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Executive Summary

Better Internet for Rural Regional and Remote Australians (BIRRR) began as a Facebook group (administered by volunteers) in 2014 with the aim of providing information and support for telecommunications services to people living and working in rural, remote and regional areas.

The **BIRRR Sky Muster Survey** aimed to establish the state of Sky Muster connections of people in rural, regional and remote areas of Australia, by collecting information about user experience in rural, regional, and remote Australia. The data will be used to work with stakeholders to improve access and usability of bush broadband. The survey was distributed to approximately 8600 members of the BIRRR membership base. However, not all members are eligible for connection to Sky Muster as they are not in a designated Sky Muster area.

To give all potential and current Sky Muster users the opportunity to respond, the survey was distributed to members of the Isolated Children and Parents Association (ICPA), National Farmers Federation (NFF) and to members of AgForce. The survey link was also distributed through Rural Media including the Weekly Times, Queensland Country Life Newspaper, and The Land Newspaper as well as other social media. Respondents who were both happy with their internet service and unhappy with their internet service were openly encouraged to participate.

Due to the nature of their geography RRR consumers are extremely reliant on effective communications and this heightens the need for effective connectivity.

The survey found that **rural, regional and remote people are severely disadvantaged in terms of access, speeds, cost and reliability of their Sky Muster satellite internet connection.**

Installation of the service has not gone smoothly with some participants experiencing **constant delays, damage to their homes and installations that are still not working.**

The nbn Sky Muster service has been **unreliable with many reports of unexplained outages and dropouts.**

Customer service has been **evasive, unreliable and has lacked transparency.**

Data allowances, speed, dropouts and outages are frustrating for rural regional and remote consumers and this has **a dramatic effect on rural, regional and remote people's business, the education of their children and their own well-being.**

Every Australian, irrespective of where they live or work, should be confident they can access quality, reliable, accessible & affordable voice and broadband services with customer support guarantees. Serious commitment is needed to ensure that RRR areas are not disadvantaged due to their population and postcode

About BIRRR (Better Internet for Rural Regional and Remote Australia)

BIRRR aims to provide information and support on telecommunications services to those living in rural, remote and regional areas. The BIRRR team gathers information across the often-confusing landscape of bush broadband and delivers it via their website (<https://birrraus.com/>) and Facebook group to people in regional and remote areas of Australia.

Kylie Stretton (Charters Towers, QLD, Australia) and Kristy Sparrow (Alpha, QLD, Australia) founded BIRRR in 2014 as a response to the lack of information, advocacy and support for bush consumers, in particular those requiring equitable telecommunications for their businesses and to educate their children. As others throughout rural Australia heard about the plight of BIRRR, they joined the BIRRR group. With support and online action gathering momentum, administrators Kristen Stahlhut-Coggan (Condamine, QLD, Australia), Amanda Salisbury (Monto, QLD, Australia) and Julie Stott (O'Connell, NSW, Australia) joined Kylie and Kristy to help with demand. In 2015, the BIRRR website (<https://birrraus.com/>) was formed to help answer an ever-increasing range of issues and questions.

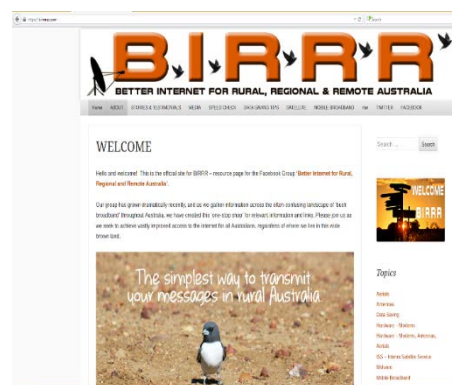
BIRRR uses data collected from their research to lobby government, relevant industry bodies and telecommunications providers to highlight downfalls in service provision. These shortfalls would have previously gone unnoticed. BIRRR's main aim is to ensure that people in RRR areas have equitable access to telecommunications.

BIRRR advocacy and lobbying achievements as at April 2017 include:

- Un-metering of education specific sites for Telstra mobile broadband distance education
- Education ports for distance education and home schoolers using nbn Sky muster
- Encouraging nbn to establish a contact team for RRR users and recorded voice service for Sky Muster outages
- Widespread survey of bush telecommunications



a)



b)

Figure 1: Better Internet for Rural, Regional and Remote Australia Facebook group (a), <https://www.facebook.com/groups/BIRRR/>, and BIRRR website (b), <https://birrraus.com/>

About the Survey

The survey sought to collect information about **Sky Muster use in rural, regional, and remote Australia**. The data collected will be used to work with stakeholders to improve bush broadband. The survey consisted of 29 questions. Respondents were asked to answer all of the questions and if they had more than one connection to complete the survey for each Sky Muster connection.

About the sample

Cluster sampling (Saunders, Lewis, & Thornhill, 2009) was used to distribute the electronic survey via Survey Monkey ("Survey Monkey," 2017) to approximately 8600 members of the Better Internet for Rural Regional and Remote Australia (BIRRR) database. Members were encouraged to send the survey link to friends and family who live in rural, regional and remote areas of Australia, hence snowball sampling occurred (Saunders et al., 2009, p. 240). To give all potential and current Sky Muster users the opportunity to respond, the survey was distributed outside of the BIRRR Membership database to members of the Isolated Children and Parents Association (ICPA), National Farmers Federation (NFF) and to members of AgForce. The survey link was also promoted through Rural Media including the Weekly Times, Queensland Country Life Newspaper, and The Land Newspaper as well as other social media. Respondents who were both happy with their service and unhappy with their service were openly encourage to participate.

Participants, who voluntarily responded to the survey, lived in NSW, QLD, NT, WA, SA, VIC, and TAS (all states and territories) as well as from either of the Norfolk, Christmas, Lord Howe or Coco (Keeling) Islands. To maximise representativeness of the #datadrought and to confirm respondent's suitability for the study, the 2017 survey was restricted to all eligible rural, regional, and remote users of nbn™ Sky Muster Satellite connection.

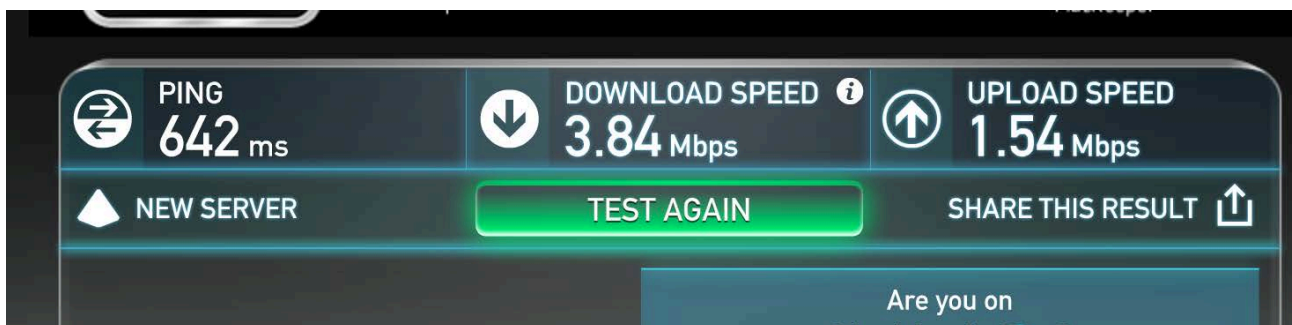


Figure 2: Screen shot of speed test provided by survey participant

About the dataset

Nine hundred and eighty nine respondents started the **Sky Muster Survey**, of those who started, **805 respondents completed the survey**. Of the 184 surveys that were partially completed, all respondents answered question 1, 127 answered questions 2-8, 32 respondents answered questions 9-16, 18 respondents answered questions 17-25 and 7 respondents answered the remaining questions. There was a significant drop out at Question 8 because the question asked the respondents if they had any issues with their Sky Muster Install to which one option “*Not yet installed*” skipped them to the end of the survey, as they would not be able to answer the continuing questions. For the remaining 57 respondents, drop outs/outages, not returning to complete the survey, along with lack of knowledge by consumers may also have affected survey responses.

To test the validity of the data, the sample was grouped into completed surveys (N=805) and total surveys (N=989), where completed surveys were identified as those that had been started and finished. The two groups were analysed separately using frequency analysis, which determined **little difference between the samples**. Therefore, ALL survey responses (N=989) were used to ensure that those respondents who could only partially complete a survey could still contribute to the study and that the rich, meaningful and lived qualitative experiences could be included in the analysis.

We also acknowledge the potential for voluntary response bias, where there is overrepresentation of individuals that have strong opinions about internet access in rural, regional and remote Australia. However, it should be noted that such bias is normatively defensive because the study has occurred within the explicitly advocacy based BIRRR group that has conducted its research without concealment or fabrication (MacCoun, 1998).

The BIRRR survey figures have a confidence level of 95% that the spread in responses for the currently connected 70,000 (April, 2017) and the well over 200,000 estimated Satellite-bound end-users will be well within 5% of these BIRRR survey figures.

Results

Due to the nature of their geography RRR consumers are extremely reliant on effective communications and this heightens the need for effective connectivity.

The BIRRR team have undertaken extensive large-scale research on RRR telecommunication needs. The first report titled the “BIRRR Regional Access Survey” identifies internet use in RRR Australia (to read the report go to www://birrraus.files.wordpress.com/2016/05/birrr-report-2016-survey-results-final.pdf).

This second research study, “The Sky Muster Survey 2017”, reports on the current state of play for satellite internet connectivity in rural, regional and remote Australia and is available online at www.birrraus.com

Previously there has been few studies and limited research into this specific consumer group.

This analysis uses graphs, visuals and summary text to display responses from the participants. Where the question asks for more information, for example by having an “other” option or by asking for “more information via a text box”, this information will be summarised and it will include anecdotal comments that support the summary findings. Spelling errors in the anecdotal comments have been edited. A complete list of unedited comments can be supplied by emailing birrraus@gmail.com



Source: BIRRR

Question 1: Are you connected to the nbn Sky Muster Satellite?

The first question of the survey asks if the participant is connected to the nbn Sky Muster satellite. Seventy three percent of respondents are connected to the nbn Sky Muster Satellite, 15% said that they were not connected, that they were waiting for an installation. Five percent said that Sky Muster did not meet their needs so they would stay with their current mobile broadband service. Nearly 3% said that they were unsure if they were eligible for Sky Muster and 2% said that Sky Muster did not meet their needs so they would stay with their ADSL connection. One percent of respondents said they can access another nbn technology and less than 1% said they could access a non-nbn fixed wireless service.

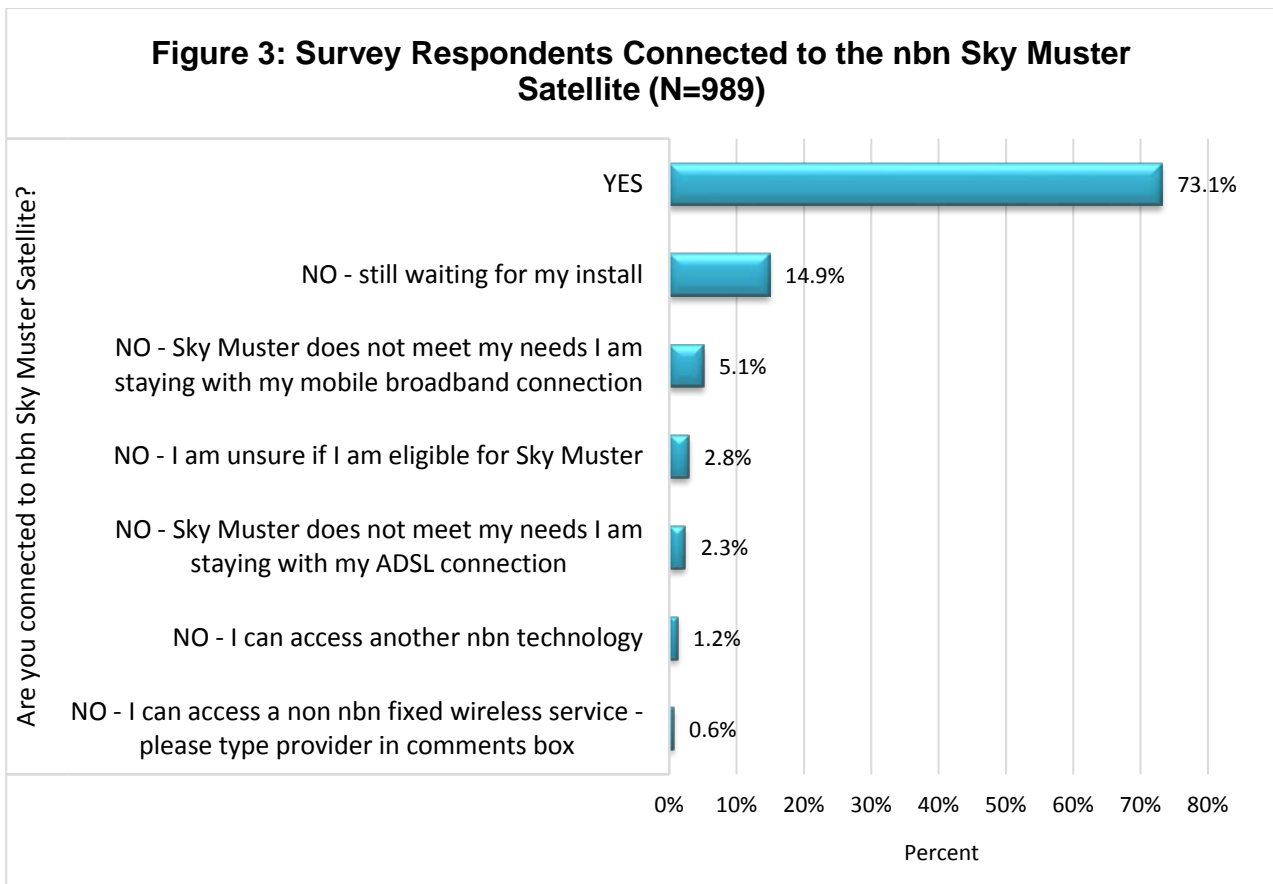


Figure 3: Number of survey respondents connected to the Sky Muster Satellite

Respondents were asked to provide supporting comments for their selection, some of these comments are summarised below.

