Review of the Measuring Broadband Australia program

Consultation report

December 2020
## Contents

Key findings ........................................................................................................................................... 3

1. Executive summary .......................................................................................................................... 4

   The ongoing importance of broadband services ........................................................................... 6
   Addressing broadband service deficiencies ............................................................................... 7
   Flexibly providing timely insights ............................................................................................... 7
   Valuable to consumers .................................................................................................................. 8
   Suggestions from submitters for program improvements ......................................................... 8
   Transparency supports broader regulatory aims ......................................................................... 10
   Holding RSPs to account so they don’t overpromise and under-deliver ................................ 12
   Expansion beyond fixed line services .......................................................................................... 12

2. Introduction ................................................................................................................................... 14

   2.1. Report structure ...................................................................................................................... 14

3. Background .................................................................................................................................... 15

   3.1. Submissions received .............................................................................................................. 15
   3.2. Public Consumer survey ......................................................................................................... 15

4. Review of how the MBA program has operated and market outcomes observed ............... 16

   4.1. Objectives and achievements .................................................................................................. 16

      4.1.1. Overview ............................................................................................................................ 16
      4.1.2. Measures of success .......................................................................................................... 17
      4.1.3. Funding for the MBA program ........................................................................................ 18

   4.2. Objective #1: Providing information on the performance of fixed line broadband services .................................................................................................................................................. 19

      4.2.1. Transparency and consumers ............................................................................................ 19
      4.2.2. Transparency – RSPs and network operators .................................................................. 25
      4.2.3. Transparency and policy makers ...................................................................................... 29
      4.2.4. Flexibility and adaptability of the MBA program during COVID-19 ............................ 30

   4.3. Objective #2: facilitating performance based competition .................................................. 33

   4.4. Objective #3: Improving consumer outcomes ...................................................................... 33

   4.5. Objective #4: Assessing reasonableness of speed claims ..................................................... 39

      4.5.1. An important part of an integrated strategy ................................................................. 39
4.5.2. Use of MBA program in our compliance and enforcement role .......... 40

4.6. Summary ........................................................................................................... 41

4.7. Stakeholder submissions .................................................................................. 42

4.8. ACCC view ....................................................................................................... 46

5. The MBA program – where to from here? ......................................................... 47

5.1. Ongoing requirement for the MBA program .................................................... 47

5.2. Stakeholder submissions .................................................................................. 49

5.3. ACCC view ....................................................................................................... 50

5.4. The scope of a future MBA program ............................................................... 51

5.4.1. Potential for expansion into additional technologies and alternative networks 51

5.5. Other potential augmentations of the program ............................................... 53

5.5.1. Ensuring representative, timely and accessible market information and engaging consumers .......................................................... 53

5.5.2. MBA program data ....................................................................................... 54

5.5.3. International comparisons .......................................................................... 54

5.5.4. Responding to market changes – small and medium sized businesses .. 54

5.5.5. Ongoing integrity of the program and data ................................................ 54

5.6. Stakeholder submissions .................................................................................. 55

5.6.1. Expansion to other networks ...................................................................... 55

5.6.2. Improved MBA Reporting ........................................................................ 57

5.6.3. Inclusion of small and medium businesses ............................................... 57

5.6.4. Improvements in MBA testing methodology .............................................. 58

5.7. ACCC view ....................................................................................................... 59

5.7.1. Expansion to other networks and service providers .................................. 59

5.7.2. Changes to MBA speed metrics ................................................................ 60

5.7.3. Inclusion of small and medium businesses ............................................... 60

5.7.4. Improved MBA reporting ........................................................................ 61

5.7.5. Improvements in MBA testing methodology .............................................. 61

6. Concluding comments and next steps ............................................................... 62
Key findings

The Measuring Broadband Australia program is an important component in furthering the Government’s priority to facilitate consumer access to affordable and reliable communications services, irrespective of where consumers live or work. It is also a key element of the ACCC’s integrated strategy for improving competition and consumer outcomes in broadband markets, along with our Broadband Speed Claims guidance and enforcement actions. This approach has successfully assisted in the delivery of improved market outcomes for consumers of high speed broadband services.

We estimate that consumers spent around $6.3 billion on fixed line broadband services in 2020

The percentage of underperforming services has gone down

Download speeds of monitored services have gone up

Consumer complaints about service speed have gone down

It is the only independent source of reliable broadband performance information.

The MBA program is a light touch, market based measure that increases competitive pressure on RSPs to deliver the performance they represent to the market.

During the COVID-19 pandemic, MBA program data provided valuable insights into how broadband services performed at a critical time of demand on the NBN network.

We have consulted with a range of stakeholders including consumers, RSPs, network operators, consumer advocate groups, industry bodies and regulators. A majority of stakeholders (including NBN Co, ACCAN, Aussie Broadband, CHOICE, the RRRCC and the ACMA) support the program continuing and being expanded. Other stakeholders who are not supportive (Communications Alliance and Telstra) point to other regulatory measures that could potentially achieve similar outcomes as the MBA, and other opportunities for consumers to access broadband performance information such as our Broadband Speed Claims Guidance and third party programs or applications. While other initiatives play an important role, these alone would not provide as strong an incentive to improve broadband service quality or overcome information asymmetries that would exist between broadband suppliers and consumers. In this regard, the Honesty Box ratings and the Netflix Index that have been available to consumers are not currently in operation, and crowd-sourced programs provide far less detail and accuracy on typical performance than does the MBA program.

The review has shown that there are numerous benefits to the MBA program:

- RSPs use it in their advertising, and can assess the relative quality of their services compared with other RSPs
- Delivered greater information to consumers and small businesses on the performance of different broadband technologies, and there is strong appetite for more information on small and medium business services
- Transparency over performance that provides impetus for improved broadband outcomes as much as actual consumer engagement with the data
- An important tool for the ACCC to assess RSPs’ anecdotal speed claims against the actual experience of MBA volunteers
- Strengthens the ACCC’s ability to intervene through our compliance and regulatory powers
- Other testing approaches identified by industry are not as effective or robust, and unlikely to be timely or comparable if RSPs establish their own individual monitoring programs
- Assist to identify where service provision is falling short and help advocate for action to address impacted segments, and measure the success of such programs

Regulators around the world use similar monitoring programs to address information asymmetries in their broadband markets

This is the ongoing international practice of:
> United States
> Canada
> Saudi Arabia
> Hong Kong
> United Kingdom
> New Zealand
1. Executive summary

The review of the Measuring Broadband Australia (MBA) program has reaffirmed the role that the program has played in driving competition and consumer outcomes in broadband markets. The MBA program achieves this by overcoming information asymmetries concerning the performance and quality of broadband services, which emerged as a significant issue during a period of transition from legacy ADSL to NBN broadband services.

The MBA program has been both a key pillar in the Australian Competition and Consumer Commission’s (ACCC’s) strategy for promoting positive competition and consumer outcomes, but also as part of the Government’s commitment for improved consumer experiences on the NBN network. The Department of Infrastructure, Transport, Regional Development and Communications (DITRDC)\(^1\) at the time of the commencement of the MBA program noted:

"By publicly reporting the results, the Australian Government is holding retail providers to account for the broadband speeds they provide and, for the first time, consumers are able to see whether retail providers are delivering the speeds they paid for, and can rely on advertised speeds being delivered, including at peak times, so they can have confidence in undertaking everyday activities.\(^2\)

During the NBN rollout, consumer enthusiasm and support for the significant capital investment in the NBN and its performance was dampened by anecdotal reports that individual services were failing to meet expectations. The MBA program has provided evidence of actual NBN network performance to counter suggestions that the network investment was failing to deliver.

The MBA program is now the only remaining independent and reliable source of information that shows network level broadband performance in Australia. The program has also helped to assist in demonstrating the extent to which higher quality broadband services have been an important outcome of the Government’s significant ongoing capital investments in broadband markets and its other communication policy settings that have complemented these investment decisions. It also counteracts claims made by critics of the NBN’s design that relatively isolated instances of poor performance are representative of the network as a whole. This is likely to be important going forward, as the NBN is upgraded and it faces competition from emerging networks that may make superior performance claims. Information provided by the MBA program can assist in addressing any poor consumer outcomes that could otherwise re-emerge in this environment.

In this regard, the MBA program is a light touch marked based measure that allows broadband markets to operate much more efficiently and thereby promote competition and consumer outcomes. More particularly, the MBA program:

- provides independent and credible data to demonstrate where NBN markets are delivering good consumer outcomes, and to identify specific opportunities for further improvement
- encourages efficient investment by NBN Co, and RSPs via NBN access charges, to facilitate consumers’ access to high quality retail broadband;

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\(^1\) At the time, known as the Department of Communication and the Arts.

- promotes more informed and confident purchase decisions through access to robust, independent and comparable performance information
- increases public awareness and understanding of the range of broadband service quality that is available.

The MBA program also assists the ACCC in responding to instances of poor market behaviour. The MBA program complements the ACCC Broadband Speed Claims guidance and associated compliance activity by making more likely detection of systemic underperformance relative to marketing claims, and is an integral component of our overall response to this issue. The MBA program also assists in the identification and resolution of wholesale market issues.

The MBA program effectiveness review sought feedback on two overarching themes:

- *A review of how the MBA program has operated and market outcomes observed* – this section describes how the program provides transparency over fixed line NBN performance, helps to promote performance-based competition, assists consumers to compare broadband plans and detect performance issues (such as underperforming fibre to the node (FTTN) services) and advocates for action to address these issues.

- *Options for a future MBA program if it is renewed* – this section discusses the risks to the improved market outcomes observed if the program is discontinued. It then sought views on changes to the scope of a renewed program given market developments to cover 5G, fixed wireless and other networks as well as changes to improve the accessibility, integrity and usefulness of the MBA data.

The consumer survey targeted both MBA program volunteers and consumers in general, seeking feedback on how useful they find the program and views on future changes.

The review has found, based on stakeholder submissions and public survey feedback, that the program as an integral component of the wider ACCC strategy “...has produced worthwhile outcomes and has met its overall objectives. The program has provided more transparency within the industry and has allowed customers to make educated decisions on choosing products and RSP’s.” NBN Co expressed a similar view and also added that the MBA program’s quarterly reports have helped to increase transparency and consumer awareness of speed and performance issues as well as other technical aspects of high-speed broadband services.

The broad sentiment in submissions from consumers, consumer representatives and those representing rural, regional and remote Australians is that the MBA program is an important tool for transparency that should be continued and expanded to benefit wider groups of Australians.

Case studies and market and complaint indicators in the Consultation paper, which are reflected in this report, demonstrate how the program has succeeded in promoting its four key objectives. These are to:

1. **Provide consumers, industry and policy makers with robust, independent and comparable information on the performance of fixed line broadband services in Australia.**

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2. Facilitate performance-based competition between RSPs by publishing independent performance information.

3. Improve consumer outcomes by publishing performance information so as to inform their purchasing decisions.

4. Assist in detecting where real-world service performance is falling short of claims made by service providers as part of a broader strategy to promote compliance with the law.

Monitoring and reporting on fixed line NBN performance has provided independent and empirical evidence that the NBN network is largely performing well and meeting the needs of consumers including in periods of peak demand. By stimulating performance-based competition, it has also contributed to an uplift in broadband performance more generally.

These outcomes are achieved at a relatively modest cost in comparison to the benefits it delivers to consumers. At a cost of $7.0 million over the four years of the program, the now established MBA program costs around $1.7m per annum. A fully cost recovered program equated to 23 cents per annum to the cost of an NBN retail service in 2019-20, on the basis of there being around 7.4m NBN services in operation as at 30 June 2020.5 We expect that a continuation of the MBA program as it currently is will cost around the same per annum. If there is interest in extending the program to fixed wireless, we are able to obtain a cost for this and proceed reasonably quickly. It is likely that there would be some development costs to extend the program on an ongoing basis to cover additional access technologies, and a small cost to cover the distribution of new Whiteboxes to additional volunteers.

The ongoing importance of broadband services

Access to broadband services is increasingly important to Australians, with over 11.8 million homes and businesses now ready to connect and 7.7 million already connected to the NBN network.6 Given the number of consumers connected and dependent on the NBN for their broadband performance, being able to meaningfully evaluate how broadband services are operating is strategically important to Australia. This also reflects the Government’s continued key plan of giving all Australians access to high-speed broadband and helps to meet its objectives of providing an environment in which all Australians can access and benefit from communications services. With improving the NBN experience for consumers as a priority, the Government announced the funding of the MBA program and has seen it as an initiative “…which provides consumers with accurate, independent information on speeds they can expect from retail NBN service providers.”7

In our consumer survey, a vast majority of respondents who are MBA volunteers identified that a key motivation for becoming a volunteer was to help consumers by providing transparency on the performance of broadband services.

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Advocates for regional and rural consumers, as part of the consultation process, expressed strong support for the continuation of the MBA program and its expansion into monitoring and reporting on fixed wireless and satellite services. They highlighted, however, that the program with its current scope, was not useful for many regional consumers as it did not cover fixed wireless and satellite services that are used by these consumers. The current program is able to report on these services but at a network only level, and our third monthly Key Indicators Report includes proof-of-concept results for fixed wireless services between August and October 2020.

Addressing broadband service deficiencies

The MBA program has assisted in identifying specific and systemic causes of poor broadband. In addition to identifying where plan speeds sold to consumers do not align with technical capabilities, the breadth of MBA data collected has diagnosed other systemic issues such as outages, which are another key source of complaint from consumers and small businesses about their broadband services. For example, case study 7 discusses how the MBA program identified elevated outage rates on one RSP that prompted remedial action to the benefit of that RSP’s customers. This transparency of providing consumers and industry with results of actual broadband performance is a key catalyst for the various changes that services providers and NBN Co have undertaken in order to improve broadband performance. In this way, the MBA reports have proven to be a powerful advocacy tool for action to assist and drive better outcomes for impacted consumers and in turn contribute to the Government’s priority of improving NBN consumer experiences.

Flexibly providing timely insights

As outlined in this report, the MBA program successfully pivoted to provide valuable and timely insights into how broadband services and key productivity applications performed at a critical time of demand on the NBN network which has recently included the COVID-19 pandemic. This data informed and verified the efficacy of various policies and strategies to uphold performance as demand patterns changed, underlining the value and wide ranging use of empirical and independent broadband performance data. The MBA program was not initially designed for this more regular reporting or testing of critical services such as video conferencing, but has demonstrated that it can be a robust and flexible program that is responsive to the broader regulatory and market environment.

