it is immediately scheduled for deactivation. Customers have always had the ability to forward their BigPond email to other email addresses while the BigPond mailbox is active.

Telstra provides this information to customers online at all times and, as noted above, via our customer service representative when they call us to cancel their services.[33]

Barriers to switching

The Draft Report suggests that where a customer loses their carrier mailbox upon exiting their services it could act as a barrier to switching if they wish to retain their email address. In Telstra's experience, changing email mailboxes is not a barrier to switching.

[33] https://www.telstra.com.au/content/dam/tcom/personal/help/pdf/cis-personal/broadband/personal-critical-information-summary-paid-email.pdf

In Telstra's case, BigPond mailbox customers can set an email forwarding rule for free at any point.[34] To avoid high switching costs, they need only set up a new mailbox and forward their email to it for whatever period is necessary to migrate their contacts before they exit their Telstra services and their Telstra mailbox is closed.

If the customer instead chooses to retain the BigPond mailbox after they leave Telstra, they are asked to pay $79 per annum to cover Telstra's costs of managing the service and providing the storage capacity for archiving emails.

<u>Email portability</u>

Mobile number portability is a misleading comparator

The ACCC compares the portability of email to mobile number portability, which is governed by rules and obligations to ensure that a customer's mobile number is moved between providers within a reasonable time. Telstra does not consider that this comparison is valid given the significant differences between mobile numbers and email.

As acknowledged in the Draft Report, the potential customer switching costs imposed by the charge for continuing carrier email after a customer exits their services are lessened by the increasing prevalence of webmail or mailboxes not associated with any carrier. If there is a problem at all, it is constantly diminishing, in contrast to the market conditions that applied when mobile number portability was introduced and even today with the advent of OTT voice services.

In March 2017 Telstra had around 2.9 million active BigPond email users, whereas the OTT mailboxes provided by Google, Microsoft and Yahoo!7 had collectively around 17.5 million email users.[35] Even if there are twice as many carrier mailboxes in market as accounted for by Telstra (in rough proportion to our market share), once other significant OTT mailbox providers such as Apple are taken into account, carrier mailboxes account for less than one third of the market.

In contrast, there are approximately 33 million mobile devices in Australia, each with its own identifying number.[36] While it is not clear how many OTT voice service accounts are active in Australia, it is not likely to be the 100 million implied by the same ratio of carrier-specific to carrier-non-specific services that characterises the market for mailboxes. If, in fact, there are less than 33 million active OTT voice services, mobile numbers are vastly more important than carrier mailboxes.

Moreover, when the mobile number portability regime was implemented, the lack of portability was a genuine barrier to switching due to the financial costs. A customer could take out a new service from a different provider on a new number and maintain their old service in parallel for a period of time while they updated their contacts. But doing so would require paying for two contracts in parallel, a significant cost. In contrast, there is no cost to establishing a web-based mailbox.

Most customers are able to archive their carrier email

The Draft Report suggests that service providers may be able to better facilitate forwarding of contacts and archived emails to a customer's nominated new email address. It is not clear why this should be the responsibility of the service provider, given that the customer is best-placed to archive their own email in a way that suits them, and that most email clients allow email to be downloaded and stored.

[34] https://www.telstra.com.au/support/category/email/manage/how-to-forward-Telstra-emails-to-another-account
[35] Roy Morgan Single Source, April 2011 – March 2017.
[36] ACMA Communications Report 2015-16, p.7.

An email portability regime would be a disproportionate response to a minor potential problem

Carrier mailboxes are a service of diminishing importance given the great ease of access to and low cost of non-carrier-specific mailboxes. Implementing a carrier mailbox portability regime would be a disproportionate response to a perceived barrier to switching providers. It would impose systems and administrative costs on the carrier that would need to be passed on to customers. Alternatively, carriers may choose to exit the provision of carrier email altogether to avoid these costs given that carrier mail is not core to service bundles. Telstra does not consider that this would be in the long-term interests of consumers.

Bundling of telecommunications and other services

In the Draft Report, the ACCC proposes to monitor customer complaints about bundling and take enforcement action where necessary, as well as consider issuing guidance to consumers regarding bundled telecommunications products (**Action 17**).

The ACCC observes that most service providers in the communications market offer consumers bundles of products, with voice and broadband the most common bundle offering. Telstra's experience is that our customers are increasingly demanding the ability to customise their services, including bundling of products, to achieve a value proposition that suits their needs. We expect the nature of bundling to continue to evolve, particularly as mobile providers enter the fixed (NBN) market. The increasing competitiveness of the communications market has generally meant that consumers are the ultimate beneficiaries of changes in the way communications services are provided. Data allowances have increased significantly, with most providers offering unlimited broadband bundles and included voice calls, as well as entertainment and content inclusions.

While noting the benefits that bundling may provide consumers, the ACCC also expresses concern that bundling may disadvantage consumers if the inclusions are not transparent or easily comparable, and/or include unwanted or unnecessary services. As a result, the ACCC considers that consumers need clear and easily comparable information about bundled services and inclusions to ensure they are able to identify what product bundle provides the best value for them in terms of price and service inclusions.

Telstra agrees that providing customers with the information they require is critical for choosing the best product for them. The differentiated products being offered by service providers can mean that it may be difficult to compare bundled offers. As set out in previous submissions and elsewhere in this submission, Telstra is constantly reviewing the way information is presented to its customers to ensure that they are able to make informed choices. At the same time, consumers have access to more information than ever before through social media platforms, comparison tools and forums which enable experiences and insights to be shared, often in real-time. Telstra considers that it would be extremely difficult for the ACCC to issue anything other than very high level guidance to consumers regarding bundled products, and risks that guidance will quickly become obsolete.

The ACCC also considers that bundling may create a barrier to switching or competition, the latter where smaller service providers cannot replicate bundles due to limited access to content or other inputs. This is based on the premise that the components of bundled products cannot be purchased separately. While this may be the case on the supply-side (that is, service providers cannot access content that is exclusive to other service providers), this is not always the case on the demand-side where consumers can effectively "self-bundle" in many circumstances. For example, Optus offers non-Optus customers access to English Premier League content. Consumers can also now access content through a number of different platforms rather than being tied to a particular service. An example of this is Foxtel, which can also be accessed via Foxtel Now on multiple devices rather than the traditional set-top box.

Service providers are now, more than ever, responding to consumer demand for flexibility and transparency of what is being provided. Telstra considers that the advantages of bundling for consumers far outweigh the risk of any detriment. This is reflected in competitive pricing of bundles, increased value and variety of options being offered. We acknowledge the ACCC has a role in monitoring complaints, however considers that the provision of information and guidance to customers is best left to service providers and other parties (such as third party comparators) who can respond more readily to changes and consumer feedback.