One hundred and six respondents who said, “**Yes, they are connected**” supplied supporting comments. Nineteen of those participant comments said that **they were connected**. While some simply commented that they were happy with their service, others gave a more positive statement, for example, that “the service works well and they have not had any problems”, and that “it has been absolutely wonderful”. There was also praise for the installers, see Table 1.

Table 1: Anecdotal comments from respondents about being connected to the Sky Muster Satellite

“It works well; we haven't had any problems with it. We get advanced notifications sent to us by email when there is going to be any outages on days when they are doing maintenance, and the email also states the approximate time that the system will be out of action, so that is good. (we still see a lot of people up in arms and upset because they didn't read their emails.) The speed is acceptable, but it is not as fast as our city, relative's internet is, and the cost compared to our city cousins is much higher. We appreciate the free installation of the dish, and we are grateful that we have what appears to be a much more reliable internet connection now”

“Absolutely wonderful, at least we can now access internet rather than the dodgy service we were trying to exist on with Telstra. Can actually work from home office rather than travel to nearest town for reliable access”

“We had an amazing installer who came and installed all 6 of our dishes in one go!”

Other positive experiences noted were simply that respondents **experienced a good installation** that it was well done, quickly and pain free, see Table 2.

Table 2: Anecdotal comments from respondents about the installation experience to the Sky Muster Satellite

“Install was early and well done”

“Installation was good with installer contacting us about 6 weeks before the scheduled date”

“Installation was quick and pain free”

Some of the respondents **have a second installation or multiple accounts** and one identified as being on a trial or as a tester, see Table 3 for supporting comments.

Table 3: Anecdotal comments from respondents about multiple account installation experiences to the Sky Muster Satellite

“Also have an active Wireless Broadband connection too”

“Connected yesterday 13/10 but made sure my ISS service stayed connected. So far it's not too bad, drops out occasionally but not for too long”

“I have two connections - one on our farm and the other on the farm next door we are renting”

“I am currently working for NG Media who have bought multiple accounts for various remote communities in the Gibson Desert.

“I was a beam testing customer with Activ8me”

“Was on the trial with dish installed in 2015”

By contrast eleven respondents were **not happy with their connection** and supplied negative comments, for example that they have had Sky Muster for some time and “it’s a nightmare” and that they only have a part time service that is “woeful beyond belief”. Another commented that the service goes off multiple times per day. Other comments relate to data being used quickly, see Table 4 for sample comments.

Table 4: Anecdotal comments from respondents about negative installation experiences to the Sky Muster Satellite

“Have had Skymuster for 2 months & it is a nightmare!”

“Part time only. Goes off 7 times a day. Woeful beyond belief”

“We have had sky muster for 2 months . Both times our 35g of data has gone in 3 to4 days ,with no use of YouTube or games or movies ! We have 4 devices nearly all updates are done at work . We also live on farm which means no neighbours taking data . I feel that we are being taken for a ride ! It a joke ,5 g on my phone last ten times longer 35 g with sky muster . Who the hell watches the providers to make sure their telling the truth”

The Sky Muster service is unreliable according to 19 negative statements. The respondent comments include that the service is so unreliable they are using other options, that they are connected occasionally, and that the dropouts make the service unreliable and unusable.

Table 5: Anecdotal comments from respondents about unreliable service experiences with the Sky Muster Satellite

“But as it is so unreliable I am using Mobile broadband from OVO (Optus)”

“Connected” is not quite correct “connected occasionally” would be more accurate.”

“I have found Sky Muster to be unreliable with many dropouts, we do not want peak and off peak data, we want larger download limits, it is also expensive, I thought NBN would have had a more reliable usable internet service”

“Since I was upgraded to the 'NBN' connection times vary from 20mins. up to” 2hrs.

“Well at least I think I'm connected!!!!!! It's pathetic! I was better off before this so called Sky Muster!”

A further eight respondents commented that **their connection was too slow to use** due to latency and nbn technical issues. See a sample of participant comments in Table 6:

Table 6: Anecdotal comments from respondents about slow connection experiences with the Sky Muster Satellite

“Been on nbn sky muster for a month, latency is dreadful, recently it's just a fail, cannot download even small files, won't connect to secure sites and fails to load even simple pages. I reckon we'll give a week or two and if things don't improve we'll drop it for 4g and let the short sighted Federal Liberal Government pay for it with someone else's money”

“However, the service has failed to meet expectations by a country mile. Recently it has slowed to a dribble with major nbn technical issues. No resolution in sight and nbn (and out polies) just act as if everything is [h]onky dory. :(Give me back my ISS ... which was always on, steady and reliable”

“Unfortunately I am connected. Service is SLOW, unreliable, unavailable at times and expensive. But then there is nothing else available, unless the NBN installs a tower for wireless connection”

“Unfortunately all that was available. Apart from being expensive, it is slow, unreliable, provides inadequate data and does not resolve my communications issues as I'd hoped”

Some participants commented that they **had a delayed installation**. The delays were noted as being because installers did not keep the appointments and because of technical difficulties and took some time to complete the installations.

Table 7: Anecdotal comments from respondents about delayed installation experiences with the Sky Muster Satellite

“After 4 appointments not kept by installers”

“After much waiting, delay and technical difficulties....yes”

“Finally after 15 dates!!”

“It took 3 appointments to have it installed (they kept cancelling)”

“Was connected to the service in early November 2016. Registered for it with my provider in late 2015 and was given email advice in March 2016 that connection would occur ""soon"". It wasn't until I kept pushing them that it was finally connected in November”

Five respondents commented that **they were suffering dropouts**. Some were only during video's while others were during downloads. See Table 8 for a sample of comments.

Table 8: Anecdotal comments from respondents about experiences with dropouts on the Sky Muster Satellite

"Connected in July. Reasonable service, speed etc but not super. Quite stable but drop outs during video links etc - continual stop/start. As good as the connection we had thru our iPhones previously but a LOT cheaper"

"Drops out all the time"

"I am connected but constantly suffer from dropouts and slow speeds"

"It's crap, drop outs not connected"

"So many drop outs it's not funny anymore. Can't download anything important as when you are halfway through it drops out and all the data you used is not replaced and you have nothing to show. A really stupid time for off peak, 1am no-one is awake to set up a download, and if you do, NBN is doing fixes and they go offline for hours, and again you lose your data. These dropouts only have to be for seconds to lose your connection. But hey,,, I have a multi coloured ring on the NTD to look at, of which the colours mean absolutely nothing"

When asked if the respondent was connected to Sky Muster, five respondents commented that they were connected but that **their connection was not working** and there were lengthy delays for the service to be fixed, see Table 9 for supporting comments

Table 9: Anecdotal comments from respondents about experiences with connections not working with the Sky Muster Satellite

"I am connected but it is not working"

"I can't answer this question using any of the options available. The Sky Muster was installed but it won't work. We have been waiting for nearly 2 months for an answer as to why. Activ8me have been terrible at communication"

"I have a connection and have had since July 4th 2016, but it has never delivered a usable internet connection"

"On may31st connected started playing up on 4th august, nothing now since 28th September. No technicians available until 19th December, but I still have to keep paying for the service"

"We are connected to NBN Sky Muster at Blackall but the orange light is on all the time. When switched off the system initialises, the white ring pulses and the blue ring comes on for a few seconds and then goes back to orange"

The negative comments continue with four respondents commenting that **they had to wait or were still waiting for the service to be activated**, which sometimes took more than 16 days, as highlighted in Table 10.

Table 10: Anecdotal comments from respondents about still waiting for connection to the Sky Muster Satellite

“After installation however, it took 8 days for it to be activated. This left us with no alternative internet for this period of time”

“Connected as in Satellite installed 16 days ago but still no service!”

“Connected hardware but no signal”

“My installation was initially installed in March as part of the nbnco trial. I did not get access to data until the end of May”

Similarly, four respondents commented that **they were installed but waiting on some further action** for the install to be completed. One participant’s installer did not bring spare equipment so had to return at a later date to complete the install, another is waiting on changes to an unsatisfactory mount of the NTD and two respondents had their neighbours modem installed at their address, see Table 11 for supporting comments.

Table 11: Anecdotal comments from respondents about waiting for further action for connection to the Sky Muster Satellite

“First installation try, the installer didn't carry more than one NTD modem, so when it wouldn't work he had to end call and I had to wait for it to be rebooked. Ended up having to ring Hills and the installer to get it rebooked. When he came back he said he couldn't get the satellite to line up due to the weather. Had to wait nearly two months to get installer back to finish the job and when a new guy turned up he said the second modem was also faulty and that the reason the first guy put 'weather' as the reason for ending the calls each time is because if he had put faulty equipment he wouldn't have been paid because they are supposed to carry spares. He also fixed a hole in the outside wall that the first installer didn't close up (apparently they're supposed to close it to ensure rats don't get in). He also said he shouldn't have put the dish on the garage roof as that was simply lazy installation and should have installed it on the side of the roof closer to where the modem was being situated. Thankfully the last guy was on the ball and got us all sorted”

“Installed 2/5/16. Still waiting for removal of the ISS installation and rectifying the unsatisfactory mount of the NTD”

“Installed 30/7/16 but not working yet. Installer fitted neighbours modem at our address first time. Now have had a follow up visit but still not working, have spent at least 24hrs on hold with Activ8”

“While we have been connected to sky muster since July 2016, there was a mix up with the neighbours and our modem, NBN installer installed neighbours modem at our address and ours at neighbours. It took 5 months for NBN to admit that they could not fix the problem their installer caused, eventually with the help of our provider the neighbours and we took it upon ourselves to swap the modems, end of problem. Apart from that service is fine”

Three respondents wrote comments about **outages** and three were so disappointed with the service that **they either had disconnected or were considering disconnecting** from Sky Muster. See Table 12 for supporting comments.

Table 12: Anecdotal comments from respondents about outages on the connection to the Sky Muster Satellite

“I am connected but we have been out for the last 2 weeks” (2 comments).

“But it has many outages every day!”

“Seriously thinking of disconnecting as it's crap”

“Yes I was connected for 4 months. It wouldn't work reliably and I would have to wait hours for it to connect after I would reset it. Back on a slow 3g connection but at least it works when I need it. Would like to go back on it but it needs to be much better otherwise im just wasting my time and money”

“I have been connected for a few months, but am cancelling my service. I am an IT professional and the latency of SkyMuster being >600ms is too high for me to reasonably use VPNs, RDP and SSH workloads without losing my sanity. I am 5km from Goulburn which is in the fixed line footprint and I have signed up for an Optus Home Wireless service (<50ms) until I can arrange a point to point private fixed wireless”

One participant was **confused about who was eligible for Sky Muster** and another commented on the **customer service** between nbn, internet service providers and installers, see comments in Table 13.

Table 13: Anecdotal comments from respondents about eligibility for the Sky Muster Satellite

“I thought Skymuster was for people who had no other web option? Seems like there are a lot who are using more than one technology”

“The communication between NBN co, ISPs, Installers and customers is very poor. To have an installer turn up, say he can't complete the install and then not hear anything for weeks afterwards is diabolically poor customer service. Over communicate is better than under communicate!”

Of those who said yes they were connected to Sky Muster, one respondent included a personal reflection about their real usage problems. This reflection is included below in Table 14 and highlights their journey from trying to do the right thing by connecting to the reality that the service did not meet expectations. The respondent experienced slow speeds and delays in the VoIP that created 15 second delays in voice to voice communication.

Table 14: Participant's personal reflection about real usage problems

“I thought I was doing the right thing by signing up for Sky Muster for both the internet and my home phone. Boy was that a mistake. My new download speed is spectacular (22 before it was 3) BUT my ping has gone from 65 To 750. The end result is my internet speed is no better than when I had ADSL and reliability has gone out the window. The best I could say is that it works intermittently. I have contacted my supplier on several occasions and this seems to fix it for a few hours then it reverts. The home phone. This is unreal. When I phone someone or they phone me, there is a 15 second delay from the time I finish dialling and when the person at the other end hears the phone ringing. This delay continues where we have to say 'over' to indicate that one of us has finished talking and the other person can now talk. Not only that but the person at the other end gets echoes of their voices. I contacted Telstra and was told that once I had signed up with NBN, I couldn't go back to ADSL or the copper cable for my phone. We live about 8 kilometres as the crow flies from Albany. We were supposed to get a tower but some residents closer to town complained that the tower would be an eyesore so NBN decided to give us Sky Muster instead. Our old copper wire wasn't all that flash but at least it gave the basics. We have gone from second world country to third! Is there anything I can do?”

Forty-six respondents commented on the option **“NO - still waiting for my install”**. Sixteen are still waiting for connection, some of whom have been waiting since February 2016. Some of the delays are due to site inspections and lost applications, for others there is confusion between internet service providers and installers, some supporting comments are included in Table 15.