These successes and improvements to the functioning of the market have been achieved at modest cost to the industry in the context of the investments made by industry and money spent by consumers and businesses on broadband services each year. As reflected in various submissions, it is also unlikely that market-led programs would emerge to promote similar outcomes should the MBA program cease.

In its submission, NBN Co noted that the “…MBA Program benefits from consistent and regular reporting which allows the provision of comparable metrics over time. This allows industry participants and consumers to see the results of the improvements that NBN Co

69% of consumers considered the MBA program provided valuable and timely insights into how the NBN network and service providers have been able to support increased demand for broadband services during COVID-19

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8 57 per cent of Australian households with telecommunication services had an issue or fault in the final six months of 2019 – the most common were outages (44 per cent) and dropouts (37 per cent) – ACMA. Telco consumer experience – Australian adults and households: Phone and internet services, October 2020, page 48, https://www.acma.gov.au/sites/default/files/2020-10/Telco%20consumer%20experience_Australian%20adults%20and%20households.pdf, viewed 24 November 2020.
and RSPs have made to their services and how the NBN network is standing up to increasing demand, including in response to unexpected events such as COVID-19.”

Valuable to consumers

Our consultation has revealed that many stakeholders representing consumers and other users reliant on broadband services, both on fixed line NBN or other access technologies, support the renewal and expansion of the MBA program. For example, both the Regional, Rural and Remote Communications Coalition and the Australian Communications Consumer Action Network strongly agree that the MBA program is beneficial for industry, policymakers and consumers. These views are also shared by NBN Co, with all of these parties supporting an extension of the program to other networks, including in regional and rural areas, for those consumers to also benefit from the program.

Of our volunteers who responded to our survey, many indicated strong engagement with the program and support for the program’s aims, particularly in assisting them to understand their service and to select an appropriate broadband plan. A majority of survey respondents expressed a strong interest in expanding the program to other networks as they emerge to offer competing broadband services, such as 5G.

Consumers are able to access MBA data via the ACCC website, and results are widely reported across media and communications focused consumer tools. For example, consumer intermediary finder.com.au noted that ‘The ACCC’s latest report into NBN speeds suggests that most NBN users hit between 84% to 89% of their peak speeds, even during busy evening times’, and directed consumers using their service to find out more about broadband plans to the ACCC website for further information on RSP performance.9 Consumer engagement with the MBA program as measured through webpage visits also increased during the peak of COVID-19.10

Suggestions from submitters for program improvements

While the majority of stakeholders appear to support the aims and the program in principle, we note some submissions, principally from RSPs and their representatives, suggest a number of improvements to the program. RSPs have raised various issues with aspects of the program including its technical robustness, transparency, reporting approach and costing.

The accuracy of the MBA data we publish is important to maintain confidence in the program and ultimately to achieve its objectives. We appreciate that stakeholders have a strong interest in ensuring that the methodology, testing infrastructure and reporting processes keep pace with market and technological developments. We welcome that RSPs have a high level of engagement with the program and seek to drive improvements. We note, however that the motivations for some of these improvements may be contrary to the objectives of the MBA program which is to provide credible, accurate and independent information. Some of the approaches which RSPs suggest could advantage themselves over

Volunteers who indicated an improved ability / understanding due to the MBA program

<table>
<thead>
<tr>
<th></th>
<th>Somewhat or significantly improved</th>
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<tbody>
<tr>
<td>Improved understanding of download speeds</td>
<td>63%</td>
</tr>
<tr>
<td>Compare broadband services and products</td>
<td>60%</td>
</tr>
<tr>
<td>Broaden understanding of broadband services</td>
<td>60%</td>
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10 For further detail, please see Table 1: Engagement with ACCC MBA webpages between 2019 and 2020.
other RSPs in results or dampen the transparency provided by the program on certain elements of their service offerings.

From the start of the MBA program we have welcomed ongoing communication with stakeholders to listen and promptly investigate any concerns or suggestions. Where practicable we have implemented refinements to the program. We have only done this however for the purpose of strengthening the program and the credibility of the data to further support the achievement of its objectives.

Together with our current testing provider SamKnows, we have previously addressed a number of the issues raised, with more recent concerns being edge cases that have a statistically insignificant impact on overall MBA program testing results. We have worked to be responsive to market developments and introduced additional transparency. For example we published for the first time the test data for the MBA Quarterly Report 10 on data.gov.au. This is to assist RSPs to interrogate the quarterly data further and compare to their own measurements. We will do this with each report going forward so that RSPs and other stakeholders can review and use the data. Also to promote transparency we have provided all participating RSPs with the network details of the test server host (to inform their traffic transmission routes to the test server), as well as worked with integrated RSPs to exclude test measurements made while 4G back up connections are operating. We have responded to market changes and stakeholders by introducing additional metrics in our reporting, for example, we started reporting on outages, and more recently on video streaming services and video conferencing applications.

One longstanding concern from some RSPs about the MBA program is how download results are presented. That is, presenting against maximum plan speeds rather than RSPs’ advertised speeds and by including services that almost never reach their maximum plan speed (underperforming services). Some RSPs contend that RSP level results ought to be presented with these services excluded. While we have given these arguments thorough consideration, we consider that the objectives of the program are best promoted by retaining our current approaches.

Presenting results against maximum plan speeds encourages RSPs to aim to maximise the speeds available to consumers, particularly in the busy hours and make efficient investments to do so. Presenting solely against advertised busy hour speed claims could increase the incentive for RSPs to make weak speed claims in the knowledge that they are easily achievable.

Including underperforming services in our headline results focuses on the improvements that can be achieved by addressing this segment through improvements in the supply chain. RSPs can improve their results by reassigning customers to (usually less expensive) plans that align with the technical capabilities of their lines. Preferably, both RSPs and NBN Co can take remedial action to address the consumer segments who desire higher speed services but are unable to attain them by fixing the underlying technical issues.

We understand from submissions that increased transparency measures may assist in improving both the perception of the program and its utility to stakeholders. If extended, we will continue to consider any further changes that do not compromise the integrity of the program. We welcome the offers of assistance from submitters to work collaboratively to improve or expand the program.

While supportive of the MBA program, NBN Co suggested several ways the program could be improved such as expanding the program to include larger sample sizes, including fixed wireless services, the performance comparisons to advertised speeds rather than wholesale speed tiers and the inclusion of retail services delivered over non-NBN networks.
A number of submissions also raised the size of the MBA program volunteer base and panel cohorts, which are lower than figures forecast at the beginning of the program. We note however that this reflects the selective approach of admitting volunteers to capture a representative view of the market and preserve flexibility to grow new cohorts in response to market changes. We also note that our testing provider manages panels and will only publish panel data when confident of its accuracy, subject to panel size and other factors. This issue is discussed further in section 4.1.2.

Transparency supports broader regulatory aims

There is a suggestion in some submissions that the program may have fulfilled its need and that there are sufficient frameworks and alternative tools in place to support the outcomes achieved going forward in the absence of such a program, including the Australian Consumer Law, the ACCC’s speed claims industry guidance and Australian Communications and Media Authority (ACMA) regulations. Some stakeholders submit that other factors have played a more significant role in improvements in broadband services, such as NBN Co’s pricing changes. A number of submissions also assert that market based alternatives for comparing RSP speeds are available to consumers. This is discussed in further detail in section 5.2 below.

While there are other factors in play, the MBA program is an important part of the overall mosaic of regulation that exists in order to drive better outcomes for consumers. While the initial period of transition to the NBN is almost complete with migration to the NBN largely concluded, the review has shown that the objectives of the program remain an enduring priority for the sector as it continues to evolve.

Transparency and independent performance data will be needed for the continued achievement of the MBA program’s original objectives as well as to address emerging information asymmetry issues as new networks and services emerge. We consider that many of the submissions have not recognised that by giving transparency over network and RSP conduct in the market, the MBA program makes it much more likely that markets will operate in a competitive and efficient manner. We also remain of the view that the factors that some submissions point to as driving better outcomes, did not occur independent of the MBA but rather as a result of actual or impending MBA reporting. For example, NBN Co’s recent decision to increase the policing rates on its access services was made more likely by the MBA program, which had shown that this policing rate was set at a level that meant consumer online applications could never achieve the full plan speeds that had been marketed.11 This positive outcome is recognised by Telstra in its submission.

The MBA program has also contributed to a positive cultural shift within the industry, and we consider it is important that this is maintained. Key regulators across the world share the view that there is an ongoing need for broadband monitoring and reporting programs using deployed agents in the field, with many operating a similar model to the MBA program, adjusted for their own market structures.

The value of transparency of broadband markets and performance is recognised internationally, including by the OECD in its pending revision to the Recommendation on Broadband Connectivity.12 Principle III of the OECD draft revision to this Recommendation is for member countries to publish quality-of-service (QoS) data through periodic reporting, including on persisting network outages, to promote network improvements and inform end-user choice. This is a measure to ensure resilient, reliable, secure, and high-capacity

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networks. ACCC counterpart agencies which currently deliver established international broadband monitoring and reporting programs include:

- Ofcom, United Kingdom (commenced 2008)
- Federal Communications Commission, USA (commenced fixed line in 2010 and mobile internet in 2013)
- Commerce Commission, New Zealand (commenced 2018)
- Canada Radio-television and Telecommunications Commission, Canada (commenced 2015)
- Communications and Information Technology Commission, Saudi Arabia (commenced 2017)
- Office of the Communications Authority, Hong Kong (commenced 2014)

Despite the improving outcomes in the broadband market described in the Consultation paper and reflected in submissions, there remains an elevated level of consumer dissatisfaction as reflected in a number of indicators. The Roy Morgan Trust and Distrust Monitor found that the telecommunications industry averaged the highest level of net distrust of all the industries surveyed. The Department of Infrastructure, Transport, Regional Development and Communications recently observed that

“…relatively high complaint numbers, sustained levels of consumer dissatisfaction with telecommunications providers, and the prevalence of customer service complaints as the most complained about service to the TIO, suggests that not all telco providers are consistently delivering on their customers’ wants and expectations around choice and fairness. This detracts from the positive benefits that telecommunications are bringing to the community.”

A recent ACMA survey also notes that performance issues such as dropouts and poor speeds represent a key factor in consumers’ issues or complaints with their home broadband service. Of the 57 per cent of survey households who had experienced an issue or fault with their service, 44 per cent involved an outage, 37 per cent a dropout and 30 per cent reported speed issues.

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15 Ibid, figure 39.
Holding RSPs to account so they don’t overpromise and under-deliver

Starting in an environment of low trust between consumers and service providers, the MBA program has helped provide an independent view over how performance issues are being addressed and assisted consumers in identifying those RSPs that offer broadband plans that will meet their needs. In the absence of the MBA program, the disconnect between consumers and service providers is likely to grow as consumers may perceive RSPs as being less accountable.

The public reporting of MBA data at the RSP level encourages efficient use of the NBN, and investment by RSPs via NBN access charges so consumers can access high quality retail broadband.

The MBA program has strong reputational consequences, creating an incentive to induce RSPs to ensure they advertise what consumers can expect to receive. This is both reflected in RSPs using the results of the MBA program in their advertising and the observed trend of newly reported RSPs showing improved performance results in subsequent reports.

Expansion beyond fixed line services

There is a strong interest in extending the benefits of the MBA program to users of additional and alternative technologies and networks that many Australians rely on outside of metropolitan areas, including the NBN fixed wireless network. The COVID-19 pandemic has accelerated an already present shift to digital ways of working, learning and interacting; and businesses in rural areas are increasingly relying on internet based technology to remain competitive in the global marketplace. This has reinforced the need for all Australians to have access to reliable and high quality communications networks for digital inclusion and social and economic participation.

Similarly, Australian consumers and businesses are increasingly being offered services from non-NBN networks, both fixed and wireless (including 4G and 5G services). Extending broadband performance monitoring to additional and emerging access technologies can assist in encouraging competition between access technologies as well as retailers. This will help to ensure these services are delivered as expected and provide consumers with the necessary information to give them greater confidence to choose between competing services.

"There will be applications, many applications where 5G will be the better service, but there will be many where NBN will be better. I think overall this nation will do better off from having both."
These factors underline the continuing value of a broadband monitoring and reporting program such as the MBA program. The ACCC considers it prudent to continue the MBA program and explore how it can be augmented and modified to benefit wider cohorts of Australians, working closely with stakeholders to further improve the robustness and relevance of the data and market outcomes.

We do however note that a number of submitters identify challenges with accurately measuring the performance of wireless services compared to fixed line services, particularly in the absence of large reporting panels. While we accept these additional challenges, we consider that with assistance from stakeholders and taking a staged approach, reliable data can be collected and reported at the aggregate or network level for fixed wireless and non-NBN networks.

We note that despite perceived technical challenges, a number of stakeholders also strongly support an expansion of the MBA program to shed light on other broadband networks such as the provision of broadband to regional and rural Australians which includes NBN fixed wireless and satellite services. In addition, as set out in the consultation paper, we consider there is also strong case for greater transparency on the performance of 5G wireless networks as they emerge to compete with the NBN offering similar performance claims. In the absence of independent and empirical data, consumers may lack confidence to engage with these services and their competitive constrain on NBN may be diminished. On the other hand, under-provisioned 5G wireless services could cause a range of consumer issues.

The consultation has revealed that along with an extension to other networks, small and medium businesses may benefit from data and metrics relevant to the services and applications that they use. Advocacy groups in regional, rural and remote Australia have indicated a willingness to assist with the program where they can.

As Australia enters the post-COVID recovery phase, small and medium businesses will be increasingly reliant on broadband services to help them remain competitive participants in the domestic and global marketplace. These businesses will also be critical to lifting Australia’s economic output. Broadband services will need to be fit-for-purpose to support their business needs and an expanded MBA program will assist in showing where service provision is meeting the needs of these businesses and where opportunities for further improvements are required.

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16 This was the title of The Hon Paul Fletcher, as at July 2020 (Minister for Communications, Urban Infrastructure, Cities and the Arts at the time of publication).

2. Introduction

This report outlines the findings from the Australian Competition and Consumer Commission’s (ACCC) review of the effectiveness of the Measuring Broadband Australia (MBA) program. The report provides an overview of stakeholder views received as part of our consultation process. Broadly, the consultation process sought input on:

- the objectives and achievements of the current MBA program
- the ongoing requirement for the MBA program, and
- the appropriate scope of a renewed MBA program.

The ACCC acknowledges the valuable contributions that stakeholders, including retail service providers (RSPs), network operators and consumer bodies have made to our review process. This paper does not respond to specific submissions or points of contention that arose out of our consultation process, but rather represents the ACCC’s conclusions in consideration of the range of views we have been presented with and provides a summary of submissions received.