Consumer migration to NBN

The Draft Report identifies a number of issues associated with consumers migrating to NBN including delays in installation, insufficient or inaccurate information provided to consumers and lack of clarity as to who is responsible for resolving issues. The ACCC's view is that the complexity of the migration process, including the number of stakeholders involved, can make it difficult to determine the exact cause of any network issues experienced and make fault attribution and resolution difficult and time-consuming. In this regard, the ACCC considers that the Telecommunications Industry Ombudsman's (**TIO**) has a pivotal role to play.

Despite not making a specific proposal, the ACCC supports the recent amendments to the TIO Terms of Reference which empower the TIO to require all relevant parties in the supply chain, including NBN Co, to cooperate with the TIO in order to resolve consumer complaints (**Action 18**). To further improve the effective operation of the TIO Scheme the ACCC recommends that the TIO collect and report on a clear data set of NBN-related complaints and collect NBN complaint data according to technology type.

Telstra notes the TIO's updated Terms of Reference were introduced to "…*strengthen the obligation on phone and internet providers to work with telecommunications Industry Ombudsman, provide information and comply with decisions of the Ombudsman to resolve a complaint."* Telstra is supportive of changes to encourage the quick and efficient resolution of customer complaints. The TIO has stated that the change *"will improve our ability to work with all the relevant parties in the supply chain"* and, as such, it is hoped that this will be a good outcome for consumers.

We note the ACMA is currently undergoing a process of reviewing RSPs NBN complaint data.

Clear data regarding NBN-related complaints, including the collection of data by technology type may be useful in identifying systemic issues. However, given the complexities often associated with NBN-related complaints, there should be analysis to ensure that any benefit of the collection of this data will outweigh the additional cost of its collection. The primary objective of the scheme should be to support efficient complaint resolution rather than the collection of information with no clear outcome in mind.

The Draft Report notes that, while consumer awareness of the NBN and the need to migrate is increasing, there is still some confusion among consumers. The ACCC acknowledges that both the ACMA and NBN Co are working on initiatives designed to address areas of confusion. As a result, the ACCC proposes to work with the TIO, the ACMA and other government agencies to improve information provision to consumers, particularly complaints data (**Action 19**).

Telstra believes the industry can also play a role in improving consumer awareness and reducing the level of confusion.

In relation to complaints data, Telstra is supportive of contextualised complaint data being made available to customers. This commitment is reflected by the fact that we have been one of the five participants in the TIO/Communications Alliance 'Complaints in Context' reporting program since its inception in 2014. This reporting tool provides consumers with a way of ensuring complaints can be understood relative to the size of a supplier's customer base. It is a useful tool to allow comparison of performance between suppliers.

The ACCC's role in monitoring broadband speeds

The ACCC is in the process of implementing a broadband performance and monitoring program, aimed at ensuring that consumers have accurate, independent and comparable information about broadband speeds. This has included issuing broadband speed claims guidance in August 2017. The Draft Report also notes that both the ACMA and NBN Co are undertaking separate work streams that are ultimately aimed at improving consumer information.

The Draft Report notes that broadband performance issues are a priority for the ACCC, including advertising and whether service providers are complying with their obligations under ACL. Accordingly, the ACCC proposes to address concerns about the performance of broadband services on the NBN through the broadband performance and monitoring program, broadband speed claims guidance (to be updated in August 2018) and enforcement action in response to practices that contravene the ACL (**Action 20**).

ACCC Broadband Advertising Guidance

Telstra supports the adoption of the ACCC's high-level speed claims principles with the corresponding Guidance, and agrees with the ACCC that it is important to provide information and set expectations for customers about NBN broadband speed and performance, as this directly contributes to a positive customer experience.

Telstra fully supports the ideal that the customer has a great experience in both purchasing and using their broadband service. We continue to work on ways to ensure our customers get the best possible speed experience with Telstra following the move to the NBN.

Telstra has taken an industry lead to ensure our customers receive the service and experience they expect on the NBN through the development of our online speed explainer guide. Telstra was the first RSP to reimburse a small set of customers where we have identified they have paid for a speed boost they may not have ultimately benefited from.

We have already changed our advertising, marketing and sales processes. For example, we now use the standard ACCC naming convention to describe our speed plans and quote the typical speeds a customer can expect, including for the period when most people tend to use the internet.

Setting the right speed expectations for our customers moving to the NBN is a high priority for Telstra.

ACCC Broadband Monitoring and Reporting program

The ACCC is planning to introduce a broadband performance monitoring and reporting program (**BPMR**) as part of demonstrating compliance with the principles and Guidance. Telstra has previously submitted on aspects that we believe need important consideration in implementing such a program in order for it to be successful.

It is important that sufficient probes are deployed in order to have a high level of confidence in the results. The probes need to cover the different range of technologies and geographic diversity. We think any program that reports on RSP performance must include all RSPs in order to create a level playing field and ensure customers are given the information.

It is important to sample each technology type and speed tier separately to avoid significant bias against any RSPs who provide different services as there is an inherent wide variation in performance for some of the technology types, such as FTTN (Fibre to the Node) and FWA (Fixed Wireless Access).

Whatever measurement metrics are used, it is important that customers are not misled by statistical comparisons which are not statistically significant. It is also essential that the reporting clearly discloses any limitations of the reported information. Confidence levels should be included in any reported results.

With the use of volunteers to install the probes on their broadband service it is important that the choice of volunteers is carefully designed to make sure the sampling is as random as possible to minimise the risk of any bias in the results.

3. MEDIUM TO LONGER TERM ISSUES REQUIRING MONITORING AND POTENTIAL FUTURE ACTION

There are a number of areas where the ACCC has not identified significant and material concerns that require immediate attention, but rather where there may be potential competition issues in the future. This is despite finding that many of these markets – the Internet of Things, OTT services, content delivery networks and data centres – are "…*highly dynamic and seem to be operating competitively*" as well as being "…*diverse, subject to rapid innovation and change and, for the main part, do not give rise to immediate concerns regarding the competitive functioning of their associated markets.*" In these circumstances, we believe the appropriate role for the ACCC to take is one of informal monitoring to reduce the risk to ongoing investment and innovation which would not be in the long term interests of end-users. If needed, the ACCC has *ex post* powers available to it should competition issues arise.