Table 15: Anecdotal comments from respondents about “still waiting for my install – connection”

“First application was February 16, that appears to have 'disappeared' reapplied May also went MIA tried again October and have install date for November”

“Had to do site inspection, which was done a month ago, but still no install date”

“This install is the blind leading the blind. Hills tells us what equip we need but Clear Networks tells us something else. No one knows if we need a new dish for SOTA. If we do, it will be a "non-standard" install bc it's fenced off in a home paddock mounted on a pole”

Ten respondents are still waiting for connection because **they have had their installation cancelled**, some supporting comments are included in Table 16.

Table 16: Anecdotal comments from respondents about “still waiting for my install – cancelled”

“Am losing count. 6th maybe 7th cancellation/no-show TODAY. I travelled 500km yesterday specifically to be here for it”

“Attempted a fixed wireless install first. Took over 4 months for a tech to show after repeated cancellations. Only to be told he doesn't have the right equipment to install. 1 month later another tech this time can't get a good signal, will have to go satellite”

“Have been waiting 6 months since registration. 3 months ago they said they were coming within 2 weeks. Rang provider 4 times. Eventually got given a date 2 weeks later (today). This morning comes - off work waiting... Phone call - can't come today, no one else in area, sorry no new install date. I could cry honestly!”

“In July I was given an install date of 19 Sept which was cancelled three days prior. I haven't been given a new install date yet...”

Another five respondents **had their installation rescheduled**, some due to unforeseen circumstances and others because the wrong address has been provided or because of the weather, supporting comments are in Table 17:

Table 17: Anecdotal comments from respondents about “still waiting for my install – rescheduled”

“Continue to be moved due to unforeseen circumstances....now 11th November”

“Had 4 install appointments rescheduled”

“Had 5 appointments rescheduled due to ‘unforeseen circumstances’

“Installation has been delayed TWICE, once by the ISP providing the wrong address to the NBN and not being able to fix it and once due to the weather”

“We've been delayed 3 times now, due weather or other issues. Rescheduled for late October. Fingers crossed”

Three respondents commented that they **would not be changing to Sky Muster** for two main reasons. Firstly, because they already have a better option and secondly, because of reported unreliability of Sky Muster, see comments in Table 18:

Table 18: Anecdotal comments from respondents about “still waiting for my install – not changing to Sky Muster”

“Actually have a wireless connection that allows us 50gbs for \$70. Not terribly confident in Sky Muster. Will continue with current provider until my confidence in Sky Muster improves”

“I was looking forward to getting skymuster on, but the more I read the more it seems it is a total disaster of a service. Maybe I am better off with my expensive 3G Telstra service”

“My install is due the 2nd week of October but because of the unreliability and ongoing faults with the Sky Muster satellite. I am working with my RSP to keep my ISS connection activated for as long as possible because there is no other form of internet available”

Three respondents are **waiting for completion of their install**. The supporting comments do not give a succinct reason for their install not working, see Table 19.

Table 19: Anecdotal comments from respondents about “still waiting for my install – completion”

“24/07/16 - placed order for Sky Muster 19/09/16 - equipment installed. Equipment active and blue light on NBN wall mounted box. Installers tested connection - all in order. 29/11/16 - installers return to double check equipment. Equipment tested. All in order. Still no service or connection. Service providers blaming NBN. NBN blaming installers. Installers advised by NBN that system was good to go. Blue light on NBN box on wall. Still no connection and no one willing to take ownership or resolve the issue”

“Install complete but still not activated 5 days later”

“Satellite has been installed but we've been waiting for over a month for the nbn company to connect us”

Respondents who selected “**NO - still waiting for my install**” provided statements about their moving to Sky Muster. Themes include not being happy to pay more for the service and being concerned about the reports of instability of Sky Muster connection and that they are unhappy to move but there are no other options. Others were unhappy about not being able to map their connection to make an informed choice and about the reliability and cost of alternative options, see comments below in Table 20.

Table 20: Anecdotal comments from respondents about “still waiting for my install – moving to Sky Muster”

“We are currently on the old satellite system we are not very happy, lots of drop outs even just downloading emails, very slow speed also. Have been told we will need to move to skymuster before end of Feb 2017 but am not happy to pay more for no better service”

“We are disgusted with this take it or leave it, ‘redundant up front’ expensive, Skyanchor tech, which comes with no service guarantee, consumer protection or advocacy. Expensive to build, slow, latency issues, limited data, decades of pain. A waste of well over \$7000 per household. Every suitable residence should have had wireless first. Incompetence and wastage beyond all belief”

“Will have to have Sky Muster as NO other option available but dreading it because of so many reports of extended outages & constant dropouts. Still on ISS at the moment, no idea when changeover will happen. Regardless any satellite service is better than nothing is but it is a farce that nothing else is available. Anything else would provide a faster, more stable service with more data allowance at half the price! Telstra & NBN & the governments that allow their behaviour are a disgrace”

“I would prefer to be able to access the NBN another way but I found the maps and determining what I may be eligible for so confusing I have applied for Skymuster assuming that is the right connection due to my location and based on information from non NBN sources”

“Currently using mobile broadband but unreliable over peak times (harvest) & expensive”

The final comment included in Table 21 provides a personal reflection that contains extensive information highlighting daily challenges, respondents face to discuss their problem and to find a solution.

Table 21: Participant's personal reflection on daily challenges about service

*"Please note my substantial comment on the BIRRR Facebook site explaining my grievances. It gives a series of failures in this system which is neither rocket science (excuse the pun) or difficult... But I have experienced nothing but problems trying to get to the point I can even speak to a technician...(which I have never done) ... **Problems with incorrect address, poor customer service or even no customer service, [...]** waiting for a response after 4 separate emails stating our service would be connected since June ... **I noted a comment from the CEO of Activ8 stating the phone waiting times have been recently longer than acceptable** ... There has been very unacceptable wait times since June when I had my first notification we were to be added to the NBN ... **I waited 3 hours one day and was never answered.** When I did get through the next day they said they were having some problems with the phone service ... Really... I have made numerous calls over the last few months and none have been answered in under half an hour and most have gone well over, some over an hour ... **And then the responses have been mostly the same infuriatingly patronising response** ... 'Oh we're sorry you've had that experience' ... Or 'We are sorry you've had that experience, someone call you within the next 5-10 business days' ... I feel for those placed in Customer Service who have no control over this and are the ones at the coal-face trying to placate those like me ... **I'm in a situation where when I need to contact Activ8 my stomach turns** and I have to make sure I time it correctly trying to contact them as **it has been such a gruelling process... In essence, I need to be in the right frame of mind. It is very stressful [...]** **The biggest overall issue is that Activ8 as the provider is separated from the installers.** There seems to be **no cohesion between the two. They are essentially separate entities ... Where it should be only one entity ... Not only because it would be more controllable, it would be far more efficient, it would save a lot of money due to installers grouping their jobs but also because there would be more accountability instead of being able to pass the buck...** Also probably, one of my biggest concerns is **the personnel I have dealt with have no clue about those they are meant to be assisting...** And it is **patronising** of many of them to think they do... **They do not realise that there are no other sources of Internet, there are hundreds and hundreds of kilometres between our businesses and nearest business centres, people are trying to educate their children, employees are trying to contact their families and friends... Some from overseas, and trying to run your business and pay accounts, etc** TELSTRA set up a **specific Remote Telephone service for remote people to ring when they had problems.** It is 1800remote ... **The people servicing this phone line have been especially trained to deal with remote people and their unique problems ... Why, why, why has this not been done in a similar manner for satellite internet services. It would give remote families a more even chance at a fair go... What would be so difficult about a technician going to an area and placing all the NBN installations in at one time...** It makes too much sense... No... They come out one at a time ... Hundreds of kilometres each way ... Lots of money for the technician or their company ... Our tax-payers money at that ... **What would be sensible would be for a group to be done at one time ... Less expensive and safer as we all know where the technician is meant to be at all times.** One argument I had with a customer service officer at one stage due to **my application being refused was regarding safety and the use of a satellite phone...** She stated **they had to assess whether the technician really needed it.....***

Only five respondents left comments for the response to Question 1 **“NO - I can access another nbn technology”**. Two were incorrectly included in this section, which confirmed that the participant had been connected (it is assumed to Sky Muster). One stated that the Sky Muster technology will not match what they have now, another is not eligible for Sky Muster and the other was not sure if they were eligible or not for Sky Muster. See comments in Table 22:

Table 22: Anecdotal comments from respondents about “not being able to access another nbn technology”

“Connected today so far so good” (two comments)

“Holding off for now until it appears to work more consistently than now. Hearing of all the spot beam outages, modem problems, installer issues, is making me concerned that the Skymuster service won't match what we have for consistency. No doubt its more cost effective and faster though”

“NO - I can NOT YET access another NBN technology. I was told I will not be eligible for Sky Muster because we are supposed to receive FW in the near future. Next hundred years for certain!”

“We have had a lot of issues with NBN trying to decide whether we are eligible for fixed wireless or satellite, so still waiting!”

Twenty three respondents left comments for the response to Question 1 **“NO - Sky Muster does not meet my needs I am staying with my mobile broadband connection”**. One participant commented that they would not change because they did not want to go backwards as they had had satellite before. Another was connected to Sky Muster for three months but has cancelled the service. Three respondents cited having access to fixed wireless as the reason they would not move to Sky Muster, see supporting comments in Table 23:

Table 23: Anecdotal comments from respondents about “Sky Muster does not meet my needs – staying with mobile broadband”

“Had satellite before. Not going backwards”

“I was connected to Skymuster for 3 'months but have just cancelled service”

“I have been mapped for Skymuster but being only 18k from Toowoomba GPO and 600mtrs from nearest FW NBN I am debating. Firstly I believe Skymuster should be for the bush and available to kids who need it. Then I read of the unreliability. This is absolute crap in my opinion. Then there is the cost and reduced number of players in the retail market. I am still trying to find someone to come and do a test to see if there is reception here as my house is actually 10feet higher on Google than the adjacent one with FW”

“I was advised by NBN and by the Satellite ISP's that i would be placed under Satellite. However, I was advised by Kristy Sparrow that after obtaining coverage maps from her resources, we have been allocated to FW coverage. This is however only a prediction as a tower has not been built yet”

“Surrounded by fixed wireless. Would prefer to be tested for that rather than satellite”

Still on question one “Are you connected to Sky Muster?”, nine respondents elaborated that they were **staying with mobile broadband because it was more reliable, better value and faster than Sky Muster**. Some of the supporting comments are below:

Table 24: Anecdotal comments from respondents about “Staying with mobile broadband – more reliable”

“I have been told by my employer I won't be able to work remotely due to the ping being too high. So I haven't rushed into satellite as I would still have to maintain both mobile broadband and SkyMuster”

“I am hoping to get fixed wifi but if not will likely stay on mobile data as it's better value, faster and is at least reliable”

“The documented evidence on the BIRRR Facebook page, of constant low data speeds and drop outs Does not give me any confidence whatsoever in changing from expensive and limited data mobile broadband, to Skymuster”

“I have not been hearing good things re Sky Muster. I use the internet for work and need reliable internet every single day. I currently have this with Mobile Broadband, even though I pay a fortune for it and can't use the internet for anything other than my work as we have limited data. If we were to upgrade we would like to be able to use Netflix etc, which we wouldn't be able to do on Sky Muster anyway”

“Not totally sold on Sky Muster and fortunately we have an option on a mobile device. There seems to still be disappointment in reliability of this service. We will eventually move over but not confident yet”

There were eleven comments left for the response **“NO - Sky Muster does not meet my needs I am staying with my ADSL connection”**. The following comments state that the main reasons are the restricted data allowances, lack of affordability and lack of reliability.

Table 25: Anecdotal comments from respondents about “Sky Muster does not meet my needs – staying with ADSL”

“I don't believe our business could operate on restricted peak time data allowances I doubt our voip services would cope with the latency of satellite We are located in the wettest part of Australia and have extensive cloud Cover for 3 to 4 months of the year and would expect extended outages I will stick with adsl in the hope that other technologies will be available in the near future”

“I cannot afford Sky Muster, I just stick with the only alternative, slow adsl and large quota”

“It means paying double what I pay now for slow as adsl2 and getting 5 times less data, the wireless tower is 6km away but without line of sight I can't access it, this is totally unfair”

“Slower speed, 1/100th the data allowance, twice the price, higher latency, long log in times (Watching complaints on Whirlpool forums) this is compared to the fully functioning ADSL 1 we currently have. (2TB data, 8MB speed, 22ms latency, unlimited phone (local, STD, mobile) for \$129.00 Telstra business)”

The comment included in Table 26 provides a personal reflection that gives a comparative view of ADSL and satellite.