2.1. Report structure

The report structure reflects the Review of the Measuring Broadband Australia program, Consultation paper (Consultation Paper) shared with our reference panel in October 2020. The substantive content from the Consultation paper sets out the ACCC’s analysis and initial views in each section. A summary of submitters’ views is then provided followed by the ACCC’s views in response to submissions.
3. **Background**

The ACCC first publicly proposed a broadband performance monitoring and reporting program in 2013. The rationale of the program was to address a number of information gaps in the market for retail broadband services, with a view to improving the functioning of the market and promoting better consumer outcomes.

Following further consultation in 2014 and a successful pilot program in 2015 the Federal Government announced funding for the program in April 2017. In December 2017 SamKnows was announced as the successful tenderer to run testing services and supply data and analysis to the ACCC.

When agreeing to fund the four-year broadband monitoring and reporting program in April 2017, the Australian Government requested that a review of the operation of the program occur prior to the conclusion of the program in June 2021.

Consistent with this request, the ACCC commenced a review of the effectiveness of the MBA program among other matters by sharing the Consultation paper with a range of nominated stakeholders. A public survey of MBA volunteers and engaged consumers was also conducted via the ACCC’s website.

As requested by the Department of Infrastructure, Transport, Regional Development and Communications (DITRDC), this report of the consultation is to be provided to the DITRDC for consideration.

3.1. **Submissions received**

Ten public submissions were received from the following entities:

- Australian Communications Consumer Action Network (ACCAN)
- Aussie Broadband Limited (Aussie Broadband)
- Communications Alliance Limited (Communications Alliance)
- CHOICE
- The Internet Association of Australia (IAA)
- NBN Co
- Singtel Optus Pty Ltd (Optus)
- Regional, Rural and Remote Communications Coalition (RRRCC)
- Telstra Corporation Limited (Telstra)

MyRepublic Pty Ltd (MyRepublic) provided a confidential submission.

3.2. **Public Consumer survey**

845 consumers completed the MBA Review’s public survey on the ACCC’s website. The views expressed in the survey are discussed below. About 80 per cent of respondents were volunteers on the program. The survey was split into two sets of questions, the first set being for MBA volunteers specifically, and the second set being broader consumer oriented questions for all respondents.
4. Review of how the MBA program has operated and market outcomes observed

In this section the ACCC has described the effect that the MBA program has had on industry, consumers, policy makers and our work at the ACCC with reference to the four broad objectives of the program. We have outlined the change in behaviour we have observed in response to the ACCC’s integrated strategy key to which is the MBA program and how it has helped address concerns and issues affecting the functioning of the retail broadband market.

We have identified a number of broad topics for discussion that relate to the objectives and outcomes of the MBA program, and we have provided the ACCC view on these topics. Views from submissions are then discussed, followed by the ACCC’s view following consideration of those perspectives.

Summaries of stakeholder submissions can be located as follows:

- Views on the review of how the MBA program has operated and market outcomes observed can be found in section 4.6.
- Views on the ongoing requirement for the MBA program can found in section 5.2.
- Views on the scope of a future MBA program, if extended, can be found in section 5.6.

4.1. Objectives and achievements

4.1.1. Overview

The MBA monitoring program has provided consumers, industry and policy makers with independent, new and valuable insights on the performance and reliability of fixed line retail broadband services in Australia.

A substantial benefit of providing this independent empirical information on NBN network performance is that it has enabled the testing of anecdotal claims about broadband performance. MBA data has helped to demonstrate those areas where the NBN has performed to a high standard as well as identifying more precisely the particular aspects of service provision where there is room for further improvement. This has also been the case for RSPs with the MBA program data also assisting in demonstrating to consumers those areas where RSPs have been performing well and also the areas where there is opportunity for further improvements.

The MBA program through its regular reporting has also helped to demonstrate the benefits over time that additional investments in NBN infrastructure, service provision and networks by NBN Co and RSPs have had on consumers’ experiences. This has been evidenced by the flow on improvements that are observed in the MBA program data’s comparable metrics, over time. For example: the steady decline over time in the proportion of underperforming broadband services from around 14 per cent in May 2018 to 8.1 per cent in October 2020. Refer to chart 4.

The overall aim of the MBA program has been to:

- assist consumers when choosing a retail service provider,
- build public confidence in the speed claims that retailers have been making, and
- to encourage the adoption of service quality as a further product dimension over which network operators and RSPs compete.
The MBA program has been collecting and building a new dataset of information on the speed and quality of broadband services in real world conditions. The MBA program results have been aggregated and then reported for a range of access networks, RSPs and retail plans. The MBA program has been run independently of network operators and RSPs, to ensure its credence among consumers and industry.

The reported data has been regularly referenced publicly and has helped to provide transparency and accountability on the performance and quality of internet performance. This is particularly the case, given that most of this new dataset of information provided by the program had not been previously available, with policy makers, NBN Co, RSPs, consumers and advocacy groups now having equal access to a wide array of comparable time series analysis of broadband performance metrics. The program has also better informed the decisions of these stakeholders. This has also supported increased competition in retail markets and has been a catalyst in driving greater market efficiency and investment, as illustrated in case study 2.

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<tr>
<td>Provide consumers, industry and policy makers with robust, independent and comparable information on the performance of fixed line broadband services in Australia.</td>
<td>Facilitate performance-based competition between RSPs by publishing independent performance information.</td>
<td>Improve consumer outcomes by publishing performance information so as to inform their purchasing decisions.</td>
<td>Assist in detecting where real-world service performance is falling short of claims made by service providers as part of a broader strategy to promote compliance with the law.</td>
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4.1.2. Measures of success

The ACCC considers that the above objectives are being met through the program’s significant contribution to improving competition and consumer outcomes in broadband markets. In the following sections, we provide the ACCC views on how these objectives have and are continuing to be realised and outline the achievements of the MBA program to date.

The MBA program has provided all parties with easy access to information that is independent, credible and transparent. It has provided market participants with results that meet their information needs as well as challenge emerging market perspectives over the quality and performance of broadband services.

The program has also been able to establish a publicly recognisable and easily understandable system of measurements that report on broadband performance. This has helped to drive competitive outcomes in the market. It has also assisted in educating and informing consumers, rewarding RSPs for delivering services that consumers value, and informing policy decisions.

The program has:

- been delivered on time. The flexibility and adaptability of the program has allowed us to enhance the scope of reporting and produce additional metrics and themes for reports, and deliver these on time.
- achieved its objectives within budget, noting that this has been met despite the increase in the program’s reporting especially during COVID-19.
• been able to successfully maintain a long-term and consistent volunteer base. This has enabled comparative analysis of broadband performance over the duration of the program. It has also meant that we have been able to reserve remaining Whiteboxes to ensure that the program has continued to be flexible and still retain capacity to develop cohorts on emerging RSPs and new products (e.g. higher speed plans) offered in the evolving broadband market, which also reflects changing consumer preferences. We consider that these elements have enabled the ongoing success and relevance of the program to consumers, industry and policy makers.

In the initial forecasts we anticipated releasing around 4,000 Whiteboxes by the final year of the program. We have had over 10,000 volunteer requests to join the program, and have released over 2,600 Whiteboxes. While expressions of interest to become a volunteer have exceeded our expectations, we have carefully targeted our dispatches to ensure that we have a representative mix of RSPs, speed tiers, locations and technologies. We have also ensured that we retained an adequate pool of Whiteboxes to allow for the expansion of our reporting to cover, for example, emerging RSPs and new speed tier plans. While there has been some volunteers that decide to drop out of the program, we have benefited from attracting a core of volunteers that have continued to participate and support the program over extended periods which has reduced the number of Whiteboxes we have had to issue in order to maintain the size of active panellists.

Some stakeholders have pointed out that we have not yet issued the full complement of 4,000 Whiteboxes that we set as a cap when scoping the program, and suggest that we issue more Whiteboxes to grow panel sizes. In this regard, stakeholders have suggested growing each of the panels so that there are to at least 75 active volunteers. While we consider that there are still opportunities to expand the number of volunteers we note that doing so would to some extent increase program costs and/or reduce flexibility to adapt the program in other respects, for instance, to continue to admit further RSPs into the program, as other stakeholders have recommended.

It should be noted that before commencing the MBA program, there was some conjecture over the panel size that would be required to obtain statistically robust data with a sufficiently high degree of accuracy, given the potential for variability of broadband performance. A key indicator of variability is standard deviation, and now that we have access to MBA program data, and statistical properties such as standard deviation, it has become clearer that our panel sizes are right sized for each of the NBN access technologies that we have monitored. As such there would only be limited gains in deepening the existing volunteer panels, and this would come at the cost of reduced flexibility to test additional performance issues within the program’s overall budget.

4.1.3. Funding for the MBA program

When considering the benefits of the MBA program with reference to the costs to the sector, it is useful to consider it within the context of broader investments that have already been made and are planned for the NBN and other broadband networks seeking to offer similar services to consumers.

As noted by the Minister for Communications, Cyber Safety and the Arts, The Hon Paul Fletcher, NBN Co has recently announced a $4.5 billion network investment to increase access to ultra-fast broadband speeds for up to eight million Australians. The Minister noted that this will have significant short and long term positive impacts on the growth of the Australian economy. Furthermore, it is estimated that this investment will increase Australia’s GDP by $6.4 billion per annum by 2024.

18 The Honourable Paul Fletcher, Minister for Communications, Cyber Safety and the Arts, $4.5 billion NBN investment to bring ultra-fast broadband to millions of families and businesses and create 25,000 jobs - media release, 23 September
In 2018, we estimated that consumers spent over $4 billion per year on fixed line broadband services. In 2020, we estimate that this has increased to around $6.3 billion per year.\footnote{ACCC estimates.}

As described above, the MBA program has fulfilled an important role in ensuring the large investments already made in the NBN have delivered the performance and services promised. This additional wave of NBN investment, which is being complemented by private sector investment into 5G networks and other superfast broadband networks, will play a key role in Australia’s economic growth going forward. The ACCC considers that continuation of the MBA program can assist in ensuring that the benefits of these investments are being realised and fully exploited by consumers and businesses.

The now established MBA program has cost on average $1.7 million per year and has operated within budget.\footnote{Australian Communications and Media Authority (ACMA), Cost recovery implementation statement, Annual carrier licence chart 2018-19, p. 41, \url{https://www.acma.gov.au/cost-recovery-implementation-statement-cris}, viewed 30 September 2020. This excludes start-up and ongoing ACCC costs of administering the program.} This equates to less than 0.025 per cent of the estimated economic benefit expected to flow from the additional NBN investment in ultra-fast broadband alone, without considering the broader economic impacts provided by its contribution to efficiently functioning communications markets.\footnote{\$1.6m of the $6.4bn GDP increase forecast per annum is approximately 0.025 per cent.} A fully cost recovered program equated to 23 cents per annum to the cost of an NBN retail service in 2019-20, on the basis of there being around 7.4m NBN services in operation as at 30 June 2020.\footnote{ACCC, NBN Wholesale Market Indicators Report 30 June 2020, 13 August 2020, at \url{https://www.accc.gov.au/regulated-infrastructure/communications/national-broadband-network-nbn/nbn-wholesale-market-indicators-report/previous-reports}, viewed 30 November 2020.} We expect that a continuation of the MBA program as is would have a similar per annum cost going forward.

### 4.2. Objective #1: Providing information on the performance of fixed line broadband services

The MBA program has provided all parties with easy access to information that is independent, credible and transparent. It has provided market participants with data consistent with their information needs as well as tests market perspectives about the quality and performance of Australia’s broadband services.

The program has also been able to establish a comparable system of measurements that report on broadband performance. This has helped to drive competitive outcomes within the market. This has also assisted in educating and informing consumers, rewarding RSPs for delivering services that consumers value, and informing policy decisions. There are a variety of ways consumers and others access the MBA program results, such as through media and intermediaries (i.e. comparator services) as well as our website. Further discussion about the benefits of the MBA program and evidence for them is outlined in more detail in the following sections, with stakeholder submissions, case studies and supporting data provided where applicable.

#### 4.2.1. Transparency and consumers

There have been a number of important ACCC actions and initiatives that have complemented the MBA program aimed at improving broadband performance information available to consumers. Not only has the ACCC seen a positive shift in how the market advertises broadband plans, there have been improvements in how information is presented to consumers so that it is now easier to understand and compare plans. In addition to the

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MBA program, the components of the ACCC’s integrated strategy for improving competition and consumer outcomes in broadband markets have included:

- the ACCC’s Broadband speed claims industry guidance (Industry Guidance, discussed further at section 4.5.1.), which is designed to assist RSPs in how they advertise their retail broadband products with a particular focus on how to advertise download speeds.

- the ACCC accepted s.87B undertakings from eight RSPs in relation to speeds at which NBN customers with fibre to the note (FTTN) and fibre to the building (FTTB) connections could upload and download content online (i.e. speeds). Technical limitations on the customers’ FTTN or FTTB NBN connection had meant that they could not get the speeds that the RSPs had advertised. The s.87B undertakings have detailed the remedies the RSPs will provide to affected customers including refunds, moving speed plans, discounted speed plans, and exit from contracts without paying a fee. The undertakings have effect for a period of three years, and vary in start date from between November 2017 and March 2018.

- various other enforcement actions resulting in infringement notices, undertakings and litigation for misleading speed or performance claims made by Aussie Broadband, MyRepublic, Dodo and iPrimus.23

The additional transparency and reliability of information provided by the MBA program has helped to drive important benefits to consumers, complementing and strengthening other initiatives in the market as noted. Over the duration of the program, this has included:

- Improving consumers’ broadband literacy such as understanding the:
  - quality and performance of different types of broadband services; and
  - broadband services they already have and that they might need in the future.24

- Improving consumer engagement in the competitive process as:
  - product offering comparisons have been made easier to comprehend over time
  - there has been a decline in the pre-purchase product search costs (time and effort) and the associated transactional costs (switching impost); and
  - there is an enhanced ability to make better value for money decisions given needs and budget.

- Reducing the potential for consumer harm as the program has helped to improve consumers' abilities to check if their broadband service is delivering on the value that they had signed up for.

- Increasing access to consistently improving service quality and product offerings as RSPs compete and are indirectly held accountable by the program’s independent publicly available information.