Competition between technologies in the supply of broadband services

In the Draft Report, the ACCC gives significant consideration to the degree of substitution between fixed line and wireless technologies – at present and in the future – noting that substitution may lead to greater competition and positive consumer outcomes, but is also likely to present challenges for industry, the Government and NBN Co. The ACCC concludes that, while the rate of substitution has increased, fixed line services remain important for a significant proportion of the population. Further, full substitution is only likely where wireless services provide a similar or greater value proposition than fixed line plans. Telstra agrees that this may currently be the case, although there is a marked shift towards the use of wireless services that is likely to continue to increase with advances in technology that improve the quality and economics of these services.

We agree with the ACCC that the extent of fixed wireless substitution depends on a number of factors, although these are more likely to be accelerators rather than determining factors (i.e. given technological developments and cost efficiencies, the trend towards wireless substitution will continue regardless). One of the most significant accelerators is likely to be the impact of the NBN, both in terms of the consumer experience and relative cost. As set out in Section 2, the economics of the NBN are challenging for RSPs and cost recovery constraints placed on NBN Co mean that the retail price of NBN services will increase over time irrespective of the pricing construct applied if no changes are made. This will mean that, alongside the advent of 5G which will improve the overall consumer experience, wireless services will become increasingly more attractive from a cost viewpoint. The extent of this, however, will depend on whether NBN Co responds to the competitive pressure of new services and adjusts its pricing accordingly. This may also depend on, as set out elsewhere in this submission, whether NBN Co continues to be constrained in its recovery of costs. Alternatively, as noted by the ACCC, there is an opportunity for NBN Co to use new technology to improve its service provision.

In the Draft Report, the ACCC concludes that regulation should not constrain competition with the NBN. Instead, NBN Co will require greater pricing flexibility and continued technology flexibility to respond to market developments (**Action 21**). Telstra agrees with this conclusion, particularly given the uncertainty about the impact of the different factors that will influence the degree and speed of fixed wireless substitution, as well as the response of providers in the market to increased substitution. It is also reasonable to expect that fixed wireless substitution will only result in enhanced outcomes for consumers. This is because consumers will typically only substitute towards wireless services where it is beneficial to do so, such as for reasons of cost or convenience. Any service provider response to increased fixed wireless substitution is also likely to result in further benefits including greater competition, price reductions, improved service quality and greater choice.

While increased fixed wireless substitution will result in some disruption and uncertainty for the industry, not least NBN Co, it also provides opportunity. There would be potential detrimental to the development of competition and therefore not in the long term interests of end-users to intervene in the market at this point in time, if just to protect NBN Co from infrastructure-based competition. Rather, Telstra considers that the impact on NBN Co may be mitigated, consistent with the ACCC, by providing them with the scope to respond on a competitive basis.

As part of its consideration of fixed-wireless substitution, the ACCC also considers whether open access to small cell wireless infrastructure may be important for competition (**Action 22**). Scenarios considered by the ACCC in the Draft Report suggest that for substitution and convergence to occur in the broadband market, significant densification of small cell infrastructure will be required on top of efficiency and quantity improvements. In this regard, the ACCC notes that densification has been occurring in recent years as mobile network operators increase their coverage and capacity. Elsewhere the ACCC defines small cells as "…*small radio nodes often mounted on light poles and buildings with only a limited range, but at high density provide greatly increased capacity*." This is generally correct – a small cell is a miniature version of a standard base station and is traditionally used to boost coverage and capacity in densely populated urban areas. However, recent developments in the technology have enabled the use of small cells in regional and rural areas to provide wireless services where a full-sized base station would not be economically feasible.

The ACCC suggests that open access may be required to small cell wireless infrastructure networks on the basis that dense small cell networks may display natural monopoly characteristics. Telstra does not agree with this suggestion. Given the very early – and very promising – stages of development in the use of small cell technology, we do not consider that it would be in anyone's interest to introduce any form of regulation, including mandating open access. This is likely to deter investment in a technology that could ultimately improve the quality and price of broadband services in Australia. The detrimental impact on investment could also threaten improvements in mobile coverage in rural and regional areas where, as noted above, small cell technology has been used to provide wireless services in areas that are traditionally uneconomic to serve. It is not clear that there are any anti-competitive bottlenecks in the deployment of this technology and there is a risk of creating detriment to consumers if future investment is hampered by an overhanging prospect of regulation.

Although the ACCC does not currently find that fixed-mobile substitution is occurring, it proposes to closely monitor the uptake of different broadband technologies, and continue to reassess relevant market definitions in the communications sector as part of its regulatory functions (**Action 23**). Telstra agrees that market definitions should be revisited when appropriate during regulatory processes. However, the ACCC should be careful to assess the full implications of amending market definitions to ensure that any changes do not have disproportionate impacts on service providers or deter investment in new products and services.

Potential competition concerns relevant to the supply of new communications services

OTT services

OTT services cover a wide range of services available to consumers and businesses which are challenging traditional business models and have led to increasing choice for consumers. For example, OTT messaging services and applications such as Facebook, Twitter, Skype, LinkedIn and WhatsApp are now among the most popular internet sites globally and are increasingly used as substitutes for services traditionally provided by telecommunications companies, including voice calls and SMS. The same applies to on-demand content services such as Netflix, Stan, Apple iTunes and 'catch-up' or subscription content services. As set out in our submission to the ACCC Market Study Consultation paper, the importance of traditional telecommunications service providers has reduced significantly due to the increased competitive intensity resulting from greater customer empowerment and the entry of global OTT players into the market.

The ACCC acknowledges that OTT services continue to grow in popularity and are necessitating continued investment in capacity by network providers and service providers. Telstra agrees with this having previously submitted that OTT applications and on-demand services would not be possible without continual investment in network capacity. Indeed, as a significant amount of technology today relies on connectivity, investment in networks will be critical to many sectors of the economy, including the communications sector. Although the Draft Report concludes that the current state of competition for OTT services is vigorous and dynamic, it identifies a number of low level risks. As a result, the ACCC proposes to explicitly examine competitive constraints posed by OTT services on traditional communications services as part of future access inquiries (**Action 24**). In addition, the ACCC will pay close attention to:

- Any traffic and price discrimination of OTT services by broadband service providers (through blocking, throttling, prioritising and unmetering).
- The impact of traffic management practices by broadband service providers (in response to increasing traffic volumes), whether this is performed in a competitively neutral manner, and the adequacy of disclosure to their consumers. Should broadband service providers fail to fully disclose to new and existing customers how their traffic management policies may impact their services, the ACCC will consider the need to develop appropriate principles and industry guidelines as well as consider enforcement action where appropriate.
- The development of key OTT service markets, which the ACCC proposes to report on as part of its annual telecommunications report.
- Potential harm arising from the ability of OTT platforms to amass market power (which the ACCC has excluded from the market study).