Table 26: Participant's personal reflection about staying with ADSL

“While the upload speeds would be an improvement over my ADSL2+ connection - the extremely high latency, low data allowances, fair use restrictions, inability to connect low latency based applications/services (VoIP etc) and unreliable nature of satellite services for both data and communications ensure I remain on the ADSL2+ services for as long as they are available. A slight speed increase is negligible for those who already have access to similar communications services when the best aspects of those services would be negated under a LTSS Sky Muster service [huge data allowances, cheap prices, full service capacity, low latency]. Such a minimal increase in speeds is not worth the huge cost of having to duplicate/replicate other services ADSL2+ offer (VoIP, data, low latency) that are otherwise unavailable on the 'next generation' satellite service. The NBN is supposed to be using these satellites as the last resort for the most remote and difficult to reach areas, not as a shortcut to get as many people 'signed on' as soon as possible and 'save money' by not increasing the fixed wireless and FttN footprints. There are towns being serviced in WA by fixed wireless that have less than 100 TOTAL residents - yet towns nearby with hundreds of residents who are 'not commercially viable' to service - yet are 'commercially viable' to put onto LTSS with ~\$7k-9k installation cost per premise. There are no cost benefits to LGA's if they choose to areas switch from a LTSS area to FttN of Fixed Wireless - those 'covering the additional costs' are only available to those who already have FttN planned and want to upgrade to FttP. This is regardless that it will save NBN Co/the taxpayer between \$7k-\$9k per installation - this is not taken from the area switch cost - the entire cost of every aspect of the area switch installs are the onus of the LGA. This is the largest single factor in only having 2 area switches to date - and those are from FttN to FttP”

Respondents were asked to type their providers name in the comments box if they chose Question one’s response **“NO - I can access a non nbn fixed wireless service – please type provider in the comments box”**. Only one participant provided the ISP’s name, the other connected to a private fixed wireless connection.

Table 27: Anecdotal comments from respondents about “I can access a non nbn fixed wireless service”

“I was waiting for 7 months for Sky Muster. In the end, a private connection was developed from farm to farm. so I decided to give it a go. It's more expensive although I am happy with my private service. Skymuster could not give me any time frame. They said in the beginning early April? When they took my 90gb plan from and reduced us to 25gb it was impossible to run the farm business and spent most of our time being shaped and using the mobile phone to pay bills etc when we had mobile reception which was dodgy at times. You always had to check the transaction went through the next day”

Nine respondents who were unsure if they were eligible for Sky Muster selected the response **“NO - I am unsure if I am eligible for Sky Muster”**. One participant purchased a property based on the nbn Co website, but the information was wrong, another was not sure if they were eligible or if it would be better than what they had and another was not sure. See below for supporting comments:

Table 28: Anecdotal comments from respondents about “I am unsure if I am eligible for Sky Muster”

“I have purchased a property due to the NBNC Co webpage confirming I am eligible for Sky Muster access, only to be told today (and long after I signed the contract of sale) that the website is incorrect and the property has no NBN options now or in the known future. Goodbye \$260000 and goodbye career (I work remotely and rely solely on the internet for my entire income)”

“Not sure if eligible and not sure that it will offer anything more than my patchy Telstra mobile broadband currently does. Have heard not very encouraging stories from those who are connected so I am hesitant to connect and find out that it is slower and less reliable than mobile broadband”

“We live 40km north west of Moree NSW and have a very limited wireless internet & telephone service. I have heard about Sky Muster Satellite and I'm wondering if we are eligible”

Question 2: What Australian State / Territory do you reside in?

The majority of respondents came from Queensland (39.5%) followed by New South Wales (28.5%) and Victoria (13.4%). Eight and a half percent of respondents came from Western Australia, 4.8% from South Australia, 2.8% from Tasmania and 2.2% from the Northern Territory. Only two respondents (0.2%) responded from the listed islands (Norfolk Island, Christmas Island, Lord Howe Island, Cocos (Keeling) Islands etc), see

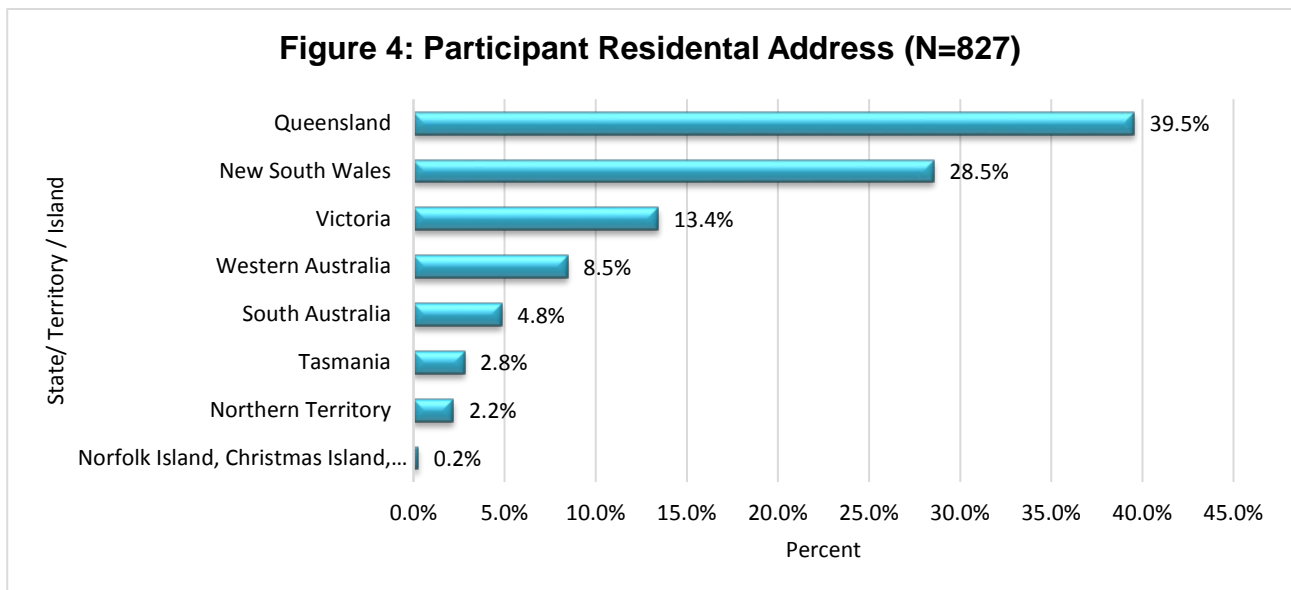


Figure 4: Participant residential address

Question 3: How many people use/ will use your Sky Muster Connection?

Respondents were asked how many people use or will use their Sky Muster connection. On **average 4.8 people will use the Sky Muster connection**. Of the responses, 33.5% of respondents said that 4-5 people use the connection, 32% said that their household had 2-3 users and 15.5% of respondents said that they had 6-7 users. Thirteen percent of respondents said that there was only one user on the household and the remaining 6% have more than eight people who use or will use the Sky Muster connection.

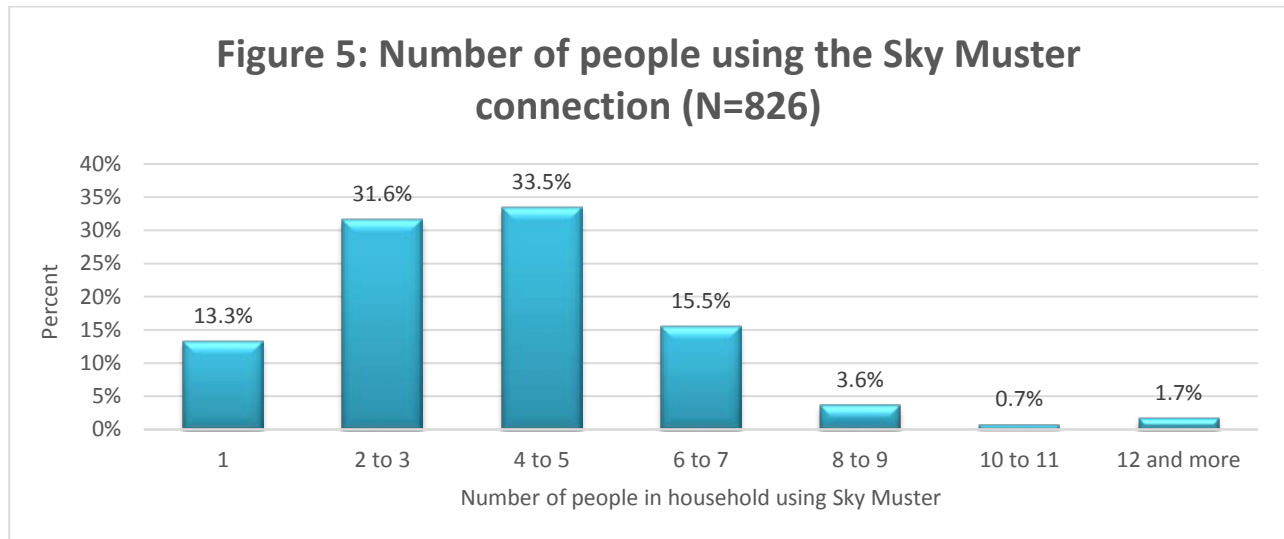


Figure 5: Number of people using or will use the Sky Muster Connection

Respondents were asked to include comments for Question 3. Fourteen respondents commented that some of the people connecting might be Education Queensland students, visitors and kids... when they were home for school holidays. One commented that the current connection was only used for business even though there are six potential users.

Table 29: Anecdotal comments about how many people use your Sky Muster connection

"2 people, but one is Education Queensland high user"

"3-5 which includes visitors"

"6 potential users in this house, but only 1 is allowed to use it for business as there is not enough data for anything else"

"6-10 when other kids are home on holidays"

"Can vary depending on visitors"

"Hundreds, because NG Media have bought multiple accounts for various remote communities in the Gibson Desert"

"One except school holidays, then usually six"

"Usually 2, can be as many as 5 for variable length periods"

"Will vary depending on my wireless broadband working or not"

"With visits from our families every couple of weeks who would also like to be able to use the Internet!"

Question 4: Who is your Provider?

Respondents selected SkyMesh (46.2%) as the main provider of Sky Muster, the next main provider is Activ8me (24.3%) followed by HarbourISP (12.9%). Nearly 5% identified Bordernet as their provider and 3.4% identified ANT Communications. IPSTAR is provided to 3.1% of the respondents, Clearnetworks 2.4%, iinet 1.1% and Westnet and Reachnet supply 0.8% or 7 respondents each, see Figure 6

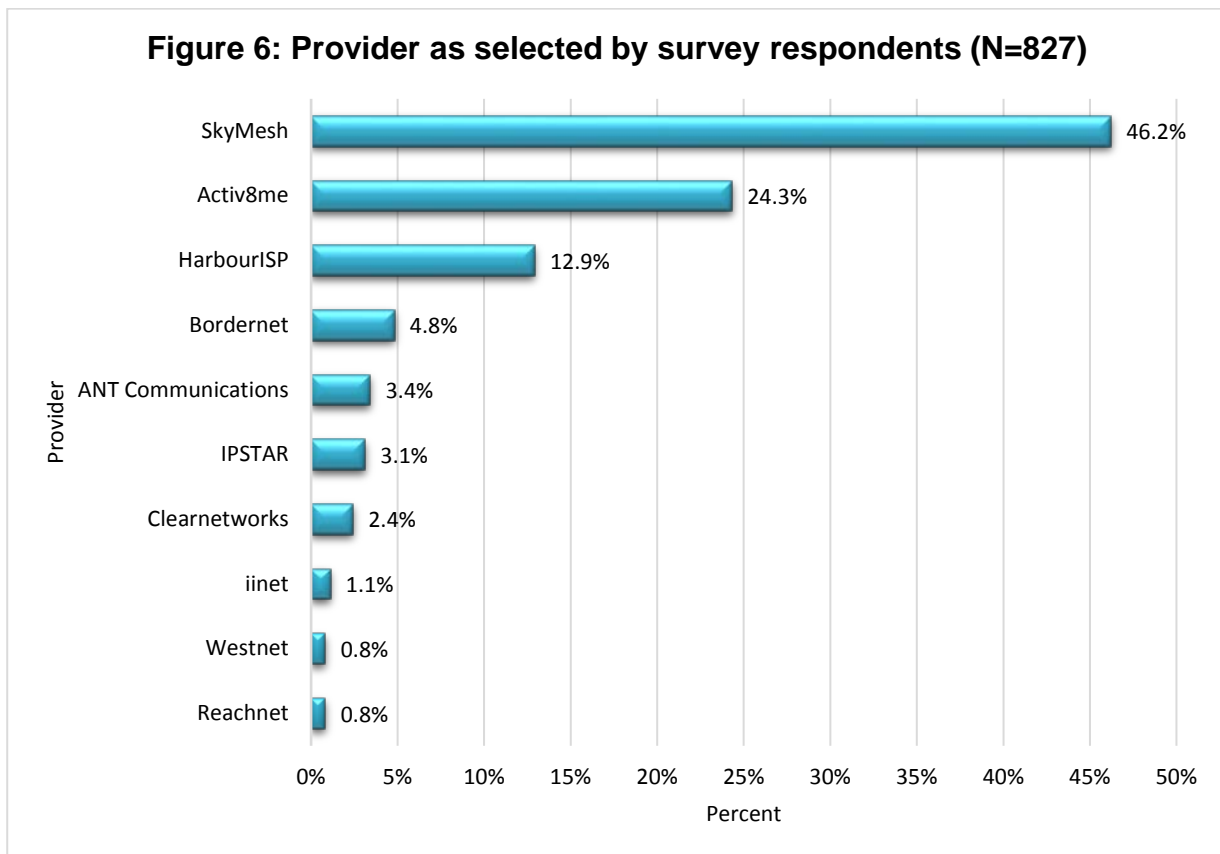


Figure 6: Provider as selected by survey respondents

Question 5: Did you have any cancelled appointments for your Sky Muster Install?

Nearly 18% percent of respondents had their Sky Muster installation appointments cancelled once. Eleven percent had two cancellations, 5.1% had three, 2.5% had four, and 1% of respondents had five installation appointments cancelled. One participant (0.1%) had six installation appointments cancelled and nine respondents (1.1%) had more than seven installation appointments cancelled. Respondents were asked why they are not connected in Question 6. Table 30 to Table 40 contains anecdotal comments from respondents about cancellations.