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24 The impact on consumer broadband literacy was considered in our consultation survey, the results of which are discussed at section 4.7.7% of all respondents considered that the MBA information assists consumer purchasing decisions. Of the respondents who are volunteers in the MBA program, 63% noted somewhat or significantly improved understanding of download speeds, 57% for latency, and 60% noted somewhat or significantly improved understanding of broadband services.
Providing incentives for participants across the supply chain, including at the wholesale level where NBN Co's product and pricing structures have likely been positively influenced by the increased transparency and focus on the retail level outcomes (see case study 2).

These benefits are difficult to quantify, but are evidenced by how the market has changed since the commencement of the MBA program and the complementary initiatives discussed above. Broadband services now run faster with fewer disruptions as compared to the period before the MBA program, as shown later in charts 6 and 7. Consumers now have more confidence to purchase higher speed tier plans, which is suggestive of consumers’ increased understanding that they are more aware of what different plans can provide to them based on what they are paying for and they are confident to make this decision.

This is evidenced by the chart below, which shows that as at 30 June 2017 most NBN services in operation (SIOs) had a download data transfer rate of 12 Mbps or 25 Mbps. This has shifted dramatically as at 30 June 2020, where the majority of SIOs have a download data transfer rate of 50 Mbps. Over this time there has also been an increase in SIOs where the download data transfer rate exceeds 100 Mbps, one of the key factors for this shift is that consumers have matured in their understanding and awareness of these higher speed plans. This is reflected in the results of the consumer survey, where 79 per cent of all respondents said the MBA program provides useful information to assist consumers in their purchasing decisions. 56 per cent of all respondents found that the MBA program had given them greater confidence in engaging with broadband services and understanding the market.
The ACCC notes that providing transparency to consumers regarding the performance of different types of broadband services and different RSPs’ product offerings has been an important step to addressing the information asymmetry that has previously existed about network performance. This has also contributed to improving consumer confidence through being able to make more informed purchasing decisions.

Prior to the MBA program, there was limited publicly available comparable information about performance and other factors to assist consumers in making their NBN purchasing decisions. Historically, RSPs competed primarily on the basis of price, data quotas and ‘headline’ or maximum data rates and this was the only information available to consumers.
This had meant that consumers were at risk of making suboptimal and uninformed purchasing decisions.

The ACCC had been concerned about the detriment that could arise from this continued information asymmetry. In this way, the program has also indirectly increased consumer protections as RSPs’ performance claims that are public, are now being verified through the program, effecting their accountability to the public.

With the MBA program, consumers have been able to meaningfully compare service performance when considering their broadband options, which is further detailed in case study 1, below.

Case Study 1 – comparing performance of broadband plans

The MBA program currently covers nine RSPs: Aussie Broadband, Dodo and iPrimus, Exetel, iiNet, MyRepublic, Optus, Telstra, TPG and Vodafone. A tenth RSP, Superloop, will feature for the first time in MBA Quarterly Report 11.

In 2018-19, these RSPs represented at least 94 per cent of the retail market for fixed broadband services.  

An example of our consumer dashboard which presented key results for the nine RSPs reported on in MBA Quarterly Report 10:

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This information has been picked up by comparator websites\textsuperscript{27} and is available to consumers to access. The availability of such information enables consumers to readily compare the performance of these RSPs, reducing barriers to switching and thereby encouraging competition on performance.

The MBA program has provided robust reporting on broadband performance since its inception, and has subsequently been expanded to report on the performance of video streaming services, which the ACCC has been able to utilise to educate and inform consumers. This analysis has been particularly important to all stakeholders during the COVID-19 lockdown. This is because of the increasing demand for video streaming and video conferencing, with people working and learning from home and the greater scrutiny on the performance broadband services as a result.

The ACCC has actively tried to build consumer understanding of technical performance metrics around broadband performance and we have published guidance on our website to further assist in this process, including, for example, our guide to home broadband for consumers.

The MBA program is providing consumers with clear, reliable and independent information on broadband performance that is in line with what consumers want.

“…What they [consumers] care about is the speeds they get from a network speed test, whether Netflix is freezing and whether it holds up when they have multiple people at home working.”28 (Minister for Communications, Cyber Safety and the Arts, The Hon Paul Fletcher)

4.2.2. Transparency – RSPs and network operators

The MBA program has allowed RSPs to assert the relative quality of their services in comparison to other RSPs. The publication of performance information has helped to ensure that RSPs and the network operator (NBN Co) are accountable to consumers for the performance of their services.

It has also led to there being strong incentives for them to:

• compete in delivering quality broadband services;
• accurately represent their technical performance capabilities of the products they offer; and
• invest in operational improvements where necessary.

This in turn has led to RSPs being rewarded for achieving their advertised performance claims with end-user quality results being transparent to the consumer and the market.

While network operators play a key role in the availability of quality broadband services, this is also influenced by the commercial decisions made by RSPs (e.g. how much transit and backhaul transmission capacity to provision). The MBA program has helped to ensure that there is sufficient information in the market about the quality of broadband services, to assist industry in making efficient network investments, including purchase of Connectivity Virtual Circuit (CVC). An example of this is shown in case study 2 below.

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We have observed that average bandwidth congestion started trending down soon after the MBA program announcements, with significant decreases following the introduction of NBN Co’s ‘Focus on 50’ promotion which resulted in some pricing discounts made by NBN Co.²⁹

Chart 2: Average network bandwidth congestion February 2017 to January 2020

The downward trend indicates that the bandwidth available to NBN end-users has substantially increased since early 2017. The change in NBN Co’s wholesale offerings and pricing discounts was timed soon after the MBA program and testing provider were announced. This change in the wholesale offer was not just about addressing congestion and ensuring that RSPs were providing the quality of service that they represented, but also to promote efficiency. The transparency over the performance of broadband services provided by the MBA program has promoted this efficient result.

While the MBA program has shown that NBN fixed line broadband services have been broadly achieving their performance claims and have generally supported consumers’ use of broadband services, it has also been an effective tool in identifying deficiencies impacting certain consumer segments.

This has particularly been the case for some NBN services that the MBA results have helped identify as underperforming relative to the speed of the retail product purchased by the end-user. These performance issues may relate to technical limitations in the NBN access network, which have been predominantly associated with the FTTN access technology. The chart below shows the percentage of maximum plan download speed achieved on FTTN

access technology in comparison to fibre to the premises (FTTP), fibre to the curb (FTTC) and Hybrid Fibre Co-Axial (HFC) network technologies.

**Chart 3: Average hourly download speed by access technology (including underperforming NBN services)**

![Average hourly download speed by access technology](image)

Source: MBA program.

Note: Data is shown for all hours and all services.

The ACCC’s media releases issued with each MBA Quarterly Report have repeatedly encouraged NBN Co and RSPs to take steps to address underperforming services. We have also urged consumers to contact their RSPs if they are not getting the speeds they have been paying for.

In response, RSPs have been using data provided to them by NBN Co to ensure they offer a plan speed that can be attained. Our MBA Quarterly Reports have also prompted RSPs to assist consumers to resolve in-home wiring issues. NBN Co has also been undertaking initiatives to remediate individual or systemic performance issues.

The MBA reports have provided direct visibility over NBN network level performance, using splits such as access technology in chart 3. The upward trend in chart 3 is encouraging and reveals which elements of the network are falling short, thereby helping to promote investment of a remedial nature. In September 2020, NBN Co announced additional investment in FTTN service improvements.

The ACCC has observed that the proportion of underperforming services in our sample size have been steadily declining over the past two years from almost 14 per cent in May 2018 to around 8.1 per cent in the October 2020 test period (see chart 4). This is likely to have

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31 We note that our MBA volunteers identity is kept confidential and therefore not afforded special treatment in remedying issues with their services.
been achieved through RSPs and NBN Co remediating the technical causes of poor performance (such as malfunctioning modems and in-home wiring issues) and we have observed material improvements in the maximum attainable speed for many monitored services over the duration of the program as a result. For other services, we have encouraged RSPs to reassign consumers to plans that more closely align with the maximum speed attainable on their line. To the extent that this is reflected across all NBN consumers, represents a significant improvement in consumer outcomes, whereby more consumers are getting the speeds they are paying for and are having an improved NBN consumer experience, which is a continuing priority for Government.

**Case Study 3 – MBA program as a consumer and policy advocacy tool**

The MBA program reports are widely followed by industry and broader media, making it a valuable advocacy tool. This has provided a strong impetus for action to address the issue of underperforming FTTN services.

For example, following MBA report 8 in February 2020, the *Guardian* and the *Australian* newspapers reported on the relatively poor performance of some FTTN services, elevating the issue among stakeholders as well as consumers more broadly.

MBA program data on the extent and impact of underperforming services has reinforced consumer complaints about poor broadband speeds and informed the ACCC’s own NBN Wholesale Service Standards Inquiry.

In November 2020, the ACCC published its final report that set out its findings in respect to our public inquiries into NBN entry level pricing and NBN wholesale service standards. We consider that the new access arrangements included in NBN Co’s wholesale broadband agreement (WBA4) address the matters of concern that have arisen in both inquiries. We have therefore decided not to issue an access determination, but rather will closely monitor the implementation of the new access arrangements under WBA4.

The charts below illustrate that since the start of the MBA program, the percentage of underperforming services in the volunteer pool has steadily decreased, suggesting that there has been some investment of a remedial nature to improve services.
4.2.3. Transparency and policy makers

The data collected by the MBA program has also supported policy makers by demonstrating the extent to which high quality broadband services have benefited consumers and industry.
from the significant capital investment in the NBN. The policy intent behind the NBN was to improve the availability and performance of broadband services in Australia.

Prior to the introduction of the MBA program, there was no independent evidence to demonstrate how the NBN network was performing, and only anecdotal accounts of the performance of individuals.

"The government has recognised there is a lot of 'he said, she said' debates going on out there that [aren't] not doing consumers any good, not doing the telco sector any good and we have just got to get clarity on what is causing these problems," Mr Sims said. "It is affecting the whole NBN rollout."32

We have seen that over time, that there has been an increase in public information available in addition to the MBA program. For example NBN Co has increased its reporting on its minutes of congestion (at a network level) and RSPs are now providing more reliable indicators of the speeds that consumers should typically expect to receive on their NBN plans. Importantly, the MBA program provides an independent means by which to verify this information in a manner that is accessible to consumers, as well as providing additional performance information on services supplied over the NBN.

In this way the MBA program has been key to demonstrating to policy makers the return on investment in terms of the benefits to consumers.

The MBA testing methodology has enabled the ACCC to collect data and publish reports on real-life service performance, including by geography, NBN access technology, RSP and speed tier attributes. The MBA program covers the vast majority of RSPs in the market (at least 94 per cent of the retail market for fixed broadband services33) and thereby provides a robust view of how fixed line broadband services are performing across the whole market.

This has also provided Government with evidence-based information on the performance of the NBN which it has used to respond to media and public queries on how it is delivering on its NBN objectives.

“The ACCC’s Measuring Broadband Australia program provides Australian consumers with accurate and independent information about broadband speeds. The fourth report of the program was released in February 2019 and for the first time, this latest report includes a breakdown of speed results by NBN technology. The report confirms that in 65% of tests undertaken, download speeds of above 90% of maximum plan speeds continue to be achieved across all technologies including FTTN.

The report also shows that broadband speeds did not slow significantly during busy evening hours (7-11pm) with average speeds reducing by less than two percentage points compared with the average."34

4.2.4. Flexibility and adaptability of the MBA program during COVID-19

During the COVID-19 pandemic, the MBA program data has provided valuable insights into how broadband services performed at a critical time of unprecedented demand on the NBN network.

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On 21 May 2020 the ACCC released the first MBA Monthly Key Indicators Report that provided daily network level download speed measurements for each month from February to April 2020. This report presented results that covered the period from the onset of the pandemic in Australia. The ACCC’s report had provided stakeholders with credible market data that was able to show the efficacy at a network level of the various mitigation strategies that had been put in place by NBN Co and other service providers in mid-March 2020. This helped to boost public confidence in the broadband network especially during this critical time, resulting from the effects of the pandemic.

The MBA Monthly Key Indicators Report complements the in-depth MBA Quarterly Reports by tracking network performance each day of the quarter. This report made further use of the data collected by the program to provide transparency and confidence to the broadband market at a time of heightened uncertainty and unprecedented demand as a result of the pandemic.

The ACCC also used MBA data to provide timely information on a weekly basis to policy makers on the performance of the NBN network during the height of the pandemic.

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This information has been important in influencing policy decisions and helped to maintain confidence that the NBN network was able to support households and businesses as network demand spiked.

We note that information about NBN performance and congestion became a key concern as Australians shifted to working and schooling from home. This information will likely remain important for consumers and businesses for the duration of the pandemic as they navigate the uncertainties related to COVID-19. Indeed, the level of demand on the NBN network remains unprecedented. Pre-COVID-19 (prior March 2020), the peak download throughput on the NBN was around 11 terabits per second (Tbps).\(^{37}\) During the height of the COVID-19 pandemic in Australia, NBN Co reported a record download throughput peak of 16.2 Tbps on 5 August 2020.\(^{38}\)

**Case Study 4 – COVID-19**

On 18 March 2020 NBN Co commenced offering 40 per cent additional CVC at no extra charge to RSPs in response to spikes in traffic volumes caused by the COVID-19 pandemic associated social distancing measures.

By using real-time measurements from the MBA program’s dashboard, the ACCC was able to provide industry with timely key updates on the performance of NBN services and the efficacy of mitigation strategies and other industry responses that were put in place by service providers, including video streaming service providers. In particular, the ACCC used this data to provide daily reports to ACCC Commissioners and shared weekly with the DITRDC and members of the NBN Special Working Group relevant broadband performance information reports to also assist in guiding technical and policy responses.

Based on this MBA program data, ACCC Chair Rod Sims was able to provide assurances to industry, consumers and businesses via his virtual Communications Day Summit 2020 address on 6 April 2020 where he stated that NBN speeds were holding up, in large part because of NBN Co’s move to provide additional capacity to RSPs.

With the pandemic leading to performance information becoming of great topical interest to government, industry and consumers alike, the ACCC released a new limited series of Critical Services Reports with the support of our testing provider SamKnows. The reports, using MBA program data, aim to show how well consumers’ NBN services are supporting their use of key streaming and productivity applications critical to online education, business, entertainment, social media and virtual communications.


The ACCC considers transparency and independent data are important to assess the effectiveness of industry and policy responses in supporting telecommunications networks. It also demonstrates the adaptability of the MBA program and ability for us to pivot and consider areas of particular interest or concern.