OTT entrants drive competition and consumer choice

We agree with the ACCC's assessment that the entry of OTT providers has had a strong pro-competitive impact on traditional communication services markets. This is evidenced across a variety of platforms where OTT challengers have offered new and improved products, creating benefits for consumers and vigorously challenging, and sometimes displacing, incumbent providers. In the Australian market this is evidenced by the entrance of Subscription Video On Demand (**SVOD**) services. Since launching in 2015, services such as Netflix, Stan and other SVOD services have all enjoyed exponential growth, with Netflix alone having amassed over 2.02 million subscribers as at June 2017 (or approximately 55 percent of the Australian SVOD market), with Stan and other entrants signing up approximately 867,000 and 769,000 subscribers respectively.[37] This impressive growth, particularly in the case of Netflix, has come at the expense of the incumbent providers, namely Free to Air (**FTA**) provider's, which have seen a 'precipitous'[38] decline in their viewership in the same period.

This competitive dynamism in the market not only fuels consumer choice, it also opens up opportunities to decrease regulation. As noted above, OTT's act as disruptors to traditional markets, successfully competing with incumbents by introducing new products or business models that reduce or eliminate the competitive (or monopoly) advantage of traditional providers. This suggests that future regulation should encourage dynamic competition, e.g. by avoiding the creation of artificial barriers to entry or raising the costs of innovation. Further, there should be an understanding and acknowledgement that incumbents with high market shares today are unlikely to maintain their 'dominance'[39] in the future.

[37] Teslyte Australian SVOD Market Study 2017
[38] CSLA (July 2016) – Telecoms and Media: Sector Outlook, p.5
[39] GSMA (2016) – A New Regulatory Framework for the Digital Ecosystem, p.9

Traffic Management Practices

Telstra uses network management to the benefit of our customers. ISPs and carriers must optimise their networks and traffic to ensure network performance remains reasonably consistent and is not materially impacted by unexpected localised peaks in demand.

More efficient network utilisation translates to lower user access costs and a better user experience. In Telstra's experience it is important to explain clearly to customers what performance characteristics they can expect from their service in terms that they understand and that are relevant to them. There is no advantage to providing technical information about "traffic management" or "network management" as it applies to a particular product or service. Rather, ISPs should be clear about what service and performance customers can expect at different times of the day on a particular product or service and then strive to meet those expectations.

OTT entrants impact on network investment

Telstra agrees with the ACCC's comment that despite the potential for tensions to emerge, the growing popularity of OTT services has not resulted in a reduction in ISP network investment levels. In fact the opposite is true, as ISPs invest to meet increasing demands for data driven by the popularity of bandwidth-heavy OTT applications, in particular streaming video.

Telstra announced during FY17 our intention to invest up to $3 billion in additional capital expenditure over the next three years. This is in addition to our usual capital spend and takes our expected total capital investment (including spectrum) over the three years to FY19 to more than $15 billion. To date, we have focused the program predominantly on our networks and have invested around $750 million since November 2016. Over FY17-19 we will direct more than $1.5 billion to building the networks for the future, and approximately $1 billion to enhance the digitisation of our business.[40]

Regulatory settings not keeping pace can distort competition

Telstra strongly supports open internet access under which consumers are able to access any lawful content, application or service of their choice on the internet and believes that the current Australian regulatory environment, strong retail broadband competition and increasing competition in the market fuelled by the entry of OTT's fosters continued open internet access. We do not believe that additional regulation is needed to maintain open internet access.

We acknowledge however that the pace of evolution in the market is accelerating, with new products causing disruption in ever decreasing timeframes. This puts pressure on traditional *ex ante* regulation, which by its nature is generally prescriptive and detailed, and assumes a relatively static and stable ecosystem. In this rapidly changing environment, we support the use of *ex post* regulation which is better adapted to a changing environment (i.e. generally more dynamic and flexible) as well as technology agnostic (i.e. functionality based). *Ex post* regulation is better suited to the principle of 'same services, same rules' to regulate services regardless of the type of technology used to provide them. As set out elsewhere in this submission, the use of *ex post* regulation also reduces the risk that regulation will have a detrimental impact on innovation and investment in rapidly changing markets, such as that for OTT services.

[40] Telstra 2017 Annual Report – p.5 and p.18

Internet of things

The ACCC examines the market for the Internet of Things (**IoT**) on the basis that it encompasses a diverse range of emerging technologies with the common attribute of communication between devices or 'things', including machine to machine (**M2M**) communication. The Draft Report finds that the diverse and fragmented nature of different IoT applications is likely to create disparate service markets with different competitive dynamics. As a result the ACCC makes a number of proposals (**Action 25**) including to:

- Continue ACCC involvement in relevant external processes in relation to IoT spectrum, NBN and consumer/data issues run by the ACMA, the Internet of Things Alliance Australia (IoTAA) and other government departments
- Continue to work with IoTAA in its various work streams and engagement with NBN Co on IoT product issues
- Explore concerns regarding restrictions associated with the e-SIM model which are impeding the ability of Mobile Virtual Network Operators (MVNOs) to compete with the mobile network operators
- More generally, periodically examine the development of competition in key IoT sectors for signs of concentration or conduct of concern. This would involve monitoring features of the market including the number of market participants and their market shares; the degree of interoperability at the network and service layers; and availability of suitable wholesale access products. The ACCC will consider the value of incorporating this monitoring activity as part of its annual telecommunications report.

Telstra agrees with the ACCC's assessment of the IoT market including observations about the heterogeneous nature of IoT services, and the potential for IoT applications to have a significant impact on the economy. As the ACCC also observes, a number of new wireless connectivity providers have deployed low-power wide-area (LPWA) networks that provide coverage that is "… *almost as extensive as the existing mobile networks*." The willingness of companies such as NNN Co and Thinxtra to invest and deploy infrastructure can be viewed as a product of both technological advancement (driving unit cost reductions that underpin high-volume low-margin business models) as well as the correct government policy and regulatory settings. The ability for these companies to deploy a large number of visually low impact nodes at scale is an example of policy settings that allow for the quick deployment of networks to meet customer demand in a timely manner.

The advent of networks that compete with mobile networks to service these markets is good evidence of competition in the IoT market. Businesses across a wide range of industries including agriculture, transport, mining and government (e.g. smart-cities) have a range of competitive options to choose from when deploying solutions.