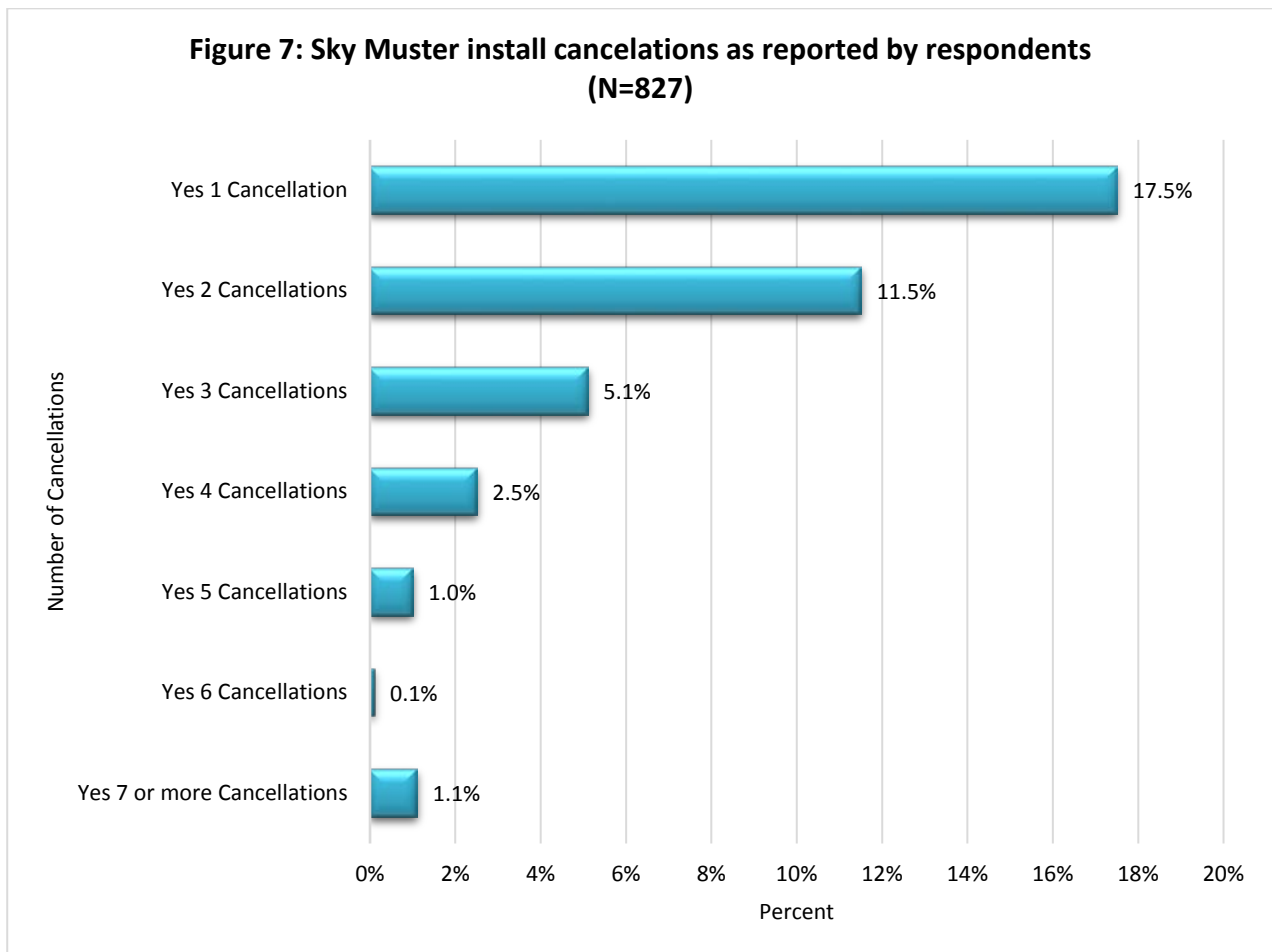


Figure 7: Sky Muster install cancellations as reported by respondents

Question 6: If you are not connected or had cancelled Sky Muster installs do you know why?

Sixteen percent of respondents were not sure why they have not been connected, 16% listed that they have not had any communication from a provider at all. Weather delayed installation for 13.4% of respondents and 12% said there were a lack of installers in the area. Only 8% were having their issue address, and 3% knew it was because of a multi-dwelling issue.

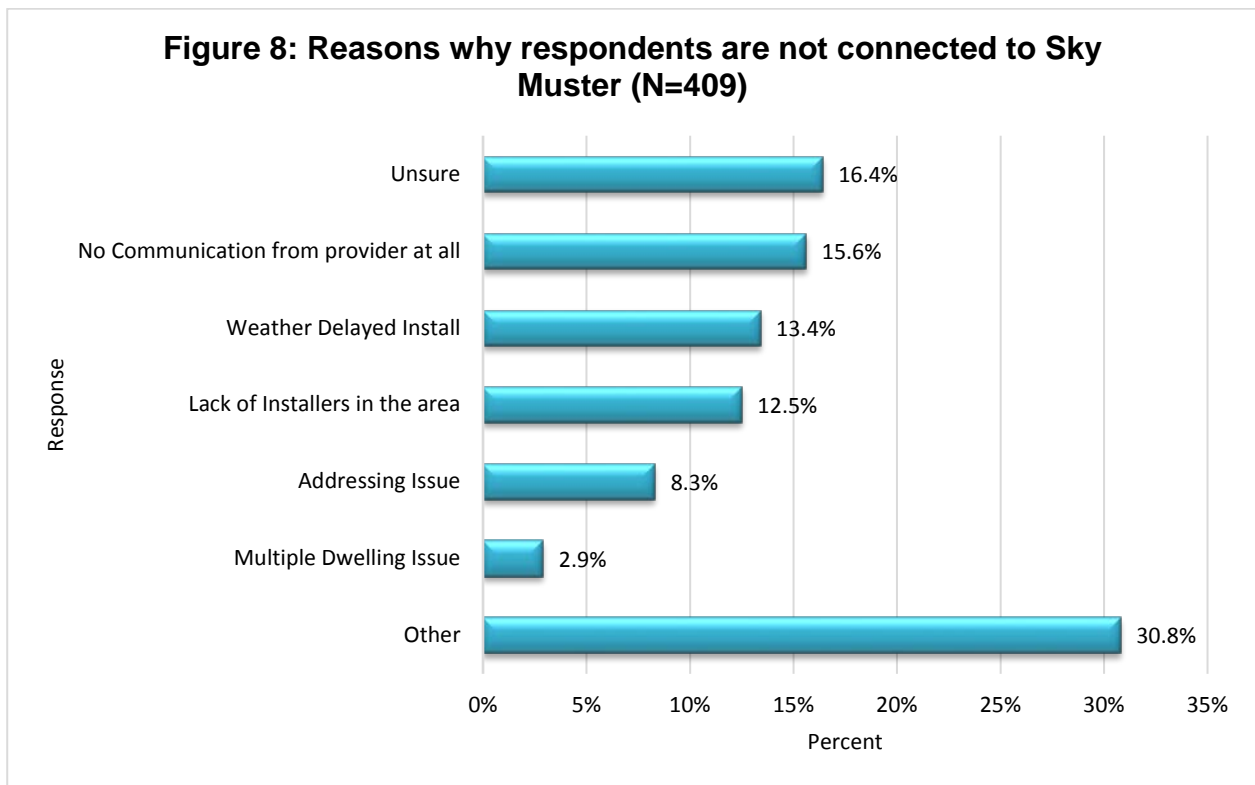


Figure 8: Reasons why respondents are not connected to Sky Muster

The respondents were given the option to select “Other” if they could not choose from the list provided in Question 6. One hundred and twenty five respondents gave an “Other” reason not listed as to why they were not connected or had their installs cancelled. Anecdotal responses were coded into 10 sub categories that describe the main problem in the comment, these are summarised below. The categories include:

- | | |
|--|---|
| Table 30 - No reason given (22) | Table 36 - Poor Communication (10) |
| Table 31 - Did not have the correct equipment/
information / incompetent installer (18) | Table 37 - Still waiting (10) |
| Table 33- Installer did not turn up (13) | Table 38 - Vehicle Breakdown or Accident /
weather (8) |
| Table 34 - Non Standard Install (12) | Table 39 - Incorrect Installation Date (6) |
| Table 35 - Participant cancelled (9) | Table 40 - Other (4) |

Each summary is supported by participant comments, of which examples are listed in the Tables 30 to 40. Note that not all comments are listed.

Twenty-Two respondents responded to **Category 1, “No reason was given”** for why they are not connected to Sky Muster. Some of the comments noted unforeseen circumstances as the reason. While others simply said that, no reason was given for the cancellation.

Table 30: Anecdotal comments about Category 1, “No reason was given” as to why the respondent is not connected

“Appointments cancelled at last minute. No reason given” (ten participant comments)

“The first was cancelled, can’t remember why, but when they called and cancelled, another appointment was rescheduled straight away”

“Some appointments were cancelled with no reason, some were re-scheduled by Skybridge with communication, another installer ‘called in sick’, some just failed to turn up with no communication”

“They cancelled this appointment, but have been expecting to get an appointment for over 3 months since they 1st said they’d be coming in the next couple of weeks. Finally got the date and cancelled this morning with no new date”

“4 x ‘unforeseen’ circumstances” (five participant comments)

Eighteen respondents responded to **Category 2, that either “the installer did not have the correct equipment, the correct information or the installer was incompetent”**. Some comments indicated that equipment was missing or unavailable and some comments identified miscommunication and others indicated that the install was not activated properly. All of the comments implicated the installer as the persons responsible for the connection not being completed. The comments below are a sample of the respondents comments.

Table 31: Anecdotal comments about Category 2, that either “the installer did not have the correct equipment, the correct information or the installer was incompetent”

“First time the roof needed a bracket the supplier didn’t have; next appointment cancelled by Skybridge day before; subsequent appointments no-one bothered turning up or phoning. I ended up getting an installer’s phone number and arranging an appointment with him directly”

“There has been some confusion about the possibility of me connecting to fixed wireless which has led to me being taken off the list for Skymuster more than once. The people at BIRRR are working on this for me”

“Lots of reasons: Installer had wrong equipment; installer didn’t turn up; no communication from installer; provider said it was out of their hands and stopped helping, etc”

“Installer didn’t do satellite installations, the job had been allocated to the wrong person

“My first install was completed but not activated properly, the technician had to re visit”

“I was one of the first few people to have the install done by the installer. He simply did not know how to complete the install; he came to my house 4 times and spent possibly 10-20 hours at my house”

“Incompetent installer. He claims he was told by customer (me) that he needed a 4wd to access property (despite sealed road to door) thus cancelled. I never spoke to the man”

Some respondents were able to tell their lived story through personal reflection. For example, Table 32 tells of how an installer’s attitude resulted in a less than optimum install.

Table 32: Question 6 - Participant's personal reflection about an incompetent installer

"We currently have 2 satellite dishes on our roof, one decommissioned (when the current satellite dish was installed by Sky Bridge we were told we would have to remove the old one ourselves, the other we are currently using. Sky Bridge (satellite dish installers) organised an install (of a third satellite dish) the new hardware for the Sky Muster satellite so it is ready when our current satellite is decommissioned in Feb 2017, (we have not signed up to a new plan as I am not happy to pay more for service which is not better than I currently have.) However we were not happy with where the installer wanted to place the dish, he wanted to place a third dish on the roof, therefore three news sets of holes, scratches etc. on our roof, not to mention 2 ugly satellite dishes which we would have to remove and dispose of ourselves at our own expense. We asked if the Sky Muster satellite dish could be placed where the decommissioned satellite (mentioned above) was, the installer said yes that it could but he could not wait for my husband to remove it, as the installer was not authorised to. My husband would have completed the job immediately while the installer was installing the new cabling through the roof for example but the attitude of the installer was that he did not have time (as he said he is only allocated 2hrs per install) so he left without completing the job"

Thirteen respondents responded to **Category 3, "The installer did not turn up"**. Respondents noted the installer being behind schedule, the technician being in the area on the wrong date, the installer got lost or was given the wrong GPS coordinates, or there was not a technician available that day. See the following for a sample of anecdotal comments from respondents.

Table 33: Anecdotal comments about Category 3, "The installer did not turn up"

"Installer behind in schedule"

"Morning install ran over and installer underestimated distance to our location. Ignored instruction not to use GPS the next day - got lost etc etc"

"Installer got lost and didn't call my mobile for directions, -install company couldn't contact install technician"

"No-shows. Several times have had multiple confirmations in the days prior on the one install date and then no-shows"

"Nbn cancelled due to lack of installers twice. The next time the contractor had to cancel as nbn sent them elsewhere"

"Sickness..."

"Technician was in the area earlier on an earlier date"

"No technician"

"Cannot get tech to my area, Hills do not contact me, wait around on property in allocated time and tech does not show up. Nor does anyone call"

"Incorrect GPS for installer"

Twelve respondents responded to **Category 4, that they had a “non-standard install”**. In many instances, it was classed as a non-standard install. The roof was too high or unsuitable, the house had a steel frame, in other cases, the install was for a schoolroom and the information was incorrect. In one instance, the respondents address was “too remote”. See the following for a sample of anecdotal comments from respondents. .