4.3. Objective #2: facilitating performance based competition

The MBA program promotes competition by enabling RSPs to better understand the offerings of competitors. The cost/performance trade-off has also become more visible to consumers, who are now better informed to consider which services best suit their needs and budget. This in turn has encouraged RSPs to manage their networks efficiently so as to meet consumer expectations.

The MBA program has allowed RSPs to assess the quality of their services relative to other RSPs. It has increased incentives for industry to compete on performance, and to demonstrate how their services are delivering returns on investment. While some RSPs conduct real-world testing on a proportion of their end-users, generally this information is not publicly released and therefore not available for comparison between RSPs.

Independent and reliable comparative data has provided a sound basis on which RSPs can market the quality of their services and importantly, provides transparency over whether their performance meets their advertising claims. This has been reflected in the use of MBA results in advertising campaigns by RSPs. This is further discussed at Case Study 5.

Case Study 5 – use of MBA results in RSP advertising

RSPs have engaged significantly with the MBA results, and we have seen various MBA result metrics used in advertising. Some RSPs who have used MBA results in their marketing campaigns or public relations content include Optus, iiNet, Telstra and TPG.

We consider that this has been a positive change in market behaviour as there has been increased transparency of information and competition based on results, as evidenced by RSPs moving to advertising on the basis of MBA results and coming to rely on the data provided to assure consumers of their performance reliability and quality of service.

From a competition perspective, the robust testing and reporting of results through the MBA gives RSPs visibility over their own real-world service performance and that of other RSPs. This enables RSPs to compare their performance outcomes against rivals and RSPs who invest heavily in service performance may be appropriately rewarded.

4.4. Objective #3: Improving consumer outcomes

A key benefit of the MBA program has been encouraging retailers to compete on performance as well as price and data inclusions.

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Since the commencement of the program, we have observed an improvement in the performance of monitored retail broadband services. This is illustrated in the following charts, which shows average download performance as a percentage of maximum plan speeds during all hours. The dotted line shows a broadly indicative upward trend for the RSPs’ average performance since the commencement of the MBA program.

**Chart 6: Average hourly download speed by RSP (including underperforming NBN services)**

![Chart 6: Average hourly download speed by RSP (including underperforming NBN services)](chart6.png)

Source: MBA program.

Note: Data is shown for all hours and for all services.
The charts show some significant improvements by RSPs such as MyRepublic and Optus since the start of the MBA program. The ACCC considers that such improvements illustrate how increasing competitive pressure from the MBA program’s transparency of service quality, along with other initiatives led by the ACCC, other regulators and industry, has helped drive increased overall performance standards.

The ACCC has also observed a considerable increase in the relative performance of RSPs from the first time that they have been reported on and their performance in subsequent reports. For example, Exetel and Dodo/iPrimus, while lower when first included in report 4, subsequently caught up with other RSPs in later reports.

There is a significant uplift in results for the October 2020 test period. The primary driver for this uplift is the measures introduced by NBN Co in response to the increased demand due to COVID-19 to address the changes in usage patterns of online applications at this time.

NBN Co provisioned more CVC (connectivity virtual circuit) capacity for RSPs. This additional 40 per cent capacity was available to RSPs during the October test period, as reflected in charts 6 and 7 above.

Another reason behind the uplift was NBN Co’s decision to over-provision the download component of some NBN speed tiers by around 10 – 15 per cent where possible. This was being implemented over the period between June and August 2020, and was not specifically in response to COVID-19.

The MBA program has provided visibility over COVID-19 measures and their impact on NBN network performance. The performance of the NBN has been vital to Australia during COVID-19:
“The Government’s investment in this critical infrastructure has proven more important than ever. COVID-19 presents extremely difficult financial and economic challenges for many and access to affordable and reliable broadband through the NBN has been vital.” (The Hon Paul Fletcher, Minister for Communications, Cyber Safety and the Arts)44

Prior to the MBA program, RSPs and network operators did not face substantial pressure to ensure that their networks delivered the performance that they were capable of or the performance that they represented to the market.

The MBA program not only reports on download and upload speeds, but other metrics of increasing relevance to certain consumers such as latency and packet loss. MBA results are also placed in consumer friendly contexts to further assist consumers. For example, MBA reports 9 and 10 provide information on the required NBN speed tier for different numbers and qualities of video streaming. There is growing demand for high-speed applications such as video streaming, and an RSP’s demonstrated capacity to deliver these services is relevant to consumer decision-making and also managing consumer expectations and complaints.

Case Study 6 – reduction in consumer complaints

The government, ACCC and the ACMA have had a strong focus on addressing NBN migration issues, which is likely to have driven a reduction in complaints about NBN service quality.

In addition to the MBA program, our broadband speed claims guidance became progressively adopted from late 2017 and in 2018 the ACMA introduced regulation to assist consumer access to information to guide their NBN speed tier selection.45

While the ACCC is unable to directly measure the benefits to consumers that flow from the transparency of RSP performance as a result of the MBA program, complaints made to the Telecommunications Industry Ombudsman (TIO) may be a reasonable proxy since increased transparency will likely result in RSPs being held made more accountable and deliver on their performance claims.

The table below outlines TIO complaints that relate to NBN service quality (2018-19 and 2017-18), compared with complaints in 2016-17 about services delivered over the NBN.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of complaints</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19</td>
<td>23,36246</td>
</tr>
<tr>
<td>2017-18</td>
<td>27,00847</td>
</tr>
<tr>
<td>2016-17</td>
<td>27,19548</td>
</tr>
</tbody>
</table>

Over this period complaints to the TIO on NBN service quality have fallen by 14 percent while the number of NBN services in operation have increased by 46 percent.49 In 2019-20, this trend appears to have continued, with a significant drop of 21 per cent in speed related complaints to the TIO in 2019-20 compared with 2018-19.50

The downward trend in complaints suggests that improved information and support available to consumers and promotion of competition among RSPs has positively supported consumer’s service quality expectations.

We have seen considerable engagement with the ACCC’s webpages (both directly and through media) that have hosted the MBA reports as shown in table 1, and this has increased during the COVID-19 period. We consider this measure is also an indicator of consumer engagement with the MBA program, and along with the decline in TIO complaints,

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shows that the MBA program has assisted in addressing the information asymmetry and performance issues that contributed to a relatively elevated level of consumer dissatisfaction prior to the start of the program.

Table 1: Engagement with ACCC MBA webpages between 2019 and 2020

<table>
<thead>
<tr>
<th>ACCC webpage</th>
<th>Hits from 1 January 2020 – 1 September 2020</th>
<th>Hits from 1 January 2019 – 31 December 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring Broadband Australia project page</td>
<td>4,717</td>
<td>5,255</td>
</tr>
<tr>
<td>Broadband performance data dashboard</td>
<td>25,977</td>
<td>29,285</td>
</tr>
</tbody>
</table>

Case Study 7 – improved outage results

An example of how the MBA program has provided enhanced visibility to both consumers and industry and has led to improved consumer outcomes and improved service quality and performance is the program’s identification of a relatively high number of service outages on Optus services in MBA Quarterly Report 5.

Following investigation prompted by the MBA results, Optus discovered that the high outage rates were due to a technical issues with its modems. Optus then distributed a firmware update to its modems to remedy the issue for its consumers. Subsequent tests observed Optus’s outage rates returned to levels comparable with other RSPs.

This has shown that the MBA program has also performed a diagnostic function in revealing whether real-world service performance is falling short of consumer expectations, thereby promoting investment of a remedial nature.


The observations above suggest to us that the greater information available to consumers through the MBA program has increased the level of RSP engagement, thereby supporting competition in the broadband market, which has resulted in overall improvement in the performance of broadband services.

4.5. Objective #4: Assessing reasonableness of speed claims

The MBA program has assisted the ACCC in carrying out its compliance and regulatory functions. Through the pilot program and other market enquiries prior to the commencement of the MBA program, we identified that there was a noticeable trend in deteriorating broadband performance during peak periods, with some RSPs doing better than others, and that some consumers were experiencing poor service performance.

4.5.1. An important part of an integrated strategy

The MBA program has complemented other ACCC actions focused on consumer issues in the provision of broadband services. These have included:

- the publication of the Broadband speed claims industry guidance (Industry Guidance) in 2017, (updated in 2019 and 2020); and
- our role in promoting compliance with and enforcement of the Australian Consumer Law (ACL) which is contained in Schedule 2 of the Competition and Consumer Act 2010 (Cth).

Together, these form part of an integrated strategy that has supported our commitment to truth in advertising relating to broadband speeds.

The ACCC’s Industry Guidance is a best practice guide for RSPs on how to advertise broadband services and includes a suggested methodology for measuring typical busy period speeds across a speed plan. Following the release of this Industry Guidance, it has become common practice in Australia for RSPs to advertise broadband speeds by reference to a ‘typical busy period speed’. This is a demonstrable shift in industry practice, since...
previously RSPs largely advertised speeds in terms of a maximum attainable speed using ‘up to’ speed claims. Using data through the MBA program, we have been able to assess whether RSPs are delivering the performance that they advertise.

Given this reasonable adoption of the speed claims guidance by RSPs and a good level of engagement with the MBA program, consumers have also been beneficiaries, noting that these benefits having not been limited just to those consumers that have swapped service providers. Even those consumers who have remained with their current provider have benefited from speeds that more closely match the expectations that they formed when making their purchase decisions.

4.5.2. Use of MBA program in our compliance and enforcement role

The ACL is underpinned by the principle that consumers should receive what was represented to them and what they paid for, and that suppliers are responsible for the delivery of the advertised service. The MBA program has assisted in keeping RSPs accountable to their performance claims as we are able to test anecdotal performance claims against an objective, real-world data set, to then monitor whether consumer expectations are likely to be met and whether RSPs are competing fairly.

The MBA program has therefore served as a mechanism to alert the ACCC to potential misleading and deceptive conduct issues, for example by indicating whether an RSP has been consistently not delivering advertised speeds which has the potential for consumer harm. The MBA reports benchmark the results of RSPs against their busy hours advertised speed claims to highlight whether these claims will then need to be reviewed.

The MBA data has been utilised by the ACCC on a number of occasions in seeking information from RSPs in respect to their advertised broadband speed and performance claims which we have considered from an ACL context. Without the MBA program data, the ability to monitor the reasonableness of speed claims would be materially weakened. Refer to Case Study 8.

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**Case Study 8 – ‘Congestion-free’ claims removed from Aussie Broadband’s NBN advertising**

The data and insights that are available from the MBA program have assisted the ACCC in its compliance and enforcement functions. For example, in 2018 we were concerned that Aussie Broadband claimed that it offered “congestion-free NBN™” and a “congestion-free network”.53

Aussie Broadband made these statements widely in its advertising, including throughout its website, Facebook posts and advertisements, targeted emails and direct mail-out letters.

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We knew from our MBA data that all RSPs in the program experienced congestion from time to time. We raised our ACL concerns with Aussie Broadband and it subsequently removed the statements of concern.

The ACCC has been able to use the MBA data to monitor levels of compliance with the ACL in the context of RSPs making claims about broadband quality. On 23 June 2020 the ACCC instituted Federal Court proceedings against Dodo Services Pty Ltd (Dodo) and Primus Telecommunications Services Pty Ltd (iPrimus), both owned by Vocus Group (Vocus), alleging they made false or misleading claims about the NBN broadband speeds their customers could achieve during busy evening hours. Since February 2019 MBA has shown Dodo and iPrimus’ broadband speeds have consistently performed towards the lower end of the nine NBN providers measured and reported on.54

The ACCC considers that overall the usefulness to consumers and veracity of performance claims in the market, particularly in relation to broadband quality, has improved since the introduction of the MBA program.

4.6. Summary

Overall, the ACCC considers that the achievements of the MBA program include:

- Being able to meaningfully report on the performance of fixed line broadband services in Australia based on independent and robust testing results.
- Improved consumer preparedness to engage with higher speed broadband services, as was illustrated in chart 1.
- Making greater information available to consumers on broadband performance, which has increased the level of competition between RSPs in relation to broadband quality.
- Observed overall improvement in the quality of broadband services, and good levels of compliance with the ACL in terms of RSPs living up to their performance claims.
- RSPs having had considerable engagement with the MBA results, for example RSPs have:
  - requested access to the Whitebox summary data for deeper examination, which we have released on data.gov.au starting with MBA Quarterly Report 10
  - approached us to assist in promoting the program to their customers with a view to attracting a sufficient panel to be included in the reports

- used the results in their advertisements or public relations content
- provided feedback on new metrics, methodological or presentation changes
- requested assistance to understand factors behind their performance.

- Observed decrease in consumer complaints on broadband service performance suggests consumer satisfaction with broadband service performance.
- We have been able to use MBA data to carry out our compliance and regulatory functions.

4.7. Stakeholder submissions

Consumers and volunteers

Our public survey reveals that MBA volunteers strongly engage with the program and support its objectives, with around 97 per cent indicating that they wanted to remain in the program. Almost 85 per cent had been a volunteer for at least one year, and the key motivation for joining the program was to help assist in collecting independent performance information to assist consumers more generally. A large number also joined to obtain more information about their own home broadband performance.

MBA volunteers have indicated that they engage often with the program, with 90 per cent regularly reading their monthly report card and over 80 per cent logging into the SamKnows platform to see their performance in real-time. The high usage of these outputs demonstrates that volunteers have benefited from the MBA program by having access to and visibility over performance of their own service.