Telstra notes the ACCC's intention to periodically examine the development of competition in key IoT sectors. We recognise the ACCC's ongoing role in monitoring any and all markets for signs of concentration or conduct of concern, and see this simply as part of the ACCC's obligations. We note, however, that aspects such as "degree of interoperability at the network and service layers" or even "number of market participants" are not automatic indications of conduct of concern. At the most basic level, technologies such as SigFox (deployed by ThinXtra) are inherently different to LTE solutions such as Cat-M1 or NB-IoT. For example, to extend battery life, SigFox has significantly simplified and shortened the addressing and authentication mechanisms to reduce the amount of time radio transmitters in devices need to operate. However, this makes the addressing and authentication completely incompatible with LTE networks. Forcing SigFox devices to have the capability to address LTE networks would significantly increase power consumption, negating the extended battery life capabilities, and as such, it is not possible nor desirable to force interoperability between these technologies.

Content delivery networks, cloud computing and data centres

The ACCC has not identified any current competition concerns in relation to the Content Delivery Network (**CDN**), cloud computing and data centre markets, observing that the markets for these services are growing rapidly to meet the demands of the digital economy. The ACCC also considers that these markets are characterised by entry and innovation, with local and well-resourced international market participants. However, the ACCC also considers that there are features and characteristics of these markets which may lead to low level risks of competition and consumer issues emerging over the medium to longer term. As a result, the ACCC proposes to follow developments in the market for CDNs, cloud computing and data centre services to ensure that competition is not undermined over time and take appropriate competition enforcement action if necessary.

Telstra agrees with this proposed action, given that each of these markets currently appears to be competitive – characterised by growth and innovation, and with a large number of providers including significant global players – but recognising that the landscape may change as these markets continue to evolve and mature. However, we believe any formal monitoring is not required in this instance and that the ACCC should, instead, rely on its *ex post* powers if competition issues are identified.

4. POLICY IMPLICATIONS AND PRIORITIES

The Draft Report sets out the ACCC's views on communications sector policy issues that relate to competition, efficiency and consumer issues – including spectrum management, data availability and use, the Regional Broadband Scheme (**RBS**) and the Mobile Black Spots Program (**MBSP**).

The Draft Report acknowledges that the ACCC has, to date, largely adopted an *ex ante* approach to regulating terms and conditions of access to monopoly services although there are *ex post* powers available to address anti-competitive conduct. One of the objectives of the market study was to determine whether the regulatory framework remained fit for purpose given the evolving nature of the communications market. In this respect the ACCC has concluded that *"…the current arrangements have remained fit for purpose notwithstanding the evolution of the communications sector to date and appear well suited to deal with the immediate and longer term issues…identified*."

Telstra broadly agrees with the ACCC that the existing regulatory framework remains fit for purpose. However, we strongly urge the ACCC to give further consideration to how it applies the regulatory framework, particularly in the case of new and emerging services. At this critical point in the development of the communications market in Australia, investment to support technology innovation must be supported by a regulatory framework that reflects the risk being taken by network operators and recognises the need to provide incentives to invest in new products and services.

Such an approach has been adopted in other jurisdictions. For example, in its Strategic Review of Digital Communications, Ofcom considered that its strategy must be to "…*enable the evolution of digital communications in line with the expanding needs of consumers and businesses. In particular, we must support the new investment and innovation that will be required*."[41] Regulatory intervention, even monitoring or information gathering, can be detrimental to incentives to invest in networks and/or new products and services. A study by NERA Consulting for the GSM Association[42] identified ways in which outdated regulatory policies are harming the development of digital markets including static regulation of dynamic markets, in which traditional *ex ante* regulation is applied unchangingly to markets which are rapidly evolving and hence more suited to *ex post* regulation in which problems are identified and addressed only once they emerge. As acknowledged by the ACCC in the Draft Report "…*there is far less need…to step in and set terms and conditions up-front for new communications services*." Telstra considers that this position needs to be extended more broadly such that the ACCC not engage in any form of *ex ante* regulation where there is no evidence to suggest that there is an immediate competition concern or evidence of consumer detriment.

There are a number of areas where the ACCC considers some form of regulatory measure may be required but considers that it is appropriate to monitor or collect further information rather than adopt a more interventionist option. Regulatory reporting and information provision requirements are, however, a regulatory burden and a signal to service providers that there is a high risk of further regulation. In other jurisdictions, they are typically used to monitor the effectiveness of regulatory remedies rather than determine whether a regulatory remedy is required. This is particularly appropriate where markets are in the early stages of development. Telstra considers that the ACCC should therefore exercise caution in determining whether formal monitoring of these markets is necessary to avoid the risk of deterring ongoing investment and development to the detriment to wholesale and retail customers. This is particularly applicable to the provision of wholesale NBN aggregation services, which are developing in line with the transition to the NBN, and dark fibre, which is characterised by increasing competition and the entry of new providers.

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[41] https://www.ofcom.org.uk/__data/assets/pdf_file/0016/50416/dcr-statement.pdf

[42] *A new regulatory framework for the digital ecosystem,* a study by NERA Economic Consulting for the GSM Associate, 2016

Further, none of the markets considered by the ACCC as appropriate for the imposition of formal record keeping rules are monopoly markets which are generally the subject of up-front terms and conditions of access, nor are there apparent consumer protection issues. In Telstra's view there is a real prospect of sustained effective competition in these markets provided the regulatory environment supports this and does not, for example, encourage entry of a monopoly provider, such as NBN Co, to supplement competitive service provision. Where allegations of misuse of market power or other forms of anti-competitive conduct arise, the ACCC has significant *ex post* powers available to it to investigate and, where appropriate, take action.

Spectrum management

Telstra agrees with the ACCC that spectrum is an essential input into wireless markets and services, and that without access to adequate spectrum, industry participants cannot offer competitive services. The current government review of spectrum management and its proposed legislation[43] provides a timely opportunity to reconsider the provisions for spectrum competition limits, i.e. the quantity of spectrum that can be acquired by parties through an ACMA spectrum allocation process. Under the current Act these limits are often called the "allocation limits" or "competition limits".[44] In the Exposure Draft of the Radiocommunications Act Bill 2017 (**Radcomms Bill Exposure Draft**) they are called "licence issue limits".[45]

Our longstanding position on restrictions on the aggregate of the parts of the spectrum that may be used by a particular person, is that these would be best managed by application of section 50 of the *Competition and Consumer Act 2010* (**CCA**) rather than by determination of *ex ante* limits.[46] However, we recognise that determination of these spectrum allocation limits has a longstanding history in Australian regulation and is likely to be retained. Our main concern is that the future approach to determination of the "licence issue limits" by the responsible regulators be as rigorous, transparent and efficient as possible.