Table 34: Anecdotal comments about Category 4, that they had a “non-standard install”

“Dwelling too high so they say then came out again and didn't have the go ahead so made another appointment going to be another month”

“First installer said a steel framed house is a non-standard install”

“Roof apparently unsuitable. Need a pole”

“Roof too high for ladder”

“Roof too high, but we weren't told that until we escalated and chased and chased it up”

“They came and went and had to come back to do a ground mount pole install as our roof profile was wrong even though we already have the interim satellite sitting up there along with 2 other satellites”

“We were too remote!!”

“Also, once I had managed some contact, provider had totally misunderstood my request for a separate install for school room and then had issues with billing name as I wanted it to be separate from our business account, so I think all of that has possibly added a couple of months onto the wait”

Nine respondents responded to **Category 5, the “participant cancelled their appointment”** for why they are not connected to Sky Muster. Some of the comments noted problems that had been identified with Sky Muster as the reason they cancelled, others were not available on the install day and others were travelling or completing renovations. The remaining reasons were a medical emergency and lack of communication. Following is a sample of anecdotal comments from respondents.

Table 35: Anecdotal comments about Category 5, the “participant cancelled their appointment”

“I cancelled 2 installs due to the unreliability and faults with Sky Muster”

“I cancelled the installation because of the problems reported on Whirlpool forum”

“I was not available on the NBN selected day”

“We were unable to keep appointment date due to a serious sudden medical emergency. We were not able to be home for install”

“The first we had to cancel as we were away for 2 weeks at ICPA Federal Conference in Perth”

“Their stated install date clashed with me travelling. Rescheduled OK”

“Undertaking renovations so delayed install. That didn't stop NBNC calling me 5-6 times to book an appointment even after I said I wanted to delay for a couple of months and got an install date 4 months out”

Ten respondents responded to **Category 6, that “poor communication”** resulted in them not being connected to Sky Muster. Communication issues include not being able to contact installers when circumstances change, and a lack of communication between the provider and the installer. Following is a sample of anecdotal comments from respondents.

Table 36: Anecdotal comments about Category 6, that “poor communication”

“Communication issues - they text me an install time and when I tried to contact them was unable to get thru for hours so lost my spot. This happened numerous times. It was eventually resolved”

“Email from the provider went astray”

“I contacted my provider in June to ask why I had heard nothing several months after applying and was told I was in line and would not have my installation before October. I have heard nothing since”

“Hills confirmed appointment but did not tell local island installer. When in direct contact with installer, all went very well. Hills were useless”

“Tech & Provider told me different dates and information (they didn't communicate between themselves properly)”

“They kept putting the appt on the day I couldn't be there due to work commitments, they kept saying they will pass that on, but it happened over and over and over and over and over again!”

“We received an email from Hills (the head contractor) advising an installation date that we advised was unsuitable as no one was available to be present at the installation. Repeated phone & email requests for a new date went unanswered from Hills. I contacted both NBN & Skymesh who provided a new date & only received a call from the actual installer a few days before he was due. I complained to both NBN Co and Skymesh about the lack of communication from Hills and was advised that they could nothing about it”

Ten respondents responded to **Category 7, that they were “still waiting to be installed”** resulted in them not being connected to Sky Muster. Mostly the comments surround waiting for the booking to occur, with one person commenting that they were responsible for the delay because they “had to get some trees cut down”, other delays were due to recent applications. See below for a sample of anecdotal comments from respondents.

Table 37: Anecdotal comments about Category 7, that they were “still waiting to be installed”

“We had to get some trees cut down”

“Applied just days ago”

“Applied March 2016 still waiting for installation!”

“Awaiting appointment for install due in 3 weeks”

“Have been advised an install date”

“Install date is October 17th so far hasn't been cancelled”

“Still awaiting first appointment so unsure what will happen”

“Waiting to be installed - have been given 25 November for installation. There was an email that seem to have gone astray to confirm my interest to begin with”

Eight respondents responded to **Category 8**, that **“Vehicle breakdown/accident or weather”** resulted in them not being connected to Sky Muster. Some of the frustration surrounding vehicle breakdown or accidents was that respondents were not notified of the cancellation. Other comments were simply about weather delays. See below for a sample of anecdotal comments from respondents.

Table 38: Anecdotal comments about Category 8, that “Vehicle breakdown/accident or weather”

“Don't know why they cancelled. Once was a broken down vehicle”

“Sometimes it was lack of interest by the installers either “forgetting” or being 6 hours’ drive from our location on the day of the appointment. Also car troubles, an accident and once it was cancelled without advising us”

“Well the installer got bogged...”

“Installer fell off a roof 3 days prior to install and install company knew about it but didn't cancel his appointments. Even when I rang because he hadn't arrived they took ages to work out why”

“First time the installer had a vehicle accident on his way to our place, rest weather related”

“[Two were] weather delayed. First time they rang back to tell us they'd given us the wrong date it was already booked”

“Other than the weather delayed, the guys were excellent”

“Raining couldn't go on roof then we went back onto the wait list for 2 months before it was installed”

Six respondents responded to **Category 9**, that **“Incorrect installation date”** resulted in the respondents not being connected to Sky Muster. Install dates were cancelled by both respondents and installers because they were booked on public holidays and in some cases the company did not realise. In one case, the installation was brought forward to fit in with the neighbours install. See below for a sample of anecdotal comments from respondents.

Table 39: Anecdotal comments about Category 9, that “Incorrect installation date”

“Hills scheduled my install for a public holiday and didn't realise till I called them to question it, then I was rescheduled for 2 weeks after original date”

“Install first booked on a public holiday”

“Installation brought forward - worked in with neighbour which made sense”

“It was a public holiday in NSW but a team in Qld set up an appointment. The provider didn't turn up obviously but no one called me and I had to schedule a new one”

“My first installer was apparently on his way to Darwin, and I was told to reschedule. My second installer had satellite connectivity issues in my location, and advised me to re-schedule. As a Fi-Fo worker, I had a telephone arrangement with Hills to have the install done when I am home on 16th December. To my surprise I received an email offering me the 17th Feb, when I will be back at work. My next time home from that shift will be mid March. NOT HAPPY!!”

Four respondents responded to Category 10, that there was some “Other” reason that resulted in them not being connected to Sky Muster. One of the ‘other’ reasons for not being connected was

that nbn need to do further testing, the booking was re-instated within 3 days. Another was because the installer arrived at the property in the dark, and one participant purposely selected a company that they were not signed up to in the survey, so they could put in a statement about feeling anxious about signing up to Skymuster (this person ended their survey at Question 8).

Table 40: Anecdotal comments about Category 10, that there was some “Other”

“First order cancelled at the direction of nbn Co so they could run a check on the GPS coordinates of our property to ensure skymuster only available service. They could not run this check whilst an active order was in the system. Order reinstated 3 days after cancellation mid September”

“I have put ‘Skymesh’ as our provider above (no option for non-customer or potential customer). We are terrified of signing up to this Skymuster service, because once we all do, game over for a decade”

“We were on the trial but our issue started after the official Launch”

“Got to my place as it was getting dark?????”

Question 7: Do you have an education port plan?

Eighty three percent of respondents do not have distance education students. Only 4.8% of respondents have an education port plan on Sky Muster. Nearly 7% are eligible, but are not connected yet, 2% are a home school/education family that are not currently eligible, 2% live in a state that has not worked out their ports on Sky Muster and another 2% are still waiting for their provider to connect the second port .

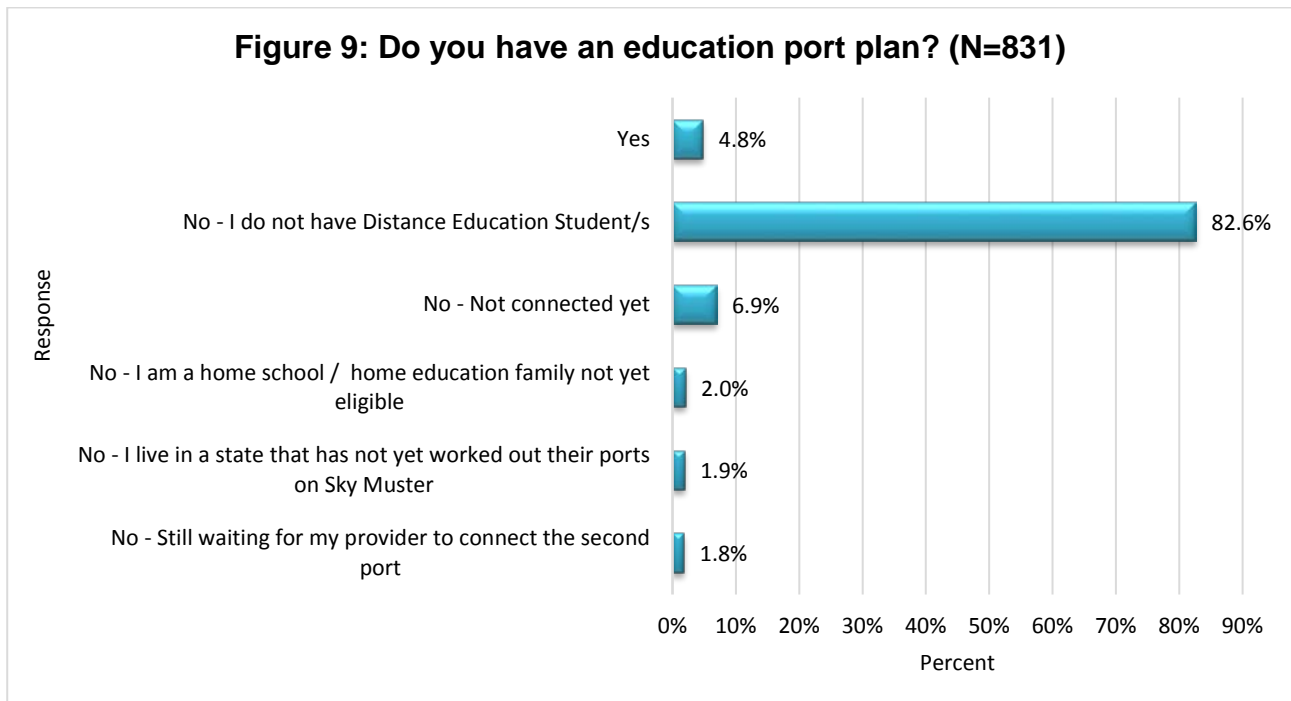


Figure 9: Responses to the question "Do you have an education plan?"

A cross tabulation of Question 7 and of the comments left by respondents for Question 7 identified responses associated with each of the answers adding some context to participant responses.

For example, of the respondents that said that they “**did have an education plan**” three comments were offered. One participant said that they had a three-student education port plan, which gave them 150GB of data, another said they had Kimberley School of the Air education plan on the old satellite and the other said that although they had an education plan, the internet was unreliable, with no internet for days. Supporting anecdotal comments from respondents are included below.

Table 41: Anecdotal comments about “having an education plan”

“Three Student Plan - 150gb”
“We have Kimberley school of the air one the old satellite”
“Unreliable also with no internet for days”

Of the respondents that said they “**did not have distance education students**”, most comments indicated concern that students enrolled in University or TAFE courses were not eligible for an education port. The respondents were next concerned that their kids who lived in RRR areas and went to mainstream schools, could not access the education port at home, where there was not enough personal data or connectivity to keep up with educations demand for data. Respondents also commented that the price of plans for broadband are too expensive so they chose to go with Sky Muster. Other comments included that respondents who work in education struggle professionally because they cannot access the education port plan or because their Sky Muster connection was unreliable. The final comments highlighted that the respondents did not know how to access the education ports. Supporting anecdotal comments from respondents are included below.

Table 42: Anecdotal comments about “did not have distance education students”

“But uni via distance education. Not eligible for ed port”
“But would like it for university studies to have access to an education port”
“Does not apply to tertiary education which I would like”
“I am a distance education student but it doesn't count for uni student”
“I am enrolled in online learning through TAFE and find it difficult to connect to tutorials”
“But we do have 2 Toowoomba Grammar day boys (3 next year) and their demands for data are huge. This is the only reason I have gone with Sky Muster. I wish I could stay with Wireless Broadband, but the plans are just too expensive for the data levels”
“However I do have a Year 12 child in 2017 with currently no data available for his study needs!”
“I do have a distance education qualified student but send him to regular school due to unstable Internet”
“Would love an education port, although my daughter who is in year 10 goes to the local school.....she would benefit greatly from having the extra data to do research for homework and assignments!!!!”
“No, but most work on Sky Muster is to do with Education Queensland. And loosing data and drop-outs are not appreciated”
“But I am a teacher and have struggled professionally”

"I will be using distance education in 2018.... I'm not sure when or how to get an education port"

Of those who are **"not yet connected"**, most said it was because they had not applied for a distance education port. Some respondents said they did not know it existed and another said they had asked about it but had not had a response as yet. One respondent cancelled the education port, as they could not justify another bill, while another said that distance education was not available to them. Another comment says that the respondent's connection is unstable. Therefore, they will not apply for a second connection that may also be unstable. The final two respondents have children going to mainstream school or they are using a different connection even though they are eligible for a distance education port. Supporting anecdotal comments from respondents are included below.

Table 43: Anecdotal comments about "not yet connected"

"Haven't yet applied, but it will be needed by next year"

"How do I apply? Am I eligible? I am a grandparent with responsibility for student grandchildren three days per week?"