Highlights from our public survey from our MBA volunteers

<table>
<thead>
<tr>
<th>Time as a volunteer</th>
<th>Want to continue as volunteers</th>
<th>Our volunteers use their broadband service for</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than two years</td>
<td>97%</td>
<td>96%</td>
</tr>
<tr>
<td>One to two years</td>
<td>45%</td>
<td>54%</td>
</tr>
<tr>
<td>Less than a year</td>
<td>15%</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>39%</td>
<td>17%</td>
</tr>
</tbody>
</table>

What MBA outputs and information volunteers have used

<table>
<thead>
<tr>
<th>What MBA outputs and information volunteered</th>
<th>Home use</th>
<th>Working from home</th>
<th>Education</th>
<th>Run a business from home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read the monthly report card</td>
<td>90%</td>
<td>83%</td>
<td>41%</td>
<td>31%</td>
</tr>
<tr>
<td>Logged in to SamKnows One</td>
<td>10%</td>
<td>8%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Viewed the ACCC MBA reports</td>
<td>10%</td>
<td>8%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>ACCC MBA dashboard</td>
<td>10%</td>
<td>8%</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Used the information for research purposes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Our volunteer's main motivation for joining the MBA program

<table>
<thead>
<tr>
<th>Our volunteer's main motivation</th>
<th>Home use</th>
<th>Working from home</th>
<th>Education</th>
<th>Run a business from home</th>
</tr>
</thead>
<tbody>
<tr>
<td>To assist in collecting and publishing independent information that could help consumers more generally</td>
<td>86%</td>
<td>71%</td>
<td>37%</td>
<td>3%</td>
</tr>
<tr>
<td>To obtain more information about their home broadband performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To confirm a suspected performance issue with their service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Some volunteers indicated the following motivations for joining the MBA program:

**Because I know my service is not capable of the minimum speeds I was guaranteed**

*I had initial problems after switching to NBN, so I was after something to 'keep them honest'*

**Previous ISP was providing non-functional service and keep blaming us until we proved it using SamKnows**

*To hold the provider to account. Advertised speeds were not met*

**To collect data to show that FTTN is not fit for purpose and mostly underperforms**

*As proof with previous provider that there were issues with line*

**We were experiencing constant low speeds and outages with NBN and our home phones**

*To be able to provide easily verifiable data on my network performance, and how that related to NBN HFC generally*

**Sort out the differences between ISP and NBN, each of which were constantly blaming each other for performance issues at the time**

These free text responses highlight consumer frustration with broadband services, and the key role that the MBA program provides in bringing performance issues to the attention of RSPs and NBN Co. It also further supports the Government’s intentions for funding the MBA program as an initiative to assist in improving NBN consumer experiences. These responses help to also demonstrate the considerable benefit to volunteers whose knowledge of the performance of their broadband service can be enhanced by access to their performance information. The survey also outlines the importance of the MBA program in providing reliable and independent information on the performance of broadband services and providing an evidence base for Government and key stakeholders to address anecdotal claims of poor performance, which was harder to do prior to the introduction of the program. In addition, with the absence of this data, consumers may also have trouble in determining whether perceived poor performance is due to their RSP or their own equipment, and thereby have trouble having the issue remediated. The free text responses also highlight a key goal of the MBA program, which is to ensure that RSPs deliver on the performance claims that they advertise.

Results from our consumer survey further reveal that the program has had a positive impact on volunteers understanding of broadband services, including their ability to engage with the market. For example around two-thirds of respondents agreed that the program has both improved their understanding of download speeds and ability to compare services and products. Around half responded that the program had improved their understanding of key metrics such as latency and streaming services. A significant proportion have used the MBA data to query their RSP about the performance of their service and resolve issues.
More broadly, a vast majority of consumers agreed that the program has kept RSPs accountable to their performance claims. A majority of respondents have also agreed that the program has helped to provide useful information to consumers to assist their purchasing decisions and generally improved competition between service providers. This shows how the MBA program is viewed by consumers as ensuring that RSPs and network operators are accountable for the performance of their services. It also shows the usefulness of the MBA program information to consumers to make confident purchasing decisions, and indicates it has helped to avoid poor purchasing decision and reduce consumer detriment (e.g. ensuring better value for money decisions, efficient use of decision-making time and effort).

Over two-thirds of respondents agree that the MBA program has provided valuable and timely insights into how the NBN network and service providers have been able to support consumers during the COVID-19 pandemic.
**Consumer advocates**

Consumer advocates such as the ACCAN, CHOICE and the RRRCC support the view that the program has achieved its objectives as described in the Consultation paper (and above). CHOICE further notes that this is reflected in declining underperforming services and complaints. CHOICE also states that its own broadband monitoring program, Honesty Box has been discontinued, meaning that the MBA program is the only source of independent information to keep RSPs accountable.

ACCAN observe that the MBA program has promoted accurate performance representations and motivated investment in operational improvements and assisted in addressing systemic and individual performance issues. ACCAN further notes this has been reflected in the declining proportion of underperforming services and the decline in complaints about speed issues.

This observation is supported by recent data from the ACMA. The [Telco complaints-handling performance: 2019–20 annual report](https://www.acma.gov.au/telco-complaints-handling-performance-2019-20-annual-report#:~:text=Accessible%20data%20files,-Key%20findings,77%20complaints%20per%2010%2C000%20services) notes that complaints reported by telecommunications service providers are down by 17.5% from last year and complaints per 10,000 services decreased by 18.9% to 77 complaints per 10,000 services. Complaints about speed have fallen from 9.4 per cent of all NBN broadband complaints in September 2018 to 5.9 per cent in June 2020, as shown in the chart below. Although there have been declines in the complaints reported by telecommunications service providers there still remains an elevated level of consumer dissatisfaction in this industry. The [Roy Morgan Trust and Distrust Monitor](https://www.acma.gov.au/telco-complaints-handling-performance-2019-20-annual-report#:~:text=Accessible%20data%20files,-Key%20findings,77%20complaints%20per%2010%2C000%20services) found that the telecommunications industry averaged the highest level of net distrust of all the industries surveyed. Given continuously evolving broadband markets (e.g. new speed plans and introduction of 5G) and with it the greater likelihood of a re-emergence of information asymmetries, it could be expected that distrust in this market is likely to increase.

**Chart 9: ACMA Telco complaints-handling performance: Quarterly NBN broadband complaints by complaint category**

![Chart showing quarterly NBN broadband complaints by complaint category](https://www.acma.gov.au/telco-complaints-handling-performance-2019-20-annual-report#:~:text=Accessible%20data%20files,-Key%20findings,77%20complaints%20per%2010%2C000%20services)
**RSPs and Communications Alliance**

While Aussie Broadband agree with ACCC’s characterisation of the program’s achievements, Communications Alliance and other RSPs suggest that other factors play a more important role in improvements in broadband markets. For example, Optus and Communications Alliance note changes in NBN’s wholesale pricing, the ACCC’s speed claims industry guidance and enforcement actions as drivers of these outcomes. Communications Alliance note that many of the improvements occurred before the MBA program commenced, suggesting other factors were the cause. Communications Alliance also question whether there is evidence of sufficient consumer awareness of the MBA program to support claims that it has assisted consumers’ engagement with the broadband market. Optus also expressed that it does not support the evidence that the MBA program has contributed to declining underperforming FTTN services and attributes this to NBN Co and RSP actions. Optus does agree, however, “…that an independent testing regime managed by the ACCC is an important part of a three-pronged approach to compliance and enforcement”, but that the MBA should reflect the rules under the ACL and the speed claims industry guidance. Telstra submits that the program does not contribute to the achievements of objectives 1, 2 and 3. Telstra considers that factors outside of the RSP’s control are not controlled for and results are skewed by factors such as the number of underperforming services. However, Telstra submit that the MBA program highlighted the impact of protocol overheads which resulted in NBN Co giving consumers an additional 15 per cent of bandwidth so that 100 per cent of their plan speed could be delivered.

**NBN Co**

NBN Co agree that the MBA program has been effective and met its objectives such as bringing about changes to how industry advertises retail broadband services and increasing consumer awareness and understanding of the technical performance capability of superfast broadband networks and services. They note, however, that the program operates as part of a wider suite of activity in promoting these objectives. NBN Co also suggest a number of adjustments and improvements to further increase the program’s future effectiveness.

### 4.8. ACCC view

As expressed in our consultation paper, the ACCC considers that the MBA program has been one of a number of complementary initiatives and policies that have helped to improve outcomes in the NBN fixed line market. These outcomes include, for example, improved speeds, reduced congestion, a downward trend in the proportion of underperforming FTTN services and declining numbers of consumer complaints.

While the ACCC acknowledges performance-based competition and improving broadband performance over recent years is a result of a number of factors, we consider the MBA program is both a direct and indirect driver.

The transparency and readily available performance data in the fixed line broadband market has been enhanced by the MBA program which has in turn helped to incentivise RSPs to make achievable and competitive speed claims given consumers have access to this independent data and information for their purchasing decisions.

The MBA data has also been an essential part of the ACCC’s three-pronged approach to promoting accuracy in advertising speed claims, by indicating where RSPs are not meeting their speed claims. As discussed above, successful identification and action against RSPs who engage in misleading conduct would be significantly more difficult without this credible data. This therefore also helps to contribute to reducing the risks of consumer harms.

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55 Optus Submission, p.4.
The ACCC considers that the MBA program also performs an important advocacy role. While consumer engagement with the MBA reports may not be sufficient to change behaviour alone, the reports and media release commentary are widely reported in media and industry and policymakers follow the results with interest. Further to this, with CHOICE’s broadband monitoring program having ceased, the MBA program is likely to be the only program that advocates for improved broadband service outcomes through providing Australians with publically independent and timely analysis of retail and wholesale service providers’ broadband performance. As NBN Co noted in its submission, “…an alternative program delivering these outcomes would be unlikely to emerge in the absence of the MBA Program.”

The MBA reports through for example media release commentary have also ensured a spotlight is kept on underperforming services, encouraging RSPs and NBN Co to address the technical causes or move consumers to appropriate plans. The MBA reports have also identified the issue of consumers not achieving full plan speeds, which has likely influenced NBN Co to introduce new wholesale products with additional CVC and to increase the download overhead protocol, which in turn has allowed RSPs to provide higher plan speeds to its customers. This action by NBN Co was an outcome recognised by Telstra in its submission.

The MBA program has also independently demonstrated to stakeholders that consumers have benefited from investment in the NBN and how the new network is meeting their needs, particularly during peak demand and periods of rapid change.

The ACCC understands that some RSPs have used MBA program results in advertising, which has caused some concern that results are used out of context and not adequately explained. The ACCC’s own messaging when releasing MBA data has focused on identifying key metrics of broadband performance and implications for consumers. Our focus has been on identifying where RSPs’ performance has improved over time and calling out specific areas for improvement such as underperforming FTTN services. In this respect we maintain the MBA program is strongly contributing to positive outcomes and can continue to do so.

5. The MBA program – where to from here?

This section discusses the ongoing requirement for the MBA program over the next few years as broadband markets continue to evolve, and the potential options for modifying the MBA program to respond to these changing markets, if extended.

In assessing whether to extend the MBA program it is useful to consider:

- Whether the improved consumer and market outcomes are sufficiently established that they would continue in the absence of the MBA program and be able to support other technologies and networks that have emerged (or are likely to emerge in the market), including whether the other regulatory tools would continue to be as effective without the support of the MBA data.
- Whether the current scope of the MBA program remains ‘fit for purpose’ in an evolving and expanding communications landscape, and if not what the extended MBA program could entail?

5.1. Ongoing requirement for the MBA program

As discussed above, broadband markets are now more efficiently meeting consumer demand since the commencement of the MBA program. That said, many of the factors that
led to the introduction of the MBA program remain relevant today, and will likely be a feature of broadband markets over the next few years at least.

In this regard, it is clear that broadband access speeds will continue to be a principal way for broadband service providers to differentiate their product offers and pricing, with most service providers offering a broader range of plans of differentiated quality. This has included the development of intermediate retail speed tiers and additions of new wholesale speed tiers on the NBN.

Broadband speeds will also remain an area of keen interest to a significant proportion of consumers. In particular, there has been an increase in the number of end-users using broadband to access video on demand services, video conferencing services and online gaming applications, all of which require good quality broadband access. Hence, consumers will continue to seek out broadband plans not just by price and data inclusions but also quality attributes that they need to reliably access these online applications.

The COVID-19 pandemic has accelerated these existing trends and demonstrated broader economic and social benefits from the availability of these applications. The requirement for extensive and robust connectivity has shown to be essential for households and businesses for social connectivity, working, learning, entertainment and commerce. While still uncertain, there is potential for this increased level of interest to persist at higher than previously anticipated levels, particularly as many businesses and employees have successfully adapted to new ways of working.

Most recently, the introduction of very high-speed plans over the NBN is particularly relevant given this will represent the first practicable opportunity for consumers to access broadband speeds of this order of magnitude.

It is also clear that there will be a continuing need for network operators to continue to invest in order to meet this increasing demand. This will include expanding the footprint and deepening capacity of existing access and backhaul networks, and investing in new technologies such as 5G fixed wireless. Similarly, there is an ongoing need for service providers to make efficient use of these investments so that consumers can access the plans that they need at the quality and prices that represent good value to them.

There is also potential for new service providers to enter broadband markets due to further investment in networks and product support, and maturity of the market. For instance, the conclusion of the NBN scale build, the introduction of service standards backed by rebates and other operational support improvements have the clear potential to reduce the complexity of supplying NBN services and thereby lower entry barriers.

In these market conditions, robust and independent speeds and quality data that provide transparency over wholesale and retail broadband markets will assist consumers, network operators, service providers, regulators and policy makers. Importantly, this information will encourage much more competitive and efficient broadband markets and greater coordination and targeting of policy and regulatory effort in those areas where markets are not delivering efficient outcomes for consumers.

As compared to a situation where MBA program data was not available, it is unlikely that an alternative program would emerge. The closest substitutes to the MBA that are currently available offer less detailed or reliable insights into broadband markets. For instance, these data can be application specific, or rely upon crowd-sourced data that can introduce various biases.
Further, the business case for a commercial performance monitoring and reporting service that would fulfil the transparency objectives of the MBA case is unclear. For example, the cessation of CHOICE’s Honesty Box program may indicate an underlying reluctance of network operators and service providers to support a service that will provide public visibility over their speed and quality metrics.

Hence, in the absence of the MBA program, there is a heightened risk of market failure associated with increased levels of information asymmetry between service providers and consumers. We consider that there will be no independent, comparable sources of information in the broadband market to assist and inform consumers’ purchasing decisions. This was acknowledged by CHOICE, which until recently operated its own broadband performance monitoring program. In its submission CHOICE noted that since the ceasing of its own program, “the ACCC’s MBA is the only program of its type left in Australia. For this reason alone, its continued operation is crucial in protecting Australians from insufficient broadband services and in holding retail service providers (RSPs) to account for their marketing claims and practices.”

To provide some examples of how this could occur, network operators, service providers and policymakers would have limited independent evidence with which to assess the validity of anecdotal evidence of poor performance on both current and emerging technologies. Identifying and targeting responses to the specific elements of the supply chain causing poor performance may also be more difficult.

Similarly, the MBA program has been a key source of information to target ACCC monitoring activities over marketing claims, as well as allow service providers themselves to have confidence that their competitors are making reliable marketing claims. This evidence base facilitates service providers continuing to invest in network capacity and compete on broadband speeds and other quality attributes. In turn, having transparent and reliable market data on speeds and quality is likely to facilitate market entry by new providers and encourage efficiency and investment.