ACMA consultation with the ACCC on the setting of licence issue limits

The current drafting of section 37(1) in the Radcomms Bill Exposure Draft states that before it determines a licence issue limit, "the ACMA must be satisfied that it has undertaken any consultation with the ACCC that is: (a) considered by the ACMA to be appropriate; and (b) reasonably practicable to undertake."

The ACCC's comments in the Draft Report appear to be seeking an expansion of this draft section 37 provision to require the ACMA to consult with the ACCC on all spectrum allocations where there are competing demands and interests for spectrum, or they are likely to impact downstream markets. Our view is that placing this requirement in primary legislation is not workable and creates the risk of litigation holding up spectrum release – a problem that has beset other jurisdictions, particularly the United States, but has not been prevalent in Australia due to the design of our existing spectrum legislation. Practically, it would be very difficult for the ACMA to determine whether or not there is competing demand for spectrum in each and every allocation, or if every particular allocation is likely to impact downstream markets. Most allocations will fall into one or the other category, e.g. obvious competing demand such as for mobile spectrum in metropolitan areas, or an obvious lack of competing demand such as for

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[43] Department of Communications and the Arts, "Consultation on new Spectrum legislation", https://www.communications.gov.au/have-your-say/consultation-new-spectrum-legislation

[44] Radiocommunications Act 1992, section 60(5).

[45] Exposure Draft, *Radiocommunications Bill 2017*, section 37.

[46] See: 1) Telstra's submission dated 12 April 2002 in response to the Productivity Commission's draft report on the Radiocommunications Act, s2 http://www.pc.gov.au/inquiries/completed/radiocommunication/submissions/dr323/subdr323.pdf; 2) letter from Iain Little of Telstra to Michael Cosgrave of the ACCC dated 17 April 2015 concerning the "Proposed spectrum reallocation for 1800 MHz in regional Australia", pp2-3 https://www.accc.gov.au/system/files/Telstra%20Submission_1.pdf.

individual device licences in remote locations. But there would be marginal cases where the ACMA may, in good faith, consider there is insufficient demand to justify consulting the ACCC, but then a third party could come forward after the fact and claim it was interested in the spectrum and seek to overturn the allocation on the basis that the obligation to consult the ACCC was not fulfilled.

This is not an unrealistic scenario: if the use of the spectrum is innovative, as soon as this use becomes public knowledge there may be spoilers and copycats seeking to reverse the ACMA's allocation decision. This means that if a positive consultation obligation to consult the ACCC existed, the ACMA would need to consult on many of the spectrum allocations it carries out. This is unlikely to be workable, given the sheer volume of spectrum for which the ACMA is issuing licences on a continuous basis. It would result in allocations of spectrum, and the associated benefits to Australian society, being unreasonably delayed.

Further, if the ACMA believes that as matter of prudence it is bound to consult the ACCC in most cases of proposed licence allocation and issue, and the ACCC then undertakes industry soundings to determine the level of demand for the relevant spectrum, there is a risk that a proposed innovative use of low-demand spectrum may be disclosed even before any licence is issued. The consequence would be to discourage innovative uses for spectrum which is not currently in competitive demand.

For the above reasons, Telstra considers that the proposed drafting in section 37 of the Radcomms Bill Exposure Draft is appropriate in establishing the ACMA as the lead authority, and that the ACCC's concern at being excluded from decisions on the setting of competition limits could be addressed by an inter-agency protocol which clearly sets out the two regulators' expectations on when the ACMA will consult the ACCC under section 37. This will enable far more flexibility to adapt to changing circumstances than an obligatory consultation requirement in the legislation itself. Of course, the two regulators would need to conduct public consultation before settling the inter-agency protocol, which should be a public document.

Consultation with stakeholders on the setting of licence issue limits

Telstra notes the interest of both the ACCC and the ACMA in being able to discharge their respective mandates in respect of setting licence issue limits. But it is important that they should be required to take into account the views of stakeholders and that they also explain their reasons clearly.

There is no explicit requirement in the draft of the Radcomms Bill Exposure Draft for consultation with stakeholders by either the ACMA or the ACCC when they carry out their roles in the determination of licence issue limits. In recent auction processes, the ACCC has publicly sought input on the advice it should provide on proposed auction limits,[47] and Telstra believes this should be a mandatory obligation. To the extent that the ACMA considers matters distinct from those which the ACCC examines, for example technical aspects of allocation, the ACMA should also be obliged to seek input from industry participants and the public in a transparent process. Telstra does not consider that relying on general obligations to consult on legislative instruments is sufficient in the context of licence issue limits as these decisions require a detailed and comprehensive consultation process that should be set out in the new radiocommunications legislation.

The process pertaining to the ACCC and the ACMA for the setting of competition limits should include a requirement that detailed reasons are published for the decisions made. Telstra is concerned that in the recent residual 700MHz auction process DoCA only published a summary of the ACCC's advice to the

[47] See, for example, ACCC, "Spectrum competition limits", 1 April 2015 (concerning the 1800MHz regional spectrum auction), https://www.accc.gov.au/regulated-infrastructure/communications/spectrum-competition-limits/request-for-advice.

Minister on competition limits.[48] This is undesirable as it limits understanding of the competition rationale for the licence issue limits that have been determined, and is relevant to future assessments.

Exclusion of ACCC powers under section 50 of the Competition and Consumer Act

Telstra notes the ACCC is opposing section 97(2) of the Exposure Draft which excludes ACCC powers under section 50 of the CCA from being imposed on spectrum that is subject to a licence issue limit.

Telstra supports this safe harbour provision to ensure certainty for parties purchasing spectrum subject to a licence limit. However, we also believe the safe harbour needs to be time bound so that account can be taken of longer term changes in technology and market conditions. Telstra suggests that all licence issue limits which endure for more than a specified period (e.g. four years) must be scheduled for a mandatory review at the end of that period to determine if they should continue, using the same consultation mechanism by which the limits were initially determined.

Criteria for determining licence issue limits

In the past, the ACCC has used a variety of different tests in preparing its advice on the setting of competition limits for individual spectrum auctions, including the extent to which:

- spectrum is monopolised;
- there is a substantial lessening of competition (in accordance with section 50 of the CCA);
- an existing market participant would be constrained from competing in the relevant market if it was barred from acquiring the relevant spectrum;
- there is detriment to the long term interests of end users.

Telstra considers that the test needs to be more clearly identified and applied consistently across all spectrum transactions. It is important that the criteria for making decisions about spectrum competition limits in ACMA allocations processes is the same as that used by the ACCC to assess the impact of spectrum trading outside the ACMA processes. Since the ACCC is already obliged to apply the CCA section 50 test to spectrum trading outside the ACMA processes,[49] Telstra believes the new Radiocommunications Act should also require this test to be applied to the setting of licence issue limits.