"I am doing ekindy next year and haven't looked into this option yet but need to ASAP"

"I am starting dist. ed next year"

"No. I haven't applied even though I believe I would be eligible"

"Didn't realise such a thing existed"

"I don't know how to answer that. I don't know what an "education port" is, but it may well impact our second dwelling install for our new employees who have three children all doing Dist Ed. They currently have nil internet and are not in a mobile service area"

"Live rural, but children educated locally (school is 52km away). Education option should be for all rural children, not just those in distance education. They require internet for their education, regardless of the location of that education facility"

"Asked about it and haven't had contact back about it"

"I cancelled the ed port account as I could not justify another account/bill".

"Adult distance education and online courses cannot be completed here"

"I am having enough trouble with my house connection and don't want to pay for another that possibly won't be stable either"

"No I did not take this option. I do have a distance education student but am using another connection"

The respondents that are “**a home school/home education family not yet eligible**” mostly commented that they did not know that the distance education port was available. One participant commented that they have been trying to get an education port for their three children who are home schooled with the department of education. Another did not apply for the education port but did not say why and another said that the internet issues meant that distance education was not a viable option. Supporting anecdotal comments from respondents are included below.

Table 44: Anecdotal comments about “a home school/home education family not yet eligible”

“I had no idea this was available”

“I haven’t even heard about this and I home-school four children full time!”

“I’m still trying as I have three children being home schooled with the Dept. Home Education”

“No. I don’t know what this is. How do I get it?”

“We are a distance ed family but I didn’t apply for the ed port”

“Our internet issues mean that DE is not a viable option and using paper resources to home-school my three children”

There were some respondent who were “**still waiting for their connection**”. One respondent who is outside of Queensland commented that they did not know what an education port was or how to get one. Some respondents were still waiting for their provider to connect the second port. Of the responses who are still waiting, one has been following up with their provider for five weeks to activate the education port, and another needs to provide the forms. One other did not know what an education port was and now that they know what it is, they are waiting to be connected. The final comment states that the education port is connected but is not functioning, but they are still being billed for the port (see Table 132).

Table 45: Anecdotal comments about “still waiting for their connection”

“I was not made aware there was an edu port plan as such. I was just told what it was!”

“I have been contacting Activ8 continuously for 5 weeks since our Sky Muster install trying to get the Ed Port activated with still no success”

“Need to give in the forms”

“They say it is connected but not functioning yet but still charging me. Playing phone tag at present with long waits”

“No. I don’t know what this is. How do I get it?”

Question 8: Did you have any issues with your Sky Muster Install?

Just under half of the respondents had issues with their Sky Muster Install. Of the respondents that did have issues, 12.8% were not yet installed and nearly 10% had appointments cancelled. Eleven percent were installed but the Network Termination Device (NTD) did not activate when installed and for 1.7% the NTD was faulty. Another 10% of respondents had some other issue, which are discussed below.

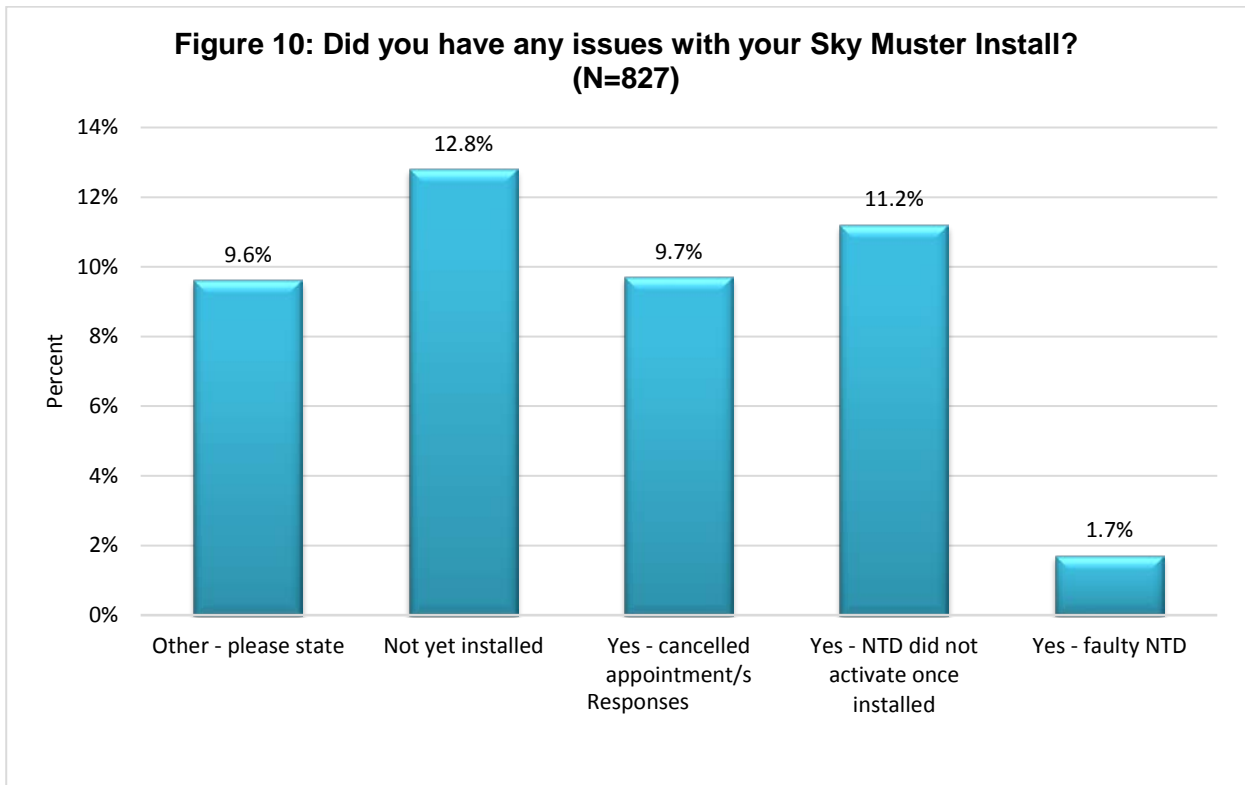


Figure 10: Did you have any issues with your Sky Muster Install

The respondents were given the option to select “Other” if they could not choose from the list of answers provided in Question eight. Nearly 10% of respondents gave an “Other” reason why they had issues. The responses were coded into similar themes and are presented in Figure 11.

Figure 11, below highlights some of the emerging themes for issues with the Sky Muster. Response themes are similar to Question 6 and include comments from respondents that they were unsure (20.8%) about what the issue was with their install, that they had no communication from the provider (19.9%), that the installation was delayed by the weather (17.1%) or that there was a lack of installers in the area (15.8%). Nearly 11% had addressing issues, 3.7% had multiple dwelling issue and 0.3% registered with nbn but did not sign up with a provider. The remaining 38.8% formed other comments, which are discussed below.

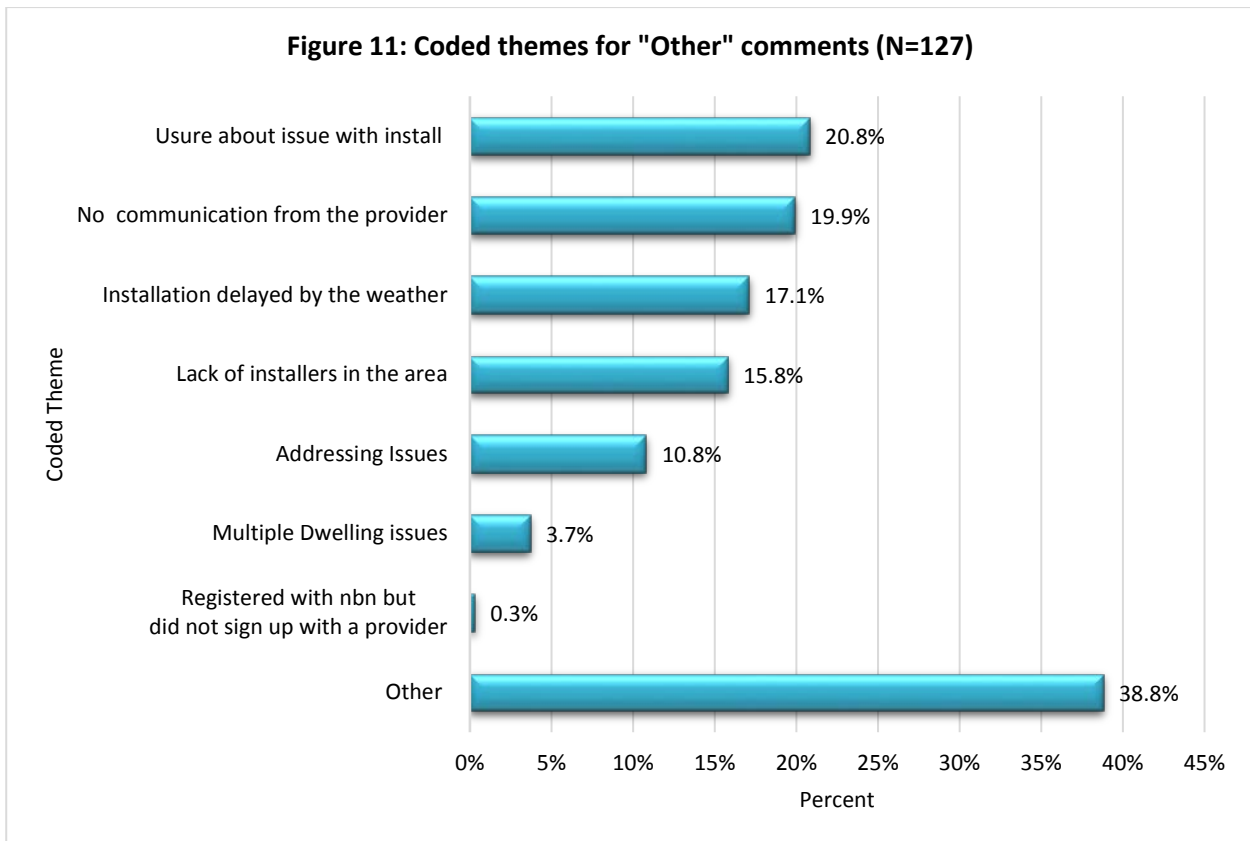


Figure 11: Other comments for Question 8: Did you have any issues with your Sky Muster install

A cross tabulation compared anecdotal responses with answers selected in Question 8. The findings are summarised below and anecdotal comments are used to support the summary.

Respondents who answered “no” included some comments about their “**install experience**”. Some of the comments included that the install went well, but there were post install problems for example, a power cable was not plugged in, which was a minor issue that was sorted out quickly. Another comment was that the install went well but the Ed Port was not working. One participant had some tiles left off the roof, which caused other damage to their property, but the install worked correctly. Two comments provided compliments for the installers. A selection of supporting quotes are included in Table 46.

Table 46: Anecdotal comments about “Issues with your Sky Muster Install - respondents install experience”

“Discovered power lead not connected after installer left.....but we worked out the reason for lack of service quite quickly!”

“The actual Skymuster install was fine but they can't seem to get the Ed Port to work”

“Great service, juggled bad weather - very grateful for his determination!”

“The installer rang the night before to confirm my appointment, arrived promptly at 7am as arranged and started work immediately. They were both very pleasant and cleaned up after themselves”

“I have said no because it would seem not... except for tiles being left off and then it rained and the kitchen became awash. I also think the Modem? does not work

correctly it never rests even when I turn the laptop off and my usage seems to have escalated”

Four respondents commented that they had a “**faulty Network Termination Device (NTD)**”. One participant had several return installations before the problem was corrected and another waited for three months to have their NTD replaced. A selection of supporting quotes are included in Table 47 below.

Table 47: Anecdotal comments about “Issues with your Sky Muster Install - faulty Network Termination Device (NTD)”

“The wrong NTD was installed”

[...] Two installers turned up on the one day for appointment 7 - unknown to each other. Installed on appointment 7, but not working. Two more weeks later, on appointment 10, the installer replaced the NTD box and finally got it working”

*“**NTD was faulty - took almost three months for NBN to allocate an installer to replace it”***

*“First installation try, **the installer didn’t carry more than one NTD modem**, so when it wouldn’t work he had to end call and I had to wait for it to be rebooked. Ended up having to ring Hills and the installer to get it rebooked. **When he came back he said he couldn’t get the satellite to line up due to the weather. Had to wait nearly two months to get installer back to finish the job** and when a new guy turned up he **said the second modem was also faulty** and that **the reason the first guy put ‘weather’ as the reason for ending the calls each time is because if he had put faulty equipment he wouldn’t have been paid because they are supposed to carry spares**. He also fixed a hole in the outside wall that the first installer didn’t close up (apparently they’re supposed to close it to ensure rats don’t get in). **He also said he shouldn’t have put the dish on the garage roof as that was simply lazy installation** and should have installed it on the side of the roof closer to where the modem was being situated. **Thankfully the last guy was on the ball and got us all sorted”***

Respondents to Question 8 commented that they had problems where the **“NTD did not activate once installed”**. Some respondents waited for between 6 and 21 days for their NTD to activate. However, one participant commented that they waited 9 weeks for activation. A selection of supporting quotes are included below.

Table 48: Anecdotal comments about “Issues with your Sky Muster Install - NTD did not activate once installed”

“12 days wait before activation”

“It took 8 days to be active once the hardware was installed”

“Took 9 weeks all up. Had an installer also sent to old address? After installation it took a week to final get active only after I rang Hills myself to complain...too many South Africans making promises at Westnet & a number of departments”

“My installation is still offline after 21 days !”