In summary, the risks we see emerging include:

- Lack of transparency about access network and RSP network performance.
- High quality broadband performance information will no longer be easily available to industry, consumers and policy makers to assess its efficiency and effectiveness. Consumers are likely to identify this as a key information gap.
- Reduced capacity with the potential inability to monitor and verify claims about speed performance where services are thought to have fallen short of expectations.
- Consumers may not have access to reliable:
  - pre-sale information about broadband service performance and hence consumers are at risk of making ill-informed purchasing decisions; and
  - post-sale information to verify performance and hence consumers are at risk of not receiving what they paid for.

5.2. Stakeholder submissions

**Consumer advocates**

Consumer advocates agree with the risks to the outcomes achieved if the program is discontinued. ACCAN notes that while some market-based comparison tools will be available to assist consumers, they will not have the independence and consumer trust enjoyed by the MBA program, which has helped drive efficient market outcomes.
ACCAN submits that if the MBA program was discontinued, information asymmetry issues would remerge and dampen retail competition. CHOICE notes that its own broadband monitoring program, Honesty Box, has terminated, meaning that the MBA program is the only source of independent information to help keep RSPs accountable. CHOICE also outlines that the reasons why there is an ongoing need for the program includes consumer issues arising from NBN Co’s technology upgrades, competition from 5G networks and continued growth in data usage.

RSPs and Communications Alliance

Communications Alliance note that in the absence of the MBA program a number of safeguards exist that help ensure consumers are provided with clear and accurate information on broadband performance including Australian Consumer Law provisions, the ACCC’s speed claims guidance and the ACMA’s existing and soon to be introduced rules designed to protect consumers.

Telstra also point to obligations in place to protect consumers and submit that the program no longer serves a useful purpose. Telstra also note that market-based alternatives exist for comparing RSP’s speed such as Ookla and Netflix indexes, and consumers can use market based comparators (such as WhistleOut, Finder and Canstar) to select their broadband plans. Telstra submits that RSPs conduct their own testing and that the MBA program creates inefficient and costly investment in multiple layers of testing. Telstra do however support a program which monitors NBN performance alone rather than RSPs’ performance.

NBN Co

NBN Co agree with the risks as outlined in the Consultation paper for the continuing achievement of the MBA program’s objectives in the absence of the MBA program. NBN Co considers that there is a continuing need for an independent broadband monitoring program especially with the launch of new NBN higher speed products and increased usage of high quality video streaming and video conferencing services as a result of the pandemic. NBN Co also agrees that an alternative program delivering these outcomes is unlikely to emerge.

5.3. ACCC view

The ACCC considers the market failures for which the MBA program had sought to address remains an ongoing risk to effective and efficient competition and positive consumer outcomes in the communications market. The MBA program has assisted in providing independent evidence of how well the fixed line NBN network supports consumers, and identifies areas where additional investment is required. As NBN Co continues to invest to upgrade its network to support increasing broadband demand, the MBA program will help assist in assessing how consumers are benefiting from these network investments.

The ACCC shares the view that if the MBA program was to be discontinued, information asymmetry issues could remerge which may affect the level of competition. Additionally, the ACCC notes that following the closure of Honesty Box, the MBA program is the only independent source of information about broadband performance. The ACCC considers the transparency provided by the MBA program plays a key role in promoting truth in advertising and in monitoring compliance with speed claims. In the absence of MBA data there is likely to be a decreased ability to monitor and verify where performance is falling short of expectations, particularly as new higher speed services emerge with untested typical peak time speed claims.

The ACCC also considers that commercial models such as Ookla and the Netflix index are not able to validate the attributes of tested services and account for the different characteristics of the NBN access networks, reducing their accuracy and reliability. Indeed,
the IAA submit that probes (such as those used in the MBA program)] “…have the advantage of collecting data from an end to end perspective, potentially yielding information on the performance of network termination devices as well as the networks themselves.”

This is reflected in the ability of the MBA program to detect an outage issue associated with an RSP’s modem (see case study 7).

While we recognise there are a range of legal and regulatory provisions in place to inform and protect consumers, the transparency provided by the MBA program underpins the efficient operation of these markets and promotes responses to address systemic performance issues in a light-touch manner with minimal regulatory burden. As the broadband market continues to develop with new and more complex offerings, and consumers’ reliance on these services further increases, the information and transparency provided by the MBA program is likely to become of even greater importance. In addition, the data and insights provided by the MBA program has been of value not only to consumers but to industry itself as well as regulators and policymakers. While the immediate issues around COVID-19 subside, the MBA program can continue to play a key role in informing and evaluating industry and policy responses to changes in broadband markets.

We note that regulators worldwide continue to see the value in broadband monitoring and reporting programs as service performance remains a priority to consumers in an increasingly complex market. Many of these regulators, such as in the United Kingdom, United States and New Zealand opt to use hardware or embedded testing agents in consumers’ modem/routers to measure end-to-end performance while accounting for specific user characteristics. In contrast to the light-touch approach of the MBA program, regulators such as the Ofcom also apply stronger and more costly obligations on service providers to measure the performance of their services.

5.4. The scope of a future MBA program

5.4.1. Potential for expansion into additional technologies and alternative networks

The MBA currently reports on the performance of 10 RSP’s fixed line NBN services and does not cover services supplied over NBN Co’s fixed wireless and satellite access technologies.

NBN fixed wireless services have experienced well documented performance issues. In the absence of independent performance data from the MBA program, the ACCC has sought to address fixed wireless congestion issues through engagement with NBN Co and by providing advice to consumers.

While NBN Co provides fixed wireless congestion information to RSPs and public metrics on its website as part of the ACCC’s NBN wholesale service standards inquiry, this information does not provide actual performance information at the individual service level and it does not include upload performance data.

The information that NBN Co provides to RSPs identifies fixed wireless cells performing below NBN Co’s network design standard, which is to provide services to an average

56 IAA submission, page 1.
throughput of at least 6 Mbps during the busy hours\(^59\) (and less than 0.25 per cent packet loss on backhaul links).\(^60\) The information provided in NBN Co’s public metrics does not include average throughput data and is limited to identifying the percentage of fixed wireless cells that fall within various monthly busy hour cell performance categories.

Incorporating NBN fixed wireless services under a continued MBA program would provide additional data to assist in identifying any performance issues on this network. It would also enable consumers to make more informed purchasing decisions, and would provide consumers, industry and policy makers with robust, independent and comparable information on the performance of fixed wireless broadband services in Australia. More broadly, incorporating the fixed wireless network into the program would allow more consumers in regional and rural Australia to also benefit from the MBA program giving them an even footing alongside Australians in metropolitan areas on the fixed line NBN.

The ACCC has received a number of complaints from consumers in relation to fixed wireless performance and queries as to why the current program does report on fixed wireless performance. The expansion of the program to fixed wireless has also been raised in a number of public forums, including at the Joint Standing Committee on the NBN.\(^61\) Submissions to the ACCC’s wholesale service standards inquiry acknowledged the importance of accurate and timely fixed wireless performance information and that greater transparency would help RSPs to provide better information to their customers and enable customers to make more informed purchasing decisions.\(^62\)

Expanding the program to cover services supplied over NBN Co’s fixed wireless access technology would assist the ACCC in carrying out its compliance and regulatory functions and, in particular, assist in assessing the reasonableness of fixed wireless speed claims. In this regard, we note that the ACCC’s broadband speed claims industry guidance was expanded in May 2019 to apply to services supplied over fixed wireless networks.\(^63\) The inclusion of fixed wireless services in the MBA program would enable the ACCC to better assess RSPs’ fixed wireless advertising and would provide RSPs with a further point of reference in developing their advertising claims. NBN Co does not provide RSPs with maximum attainable speed information for fixed wireless services, and MBA reporting would provide both RSPs and consumers with information about the typical performance of fixed wireless services.

As the communications market continues to evolve, consumers will increasingly be offered broadband services by new providers and over different or new technologies. Infrastructure-based competition to the NBN continues to expand geographically, both from other fixed line network operators and emerging 5G networks.

There is already evidence that 5G fixed wireless services are being marketed as a substitute for fixed line NBN services. For example, Optus’s 5G fixed wireless service\(^64\) advertises download speeds and data inclusions comparable to its NBN services at a similar price point. There is a lack of independent and reliable information on e.g. 5G fixed wireless


\(^61\) Joint Standing Committee on the National Broadband Network, 5 June 2018.


service. This is likely to be preventing full consumer engagement in the competitive process and can lead to consumer harm by increasing product search and transactional costs, given that services are typically sold on a minimum term basis with early exit fees.

The potential for consumer harm remains relevant and the risk of this occurring is likely to increase. This is because there are currently no independent tools to verify and compare the performance claims made by mobile networks offering fixed wireless broadband services. There is likely to be an increasing need and expectation from consumers to be able to access information about how these services will perform and thereby benefit both consumer and competition outcomes.

More broadly, infrastructure-based competition may benefit if the MBA is extended to new technologies as consumers will be able to have more confidence in the performance to expect from them. Benchmarking these networks against NBN performance may provide incentives for industry investment to address geographic areas or technologies where performance compares poorly to broader benchmarks, or assist in targeting policy responses.

In light of the above, a renewed MBA program may help to further improve competition and market outcomes for a wider range of consumers if the current program is broadened in scope to cover these additional networks. This would enable a greater number of Australian consumers to assess the relative performance of competing networks as well as retailers.

The variable nature of the performance of wireless technologies initially presented a barrier to extending the MBA program to NBN fixed wireless services, requiring a much larger sample size than fixed line services to generate comparably reliable results. However, increased investment in this network has resulted in more stable, homogenous network performance, which could provide for statistically reliable results using smaller cohorts. Assistance from stakeholders could assist in obtaining the required panel sizes in a timely manner.

5.5. Other potential augmentations of the program

Whether an extended MBA continues to focus on the NBN fixed line network or is extended to other networks, there are a range of other enhancements that could be considered to ensure the program can continue to provide reliable, informative and timely data to consumers, industry and policymakers to meet their various needs and demands.

In many cases, poor broadband performance is caused by factors not within the NBN or RSP networks but within the consumers’ premises or hardware. The capability of the testing infrastructure is advancing to capture new services and technologies. A future MBA program could employ diagnostics on these broader factors that impact performance to better inform and educate consumers to resolve issues themselves. A number of potential augmentations of the program are canvassed below.

5.5.1. Ensuring representative, timely and accessible market information and engaging consumers

The ACCC sought feedback on how the MBA program can continue to reflect the market and provide useful and accessible data. This has included helping to identify issues with consumer experience that may otherwise not be detected. This is likely to be achieved through incorporating a greater number of RSPs in the program by the recruiting and retaining of more volunteers. Consumers’ engagement with the program may be promoted by the inclusion of new metrics, more accessible presentation and timely reporting.
5.5.2. MBA program data

The MBA Quarterly Reports consist of a technical report with data presented to consumers through the ACCC’s interactive dashboard. In September 2020, we also commenced publishing underlying MBA data compiled to the Whitebox level on data.gov.au for interested stakeholders to use.

5.5.3. International comparisons

International comparisons of broadband performance are of interest to consumers and policymakers. International benchmarks could also provide an indicator of the relative performance of Australia’s connectivity to ensure key services are delivered to a similar quality to consumers overseas. There are however, a number of drawbacks with these international comparisons not being able to take into account context specific factors and market conditions, limiting the usefulness of international comparisons.

The current MBA testing provider, SamKnows, provides broadband performance measuring services to regulators in many jurisdictions worldwide such as in New Zealand, the United Kingdom, United States and Brazil. As in Australia, these measurements include a wide range of tests to applications and other metrics in addition to simple download speeds. This data could potentially be drawn on to assess how Australia’s broadband market and performance compares with similar countries, particularly with reference to specific applications.

5.5.4. Responding to market changes – small and medium sized businesses

Pivoting the MBA program to provide data to wider users of telecommunication services could assist those users make better more informed decisions and promote more efficient outcomes in more markets.

Broadband connectivity and e-commerce has become increasingly important to a broader segment of small and medium sized Australian businesses. At the same time, with more Australians working from home as a response to the pandemic, residential broadband services have become an extension of business networks for many employees and have been required to support the same productivity applications.

The MBA program has traditionally focused on metrics important to residential broadband users. However, in July 2020 the ACCC released its first Critical Services Report which also examined how fixed line NBN services were supporting consumers’ use of productivity applications (video conferencing) at a time when many employees were relying on these applications when working remotely.

5.5.5. Ongoing integrity of the program and data

The strength of the MBA program is its independent, reliable and transparent data provided by the robust volunteer recruitment, testing methodology and reporting processes. There are however potential risks that the ACCC has managed and continues to be alive to including during the COVID-19 pandemic when adjustments and mitigation strategies were employed as a result of the high levels of congestion on certain testing infrastructure. In addition new technologies and services provided by RSPs may not necessarily be fully captured or accounted for in the current testing infrastructure.
5.6. Stakeholder submissions

5.6.1. Expansion to other networks

Consumers

Responses to the survey revealed a relatively strong appetite for the program to expand to other networks, with 82 per cent agreeing that 5G home broadband services should be covered and 76 per cent supporting an extension to NBN fixed wireless services.

Some respondents to our survey who are MBA volunteers also indicated the following motivations for joining the MBA program:

To try and get the same level of service in regional Australia as the cities and major regional towns have

### NBN Fixed Wireless service

Some respondents also gave the following comments in relation to what additional networks they thought should be included in a continued and expanded MBA program:

The program should be monitoring all NBN performance including Fixed Wireless and Satellite

Rural satellite and wireless broadband

We live on a farm and are still on ADSL internet

Regional and rural locations as a focus rather than types of technology

There are areas here with no NBN or poor internet and mobile phone services as yet

It should be open to all retail services so speeds and latency can be compared between providers who haven’t purchased enough CVC capacity

Everything should be assessed independently on a level playing field

Whatever technology may be offered. Perhaps a retailer’s fibre to the building service, international service provider’s offerings (Leo satellite?) or even 6G -when that arrives

If new independent non NBN players enter the market we need to see how they also compare with existing providers

Comparisons with overseas broadband plans and their performance
These free text responses highlight some consumers desire to be able to compare the performance of differing technologies. There is also a strong theme for transparent analysis of services that service regional and rural areas, which often rely on fixed wireless and satellite technologies.

**Consumer advocates**

Consumer advocates are also strongly in favour of expanding the program to other networks such as NBN fixed wireless and satellite, particularly to bring the benefits of performance based competition to consumers in rural, regional and remote Australia including key user groups such as farmers and isolated children. In our discussions with representatives, the Country Women's Association and National Farmers Federation expressed strong support. ACCAN also support extending the program to other wireless services so that consumers are informed about these services before committing to contracts.