Application of licence issue limits to overlapping licences issued for the same part of the spectrum

The advent of the single licence approach in the Radcomms Bill Exposure Draft enables the issue of multiple licences for the same part of the spectrum,[50] unless this is precluded by a regulatory undertaking in respect of the first-issued licence. A consequence is that licence issue limits may no longer be able to be determined on the premise that use of each part of the spectrum is exclusive of use by another person. This means that licence issue limits may need to take into account the prospect of multiple users of the same part of the spectrum or 'densification', which would potentially require an increase in the maximum amount of spectrum which any one user should be permitted, relative to a conventional issue limit that relies on exclusive use rights. Telstra believes that further consideration needs to be given to this issue.

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[48] Department, "ACCC advice on allocation limits for the auction of unsold 700 MHz spectrum—executive summary", 14 December 2016, https://www.communications.gov.au/publications/accc-advice-allocation-limits-auction-unsold-700-mhz-spectrum-executive-summary.

[49] *Radiocommunications Act 1992*, section 68A and section 114A.

[50] Exposure Draft Radiocommunications Bill 2017, s46(3).

Additional regulatory measures are not required

The ACCC notes in the Draft Report that regulatory measures, such as spectrum set-asides and reduced fees, are used by regulators internationally to promote competition in relevant wireless and mobiles markets by assisting new entrants and smaller incumbents. The ACCC also states it is not clear that if a need arose, these measures would be able to be used in Australia.

Telstra believes the licence issue limits framework is adequate to address any competition concerns that may arise in relation to the allocation of spectrum to new entrants and smaller incumbents. We are not aware of any compelling case for additional regulatory measures to be created. We would welcome further discussions with the ACCC to understand why it believes there is doubt as to whether such measures (if ever warranted) could be adopted under the existing *Radiocommunications Act* or the proposed new legislation.

Radiocommunications Act already recognises the benefit of competition

In the Draft Report the ACCC strongly recommends that the radiocommunications regime explicitly recognise, and do more to promote, competition in relevant markets (**Action 27**).

Telstra considers that the existing Radiocommunications Act already does, in its object (section 3), recognise the benefit of competition in relevant downstream markets. The object in section 3(a) of "efficient allocation" and "overall public benefit" is highly aligned with pro-competitive measures. Similarly, section 60 of the current legislation created the framework for market-based allocation and the determining of allocation limits, which are obviously directed at downstream market consequences. To the extent that the current Act (now 25 years old) may not be sufficiently explicit in its object, the proposed new section 3(a) in the Radcomms Bill Exposure Draft provides a plenary object of promoting the long-term public interest and references efficient planning, allocation and use of spectrum. These are requirements which all align with fundamental competition principles.

Data availability and use

As noted by the ACCC, issues associated with data availability and use have been the subject of a Productivity Commission (**PC**) Inquiry. The recommendations made by the PC are currently being considered by the Government. The ACCC is supportive of the proposals by the PC around greater availability and use of consumer data on the basis that such information will facilitate better purchasing decisions and encourage service providers to make more tailored offerings to consumers. Accordingly, the ACCC considers that the proposals of the PC's Inquiry into Data Availability and Use should be implemented to facilitate consumers having access to relevant data about themselves (**Action 28**).

In our submissions to the PC's initial inquiry[51] and subsequent draft report[52], we expressed our support for the proposed directions for data reforms in Australia. We are strong advocates for consumers and businesses having data related to their use of our products and services (transaction data), not only for the potential purpose of comparing competitor plans and offerings, but also for understanding and managing their usage. Providing transaction data to our customers is good business practice and aligns strongly with our desire to serve our customers better.
However, we also expressed concern in our submissions that the definition of consumer data was potentially being expanded under the PC's recommendations to include data that we consider outside the bounds of customer data to include network and proprietary data.

[51] Telstra submission to Productivity Commission inquiry into Data Availability and Use, 29 July 2016. https://www.pc.gov.au/__data/assets/pdf_file/0003/203556/sub088-data-access.pdf

[52] Telstra submission to Productivity Commission draft report on Data Availability and Use, December 2016. https://www.pc.gov.au/__data/assets/pdf_file/0018/211446/subdr312-data-access.pdf

The ACCC's Action 28 proposes that the recommendations from the PC's inquiry should be implemented but is silent on the scope of customer data. Telstra's submissions to the PC's Inquiry presented the case for a narrower and clearer definition of consumer data, based upon a given consumer's details about themselves (name, address, etc) and transaction data. In terms of meeting the PC's goal of facilitating comparison of competitor plans, the 'transactions' associated with services (including data use, call minutes, storage capacity, etc) are the primary attributes providers compete on. Limiting customer data to consumer detail plus transaction data would be simpler and more practical than the PC's broad proposal and would serve to lower compliance costs; costs that are ultimately borne by the consumer.

Telstra also observes that the ACCC has made two draft findings in relation to this recommendation: the first that consumers don't have sufficient access to data about themselves to make informed choices; and the second in relation to the roles recommended for the ACCC.

With regard to the first finding (consumers don't have sufficient access to data about themselves), we note that today we already provide details of all transaction data including calls, data use, SMS/MMS, and more, with date/time stamp through on-line and printed means, which are the primary attributes on which providers compete. Neither the ACCC's finding, nor the preceding text in the Draft Report cite any tangible examples of data the ACCC believe is missing in regards to consumers being better informed. We would welcome examples of the data the ACCC believe would better enable consumers and businesses to make better comparison of competing offers that is missing from the information we already provide to our customers today. Further, as set out elsewhere in this submission, consumers today have access to more information than ever before - via a number of sources – which has empowered them to make informed purchasing decisions.

With regard to the second finding, we note from the PC's Final Report that, outside of the role of coordinating with the relevant industry ombudsman and Office of the Australian Information Commissioner (**OAIC**) in regards to complaint handling (see Recommendations 5.4 and 8.7), one of the proposed roles for the ACCC is to approve and register industry data-specification agreements and standards. These agreements will be based on an industry-determined scope of consumer data relevant to a particular industry. Telstra supports the approach proposed by the PC – particular in terms of the scope of data being determined by industry participants - but considers that adding an additional layer of approval will have limited benefit and may cause delays to the implementation of the PV's recommendations to the detriment of consumers.

Regional Broadband Scheme

The RBS aims to establish funding arrangements to provide broadband services to regional, rural and remote Australians. Under the proposed RBS, carriers that provide high speed fixed line broadband services to premises on their network would contribute to subsidising high cost NBN services (fixed wireless and satellite) through a charge of around $7.10 per premise per month. The RBS does not apply to fixed wireless or mobile broadband operators.

In the Draft Report the ACCC notes that it originally supported the view that the charge should only be imposed on NBN-equivalent services on the basis that this would encourage NBN Co to contain costs to efficient levels due to revenue uncertainty. However, the increasing substitution towards fixed wireless and mobile broadband services has caused stakeholders, including NBN Co, to suggest that the exclusion of fixed wireless and mobile broadband providers may need to be revisited to prevent the distortion of future market outcomes.

The ACCC does not, however, support this view proposing that the RBS should only be applied to fixed line services and should not be applied to wireless services in the future (**Action 29**). The ACCC considers that the extent to which wireless services constrain fixed line broadband services is evolving and should not be inhibited by policy or regulatory changes to assist NBN Co. Further, greater substitution across technologies would also bring into question the suitability of the RBS charge as a mechanism to fund non-commercial NBN services. The ACCC preference is for direct budget funding as it would be the least distortionary alternative and not serve as a means of protecting the NBN from network competition.

Telstra's support for the RBS was predicated on it being introduced to create a level playing field and support the provision of rural and regional broadband infrastructure, i.e. addressing "revenue-leakage" to networks competing with NBN Co in more profitable areas which reduced the cross subsidy NBN Co would otherwise earn to support its rural and regional broadband infrastructure. Under that approach the levy would only be payable by those networks that had infrastructure competing with NBN infrastructure, i.e. NBN-equivalent networks effectively "cherry picking" the NBN. [53]

RBS applied to NBN-equivalent services only is the right approach

Telstra supports an NBN-equivalent approach to the RBS. Back in 2015, the Bureau of Communications Research (**BCR**) considered two options for funding NBN's non-commercial services: an NBN equivalent approach and a wider industry based tax. Under an NBN equivalent approach, contributions to the funding of non-commercial services would be sourced from operators of high-speed fixed line access networks (i.e. 'equivalent services'). Under a broader industry tax model contributions would be sourced from the whole of the telecommunications industry. The BCR indicated a preference for the NBN equivalent approach, stating is was 'the most economically efficient way of achieving competitively neutral funding of fixed wireless and satellite losses, while freeing up infrastructure competition'.[54]

In terms of liability under an NBN-equivalent approach, the BCR proposed that:

1. Industry participants that resemble NBN will be liable. This liability is based on network operators of high-speed fixed line broadband access networks delivering download speeds of at least 25 Mbps to residential and small business customers
2. Mobile networks will be excluded, as they are not considered to be NBN-equivalent services.
3. Networks serving government and medium and large businesses will be excluded
4. Networks that are being transferred to NBN under the Definitive Agreements (legacy copper and HFC networks) will be excluded (noting the customers on these networks will be included in the funding base once they have been transferred to nbn)
5. Any high-speed fixed line services in the NBN fixed wireless and satellite footprint will be excluded in the interests of encouraging efficient new infrastructure investment.

Telstra supported the BCR's views on the scope of the RBS in its response to the consultation paper, and continues to advocate for a narrower, NBN-equivalent funding arrangement in preference to a broader industry based tax.

Direct budget funding of NBN non-commercial services is preferable to a broader industry tax

Telstra supports a direct funding approach for non-commercial NBN services for two reasons.

Firstly, because it is non-protectionist and directly addresses the negative impacts to NBN Co's business case arising as a result of competing fixed line networks in metropolitan areas. This impacts the cross-subsidy available to NBN Co for non-commercial fixed wireless and satellite services. It also incentivises NBN Co to pursue its national fixed network rollout.

Secondly, it promotes fairness for consumers. Telstra continues to advocate for a sustainable levy arrangement that is precisely targeted to facilitate NBN Co's efficient roll-out of services, with minimal

[53] Telstra Submission to Senate & Environment Committee - 14 July 2017

[54] Bureau of Communications Research - Initial consultation paper, NBN non-commercial services funding options, p.49

impost on services that do not impact the roll-out. We also believe that funding arrangements should deliver fair outcomes for these customers by taking into account any internalised cross-subsidies that retail and wholesale customers may already pay on non-NBN broadband services. In particular, if customers already pay nationally averaged prices for their non-NBN services delivered on a national network, they are already paying an implicit cross subsidy on the service that they are using. For those customers to then also pay for a cross subsidy on NBN services where they are not using these services or otherwise impacting NBN's business case will lead to inequitable outcomes for customers as they face the burden of paying cross-subsidies across two networks.[55]

Mobile Black Spots Program

The Draft Report sets out the ACCC view that funding programs, such as the MBSP, should give appropriate weight to competition in allocating funding. In particular, the ACCC notes that there is no mandatory requirement to provide roaming at new mobile sites despite the significant public funds used to deliver the program. The ACCC considers that open access requirements for these types of programs will deliver more benefit to regional consumers who are seeking improved coverage and a better return for public expenditure.

Although the ACCC does not make a proposal in relation to the MBSP (or similar programs), Telstra notes that this issue is also being considered following the conclusion of the ACCC's Domestic Mobile Roaming Inquiry. Specifically, the ACCC proposed to write to federal and state governments asking that competition considerations be adequately dealt with when designing subsidy programs to expand coverage of, or improve telecommunications networks. The ACCC also noted that the third round of the MBSP was proceeding and stated that they would write to DoCA advocating for clear prioritisation of objectives to be set for the program, evidence-based selection of sites and, importantly, that open-access requirements to be put in place. The ACCC also stated that it would seek changes to the terms and conditions for backhaul access and pricing under the program to be aligned to the declared DTCS.

As set out in our submissions to the Domestic Mobile Roaming Inquiry, Telstra does not consider that it would be appropriate to mandate roaming on MBSP sites although it is not clear as to the form of open access that the ACCC is advocating. However, we support some forms of open access such as co-location. Where technically feasible, Telstra has built new co-funded sites under the MBSP to allow for an additional Mobile Network Operator (**MNO**) to co-locate without incurring additional site upgrade costs. Further, to ensure that sites have sufficient capacity, both Optus and Telstra have asked for Expressions of Interests from other MNOs to co-locate on sites co-funded under the MBSP in advance of site construction. Telstra's agreement with the Federal Government for MBSP Round 2 also requires backhaul to be offered at price terms and conditions more favourable than regulated rates to assist with improving the economics of providing mobile coverage in remote and regional areas. Telstra welcomes further engagement with the ACCC and other stakeholders on the future of the MBSP with the objective of ensuring positive outcomes for consumers in regional and rural Australia.

[55] Telstra submission to the Bureau of Communications Research Re: NBN non-commercial services funding options - Final Consultation Paper, p.7