The RRRCC and its members have offered to assist with recruiting regional, rural and remote volunteers for the MBA program.

**RSPs and Communications Alliance**

The RSPs and Communications Alliance are generally opposed to the expansion of the program to other networks with a number noting the various environmental factors that make results from wireless networks less accurate than those from fixed line services. Optus also submits that it would be difficult to recruit sufficient volunteers to produce a reliable measure of speed.

In contrast Telstra offers to encourage its fixed wireless customers to participate if the program is extended to NBN Co’s fixed wireless network. Telstra however notes that RSP comparisons would be difficult and the reporting should be limited to an assessment at the technology level.

Specifically for 5G fixed wireless services, Optus rejects the proposition in the Consultation paper (and above) that a lack of independent and reliable performance information prevents consumers from engaging with the competitive process and Communications Alliance submit that competition in these markets are already strong. Optus also submits that introducing this testing would generate congestion on these networks. Further, Optus notes that a third party testing provider would not be able to account for complexities in 5G network architecture (with some parts designed for broad areas, and others for fixed wireless and the use of different spectrum ranges) which would make comparisons across networks difficult. Telstra also considers it is too early in the product lifecycle to commence meaningful comparisons and also note the various factors not related to RSP performance that would impact the reliability of data.

Aussie Broadband and other submitters recognise that there are issues with measuring wireless services, since environmental factors can lead to variable results. Some submissions, such as Telstra and Optus, highlighted that a greater sample size would be needed for fixed wireless services. Aussie Broadband supports expansion of the program to include other fixed networks such as Opticomm in the program, noting that they provide services over the Opticomm network. In contrast, Communications Alliance question the need for a comparator to the NBN in MBA reports.

**NBN Co**

NBN Co supports an expansion of the program to NBN Co’s fixed wireless network, non-NBN fixed line networks and 5G fixed wireless networks. It should be noted that the latter two are offering services in competition to NBN Co and the MBA program is therefore seen
as being able to assist consumers with making an informed choice and thereby purchasing
decision. For fixed wireless, NBN Co outline has how reporting on this network could be best
achieved, accounting for the differences between fixed line and fixed wireless services.

The IAA also express support for the MBA program to extend to non-NBN fixed line
networks, 5G fixed wireless networks and particularly the NBN fixed wireless network given
the performance issues experienced by many consumers on this network.

5.6.2. Improved MBA Reporting

Submissions to the Consultation paper from a number of stakeholders suggest some
improvements to MBA reporting. Both NBN Co and Communications Alliance suggest that
the reporting is confusing as headline results are benchmarked against wholesale speed tier
rather than advertised speeds. Aussie Broadband also submit that the results should be
reported in a way that is consistent with the ACCC’s speed claims guidance that is against
an RSP’s speed claims.

Communications Alliance suggests that the materiality of differences in headline results
should be better explained. Telstra consider that the RSP comparisons are not helpful and
unfairly treat RSPs as underlying biases are not accounted for. Telstra adds that even if
these are addressed, reported results are so similar they would not be discerned by
consumers. Telstra also noted that the headline speed charts that include underperforming
services disincentivise RSPs from offering higher speeds to consumers, even at the same
price, denying them access to higher upload speeds available on higher speed plans.

NBN Co also suggests the program target larger volunteer bases to have more reliable and
robust range of RSPs and technologies.

The ACMA and ACCAN both suggest ways in which the results can be more engaging,
interactive and accessible to consumers.

The IAA submit that inclusion in the MBA program is a marketing tool for RSPs. The IAA
note that more RSPs should be included in the program and that many of their members
would welcome the opportunity to join the program and would actively help to recruit
volunteers.

5.6.3. Inclusion of small and medium businesses

There are a variety of responses on the question of whether an extended MBA program
could capture and report on the performance of services supplied to small business. In their
submissions, the ACCAN and the ACMA support this proposal. ACCAN note that a small
panel of business users would be useful given the slow speeds and inefficiencies that create
costs for small business and their competitiveness. The RRRCC also support including a
specific panel of business volunteers. A body representing rural health providers has also
offered to help in facilitating the identification of volunteers to assist in trials including
healthcare providers who rely on broadband to deliver their business services such as
telehealth.

Although Telstra and the Communications Alliance question the need for an extension to
small businesses, Aussie Broadband submit that they would assist with an expansion in the
program and note that metrics such as daytime speed performance would be of interest to
business users.
NBN Co suggest that any extension to business services should also include services provided over non-NBN networks which supply many business customers.

Of our volunteers who responded to the public survey, 17 per cent indicated that they run a business from home. This shows a general indication that performance of services supplied to small businesses may be of interest to a subset of existing MBA volunteers.

5.6.4. Improvements in MBA testing methodology

RSPs and Communications Alliance express some concerns and seek improvement on some aspects of the methodology and testing infrastructure. Communications Alliance in general seek further opportunity for the public and industry to understand and verify the methodology and accuracy. Communications Alliance express concerns that some sample sizes are relatively low (a view shared by NBN Co) and there is a lack of transparency on the number of measurements, how test servers are selected, transit routes used to testing servers and the treatment of tests to 4G backup networks. Communications Alliance also suggest moving to an existing commercial performance testing model, rather than SamKnows, such as Ookla or the Netflix speed index.

While Optus supports the retention of the MBA program, it suggests that for the program to remain as a credible independent source of comparable information, there should be improvements. Optus considers that congestion at the test servers may impact the reliability of results and notes that the server provider used by SamKnows is not a major provider. Optus also notes that the location of the testing infrastructure disadvantages Tier 1 RSPs like Optus who do not have major connections with this smaller provider.

Aussie Broadband suggest changes to the methodology to reduce the impact of underperforming services on RSP’s results, noting that these are caused by factors outside an RSP’s control.

While NBN Co are supportive of the MBA program they note there are some improvements that could be made to deliver greater value for money. NBN Co suggests the ACCC focus on including a greater range of RSPs and technologies, which they consider could be achieved through less frequent reporting. NBN Co offer to explore synergies with sharing of data with the ACCC to realise further improvements.

Telstra seek a range of transparency enhancements, including more detailed data on top of the summary already published on data.gov.au, as well as operational metrics of how the testing infrastructure is performing.

In contrast, ACCAN recognise some of the issues with testing but consider that the long-term volunteer base has produced consistent and reliable results.

The IAA also support the publication of raw data to enable further analysis by researchers. The IAA note that this would potentially enable improvements to troubleshooting and enabling protocols and software for the internet generally.
5.7. ACCC view

5.7.1. Expansion to other networks and service providers

We note that a number of stakeholders support an expansion of the MBA program into fixed wireless and satellite to shed light on broadband services used by regional, rural and remote Australians.

The ACCC is aware that there are additional challenges with including fixed wireless (both current generation and 5G) services in the MBA program but do not view them as insurmountable.

To extend this monitoring the ACCC would likely require assistance and additional resourcing to build up larger panel sizes to provide for more statistically robust results and we appreciate NBN Co’s initial guidance on this matter in their submission. We consider that we could do this in stages, initially reporting on NBN Co’s fixed wireless network but first reporting on a network rather than RSP level to provide a view over how performance across the network is holding up. Ensuring that MBA volunteers are spread across fixed wireless cells would also mitigate the small impact that the speed tests could have on cell congestion on any one cell. If sample sizes were sufficient for reliable reporting we could then move to doing RSP level reporting.

The MBA program has incidentally picked up a number of NBN fixed wireless customers as volunteers, largely arising from when volunteers change address to the fixed wireless footprint. We have been monitoring the performance of these services, and in December we published some indicative NBN fixed wireless network level performance results as part of the Key monthly indicators report. This was published as a proof of concept that meaningful data could be reported on fixed wireless and we expect that this could be further developed if we were to build a significant fixed wireless volunteer cohort.

Similarly for other fixed wireless networks and other superfast fixed line networks, we would likely require assistance to recruit sufficient volunteers and address methodological concerns such as those that Optus has identified. As set out above, we consider there is a strong case for greater transparency on the performance of these networks as they emerge and compete with the NBN offering similar performance claims in the absence of independent and empirical data to give consumers confidence to engage with these services.

That said, there are no fundamental technical issues that prevent the MBA program being extended to these networks. We have tested a small number of services on these networks as our volunteers have migrated off their legacy services or moved premises.

We agree that there would be value in including additional RSPs in the MBA program and are willing to work with RSPs that would like to be included in order to bolster the presence of their services in the MBA program. This has proven successful for those RSPs with more highly engaged customers. We would also consider other opportunities to include smaller operators in MBA reporting should the program be renewed.

It is anticipated that expanding the program to fixed wireless consumers and higher speed plans would involve relatively small set-up costs with minimal additions to the ongoing cost of running the program going forward. If the program is expanded to other networks and to small and medium businesses, especially given the importance of this sector to the post-COVID recovery phase, indicative costs can be provided.
5.7.2. Changes to MBA speed metrics

The ACCC notes that RSPs and Communications Alliance have continually expressed a view that speed results ought to be benchmarked against advertised speeds rather than the relevant wholesale speed tier – a view echoed by NBN Co. We have responded to this by including this metric in our reports and giving these results increasing prominence in our media releases.

However, calls to give further prominence to this alternative set of metrics broadly misunderstands the fundamental role of the MBA program to inform markets on the range of broadband services available in real world conditions. It also understates the risk that MBA reports would cease to incentivise quality improvements and instead encourage RSPs to weaken their marketing claims as a means to achieve a higher rating.

We note that RSPs are strongly of the view that factors outside of the control of RSPs should be controlled for. While we appreciate this in principle, we note that RSPs do have a role in addressing the issue of underperforming services, by replacing faulty modems and by working in partnership with NBN Co to address technical issues with the consumer’s connection to the network so that consumers that express a preference for higher speed plans can receive them. This will include RSPs raising awareness and accepting consumer orders to upgrade to FTTP connections or take up other on demand remediation opportunities. Until this can occur, RSPs can educate their customers about the opportunity to select less expensive plans with speeds that can be delivered over their connections.

The different incidence of underperforming services across RSPs demonstrates that some RSPs can do much better than others in controlling for this issue for the benefit of their customers.

We note that we have already published a guide to assist consumers in interpreting the MBA speed metric data.

5.7.3. Inclusion of small and medium businesses

The ACCC recognises that providing meaningful data for small and medium businesses raises a number of issues. Small businesses could use residential grade broadband services or business grade services and we would need to control for each service type in our monitoring. Small businesses are also likely to use their broadband services differently to household consumers (i.e. different applications, more uploading activity and daytime usage) such that different metrics may be more appropriate for this market segment. We would intend to give this further consideration potentially through a pilot program subject to the MBA program being continued.

Medium and large businesses are likely to use business grade services supplied over non-NBN networks (as noted by NBN Co) that are tailored and therefore heterogeneous, making comparisons difficult.

It should also be noted that Government has a focus on enabling small to medium businesses to take advantage of digital infrastructure, as part of the Government’s economic recovery plan to grow the economy, create jobs and support its goal for Australia to be a leading digital economy and society by 2030.65 This is in addition to its investment into ultra-fast broadband to consumers and businesses across the economy. Effective and high quality broadband services are seen as key to businesses to continue to contribute to the uplift to economic output and further drive productivity enhancements to achieve greater

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competitive outcomes. The MBA program could be very effective in providing valuable insights on this critical infrastructure which is integral to the way these businesses operate and remain competitive.

5.7.4. Improved MBA reporting

Over time, we have developed our MBA materials to be as consumer friendly as possible. We have released a consumer guide to MBA performance data, and we have included additional explanation and analysis in more recent MBA reports to assist readers in interpreting results. We will continue to consider ways in which we can make results more engaging and accessible, including by liaising with relevant stakeholders on their practical suggestions.

5.7.5. Improvements in MBA testing methodology

The MBA program has remained resilient notwithstanding the challenges during 2020 with very high levels of network demand. The program was able to maintain an extensive testing program and provide reports with a very high level of accuracy and reliability of results through careful selection of test periods and additional assurance steps.

The ACCC has continued to work closely with SamKnows during COVID-19 to effectively address testing infrastructure issues in light of the unprecedented demand on hosting data networks.

We also note Communications Alliance’s suggestion that the ACCC could instead engage a commercial speed testing service such as Ookla or the Netflix speed test. The ACCC however considers that these services are unable to provide the breadth and detailed level of testing, validation of the data and reporting of results that have underwritten the MBA program’s success. We note that regulators in key jurisdictions such as the United States and United Kingdom also use dedicated testing infrastructure rather than rely on crowdsourced data for likely similar reasons. We also note that the Netflix speed index has been suspended since February 2020.

The ACCC and SamKnows have continued to work constructively and responsively with all RSPs to address any concerns they have with the testing methodology or infrastructure in order to assure the quality of reporting under the MBA as broadband markets and service offerings continue to evolve.

The ACCC has and will continue to look for ways to improve transparency to address concerns from stakeholders in a way that does not compromise the integrity of the program and we regularly communicate with stakeholders through regular briefings and by responding to requests for discussions. As discussed above, alongside the release of Report 10 we published the test data on data.gov.au, responding to requests from stakeholders to release underlying test data. We will do this with each report going forward so that RSPs and other stakeholders can examine and use the data. We are also keen to work with stakeholders to further improve the data released where it contributes to better consumer outcomes.

The ACCC has also undertaken other measures to promote equity and transparency in the program. For example, we have provided all participating RSPs with the network details of the test server host (to inform their traffic transmission routes to the test server), as well as worked with integrated RSPs to ensure that any test measurements which run to their 4G networks when the NBN is experiencing an outage are excluded from results.

The ACCC takes on board the constructive suggestions for modifying and improving the technical and methodological aspects of the program and consider we have acted on many
already. We are ready to further engage with stakeholders to explore and address their outstanding concerns, including on further deepening and expanding our panels to address any residual concerns they have with the robustness of the data.

6. Concluding comments and next steps

The ACCC considers this consultation process has yielded a wide range of valued insights and perspectives on the effectiveness of the MBA program and the options for its potential renewal and expansion. Having considered these views, the ACCC remains confident in the ongoing value of the program and the potential additional benefits for an even wider proportion of the community if it is expanded. We intend, however, to pursue any expansion of the program in a consultative and prudent manner, recognising the potential challenges posed in measuring different technologies and services. We also look forward to continuing to work with stakeholders who made submissions and others more broadly in the ongoing refining of the current and/or future expanded program, where appropriate, recognising emerging technologies and the evolving communications market.

This report has been provided to the DITRDC for their consideration.