“Took 6 days before it was activated”

“NBN & installer both could not tell me who my ISP was. I rang all isp's twice before Harbour ISP realised I was with them after all. This took 2 days and approx 10 calls each with hold times over 40 mins”

Twelve respondents reported having **“cancelled appointments”**. None of the respondents noted a reason for the cancellations in this set of comments. Previously, cancellations were said to be due to weather, getting lost, car accidents, no equipment, jobs over running and incorrect addresses given. A selection of supporting quotes are included below.

Table 49: Anecdotal comments about “Issues with your Sky Muster cancelled appointments”

“1st allocated company (skybridge?) Claimed heritage listed house & its not. Then had no record of my allocation. Also clear reference number I could use when communicating with installers initially”

“First connection in May was good, second one, they didn't turn up, I rang and asked where they were, and they told me the guy wasn't coming that day but they forgot to inform me. I had to wait another 2 weeks for them to turn up”

“[...] only the one cancellation. Second one was successful and was up and running within a couple of hours. Mind I think I questioned the young fellow to the point where he wasn't going to leave until he knew I had my connection. So thanks to BIRRR for that”

“Installed incorrect address”

“Multiple cancelled appointments until allocated to Hills. They were persistent to make contact, followed up. The actual installers (Laser Electrical, Swan Hill) were very professional, efficient & helpful. Activ8me were also very helpful”

Respondents included “other” comments about issues with their installation. Comments mention parts being replaced, faulty modems, and delays to the installation as well as simple errors such as cords being mounted to the wrong place as reasons for issues with installation. Some of the issues were to do with programming, while others were about placement of the dish. Other issues included being activated but not receiving a modem and lack of experience. A selection of anecdotal comments has been included in Table 50 that represent the majority of comments given by respondents.

Table 50: Anecdotal comments about “Issues with your Sky Muster – Other problems”

“We were connected to Sky Muster in August 2016. There have been frequent outages. Since 27 November we have had no connection. After two weeks service people came out and replaced modem, cable and part on satellite dish. Still not working and they said it was a problem with nbn. We have not been able to get the problem fixed as at 3 January 2017 which is causing much frustration as we work from a home office”

“Faulty modem causing routers to fail”

“Even though the equipment was installed as a beam testing site once the service was commercially viable it still took nearly 3 weeks to have our service activated as the NBNco claimed they 'didn't know who we were or where we were”

“Guy put cord in wrong port”

“[programming issue we had two lots of installers the second lot spent the whole day here to no avail”

“3 different installers all suggested different locations for dish, very little coordination between installers”

“Activated but no modem. Unable to use system for over a week. Had to ring and negotiate change of activation date to avoid being charged for week of no use”

“Installer could not establish connection, left job advising that I should contact provider to rectify fault. Fault was faulty modem and despite contacting NBN that were not interested as the installer had recorded that the job was completed. After complaining to local member, (Cathy McGowan), service provider (SkyMesh) and the Ombudsman, NBN finally opened complaint case and rectified problem with another installer attending and replacing faulty modem. Biggest complaint was that I could not report a complaint against the NBN”

“Installer left muddy boot prints through the house”

“Installer should have consulted more about where to put box and conduit. Said he was going to put it at x but then put it in different spot - takes up desk space- even though mounted on wall”

“Installer was due early morning but didn't arrive until lunchtime. Inexperienced installer. Wasn't willing/able to run cable to my nominated wall position, and didn't have wall mount for NTD so I had to have the cable run to a shelf so it could free stand. Installer also didn't have laptop, so I had to use my own laptop to qualify the service. Installer didn't have label printer, so he handwrote the sticker for the NTD (a new one was later mailed out). Overall a bit of a debacle, to be honest”

“Installer was instructed to take away an existing satellite disk. Ours is a new building with no prior satellite service. It took about two weeks after installation for NBN to configure our port so we could access the service. We had about 3 separate notices of installation after installation was completed”

Some respondents were able to tell their lived story through personal reflection. For example, Table 51 shares a story about issues with installation.

Table 51: Question 8 – Participant’s personal reflection about issues with installation

“It worked beautifully the first night, thereafter it was sporadic and still is. This week it has been great but I am sceptical it will stay that way given the record. I stopped reporting problems because no one is ever available to take call/troubleshoot, I register for call backs but they always call back at unsuitable times. I have sent emails and I get a reply that someone will call. I just roll with it now, some days it works as promised mostly it doesn't. I have kept an old ISS Harbour ISP "test connection" and it has been a great backup. We were one of the early ones to get connected. My in laws, who have an ACTIV8 ABG connection, registered for SKYMUSTER months ago, they have had a lot of dramas and are still not connected. Recently, after being given a date for install, they were disconnected and told the reason was that they now had their new Skymuster connection and so the old one was turned off. This was not the case and it took about a week and many long telephone calls to reconnect to their original ABG, they were told that they would now get a new install date, I don't think they have that yet. I have wasted countless hours trying to fix Internet connection issues, been passed from ISP to NBN to installer and back again. I have found that rarely has the problem been at my end but it takes many hours to establish that. I no longer bother with any of it, I liken it to banging my head against a brick wall!! We live in a modern country, Australians should have access to reasonable Internet. Perhaps remote Internet services should not be privatised”

Question 9: Are you happy with the customer service given by your provider?

When asked if the respondent was happy with the customer service given by their provider, 58% selected a happiness scale from six (moderately happy) to ten (extremely happy), indicating that they are happy with the service from their internet provider, only 12% were extremely happy with the customer service received. On the other hand, 42% of respondents were unhappy with their service from their provider (responses combined from scale 5 moderately unhappy to 1 extremely unhappy), with 12% also being extremely unhappy.

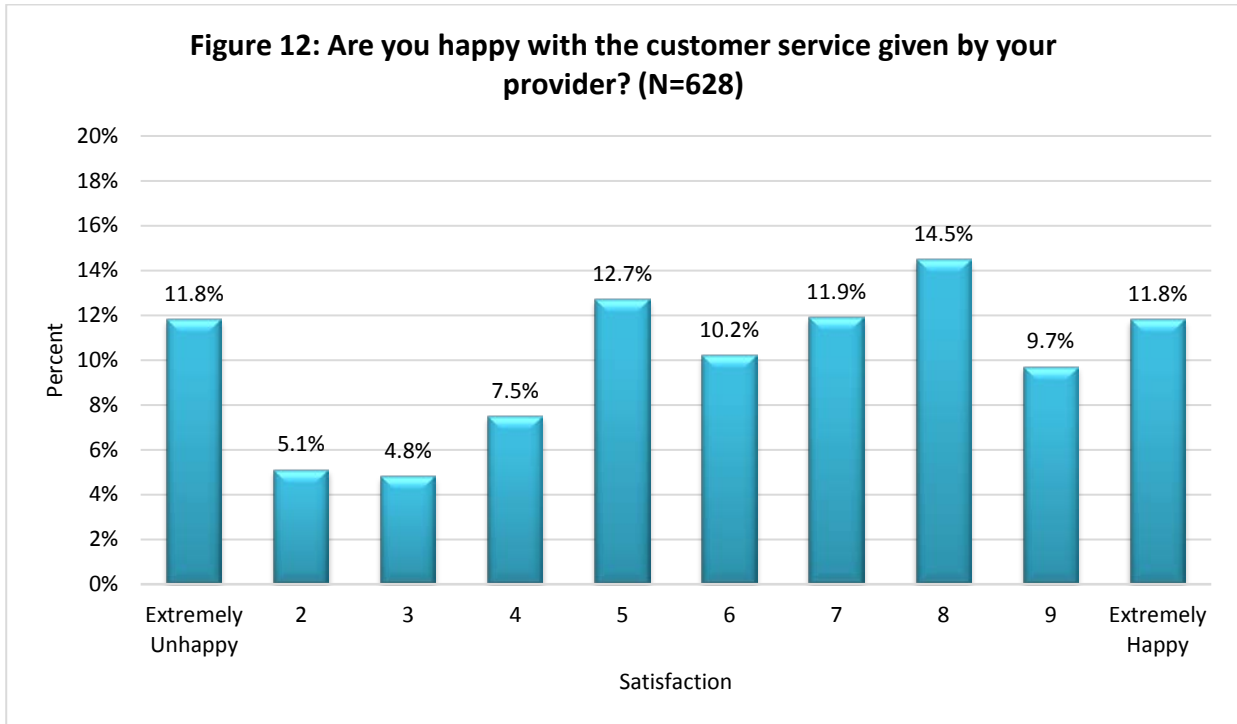


Figure 12: Satisfaction rating given to the provider for customer service as rated by the participant

The preliminary analysis of the supporting commentary identifies that respondents are not happy because of slow response rates, that they cannot get through to the help desk and when they do there are very long wait times, which often lead to promised call backs that never happen. The more positive comments support their providers and mention great customer support, generally helpful, pleasant, and that their providers call back.

“Activ8me try but never understand the inability to sit in front of the computer /modem due to no mobile service and no home connection. Support cannot help if you are not in front of your modem. They did try email but after first one and a response from me after completing advice in email never heard from the email side again”

To further understand participant responses, a cross tabulation compared anecdotal responses with answers selected in Question 9. The comments were sorted into groups according to the ranking of the question (1 extremely unhappy to 10 extremely happy) and then coded into customer service themes. The most prominent theme for the extremely unhappy responses was that the consumer cannot get through to the provider, that when they did the service provided was inadequate and that follow up service was non-existent. Other sources of dissatisfaction

surrounded problems with the installer, and no support from the provider. Table 52 shows examples of the anecdotal comments from respondents who chose extremely unhappy.

Table 52: Cross tabulation of Question 9 and the "Other" responses – Extremely Unhappy

		Q9 Are you happy with the customer service given by your provider	
		N	Supporting Comments
Extremely Unhappy	Cannot get through	12	<p><i>"I have had no internet for 7 days now and have been trying to contact activ8, I take the phone around with me on speaker while I do my jobs before requesting a call back when I have to leave the house - so often up to 2 hours on hold waiting for someone to answer my call. Have not had an answer or a call back yet. This is day 8"</i></p> <p><i>"SKYMESH IS HOPELESS - WAIT 45 minutes to talk to someone. Call back option useless as you cannot sit at your computer all day when you are a farmer. As I said earlier HOPELESS with a capital H!"</i></p> <p><i>"Unable to have ANY direct contact, and unable to GET any return contact"</i></p>
	Do not call back	10	<p><i>"Frequent dropouts, currently been 4 days without service so no banking business activities etc. without a 60 km trip to town. Impossible to get any feedback when reporting faults, promised 'phone backs' don't happen, absolutely no customer service. Very frustrating!! It does not help that NBN is just a wholesaler as I suspect that these are NBN problems and the ISP is left to 'carry the can'"</i></p> <p><i>"No "call backs", no reply to emails, no communication, long wait times, no apologies, no estimate of advertised and paid for service delivery"</i></p> <p><i>"Clueless. Broken promises, misinformation, long wait times, and scripted responses"</i></p>
	Customer service	9	<p><i>"Ridiculously slow - despite paying for the faster service it's never made it above 5Mbps and then only for a moment or two. HarbourISP need to be constantly chased and harassed to get them to do anything and have as yet, in over 2 months, failed to resolve. Even had to hound them to get a ticket lodged with nbn"</i></p> <p><i>"As if anybody could be happy with anything connected to Skymuster. SOMEBODY is stealing \$50 a month from me. Never gives notice or apologies. Nothing"</i></p>
	No support	5	<p><i>"Hopeless beyond belief. Clear networks will only email. That's virtually one email response per day, strung out forever. After two months our dropouts continue, and our abysmal download speed (1-5 mb/s) persist"</i></p> <p><i>"No contact after 3 weeks. Repeated phone calls, emails and no communication at all. I've had no service for 3 weeks and I'm still being billed!"</i></p> <p><i>"No fault of Skymesh, NBN's wall of silence is the problem"</i></p>

The most prominent theme for the extremely happy responses include that the respondents were happy with their Internet Service Providers, but not happy with nbn. Table 53 gives examples of respondent comments. *Note: There were only 11 extremely happy responses, which are all listed below.*

Table 53: Cross tabulation of Question 9 and the "Other" responses – Extremely Happy

Q9 Are you happy with the customer service given by your provider	
Extremely Happy	N Supporting Comments
	"H-ISP were very supportive... NBN Co was not responsive or helpful"
	"SkyMesh are open and visible with everything they offer and do. Unlike nbn :("
	"It's a shame that NBN launched and then connected 30,000 customers to a service that wasn't ready to go online. Then to isolate themselves (NBN) from any repercussions and to point customers to the ISP for problems. This undermines all the goodwill these providers have built up over the years"
	"I haven't really needed to use the SkyMesh customer service. Their webpage is very informative if there is maintenance scheduled or outages. I also receive regular emails if there is an issue"
	11 "Mind you I'd hate to be them trying to support an evolving untested product like Sky Muster"
	"Cannot complain at all the Harbour ISP guys are terrific"
	"Extremely happy with Skymesh but extremely unhappy with Activ8me"
	"happy with my providers service, NOT HAPPY with skymuster or whoever runs the satellite end"
	"Have only had to call them once so haven't tested the customer service yet"
	"I am extremely happy with my ISP it is not the isp's fault that the nbn can't get their shit together and fix the satellite"
"Unsure, only connected on Monday. Seems a lot faster than the interim service which only worked very early in the morning. We could never get on during the day or at night"	

The scale for Question 9 measured happiness between 1 extremely unhappy to 10 extremely happy, where mid-way happiness measured between 5 and 6. On the scale from extremely unhappy (scale 2) to unhappy (scale 5) similar themes emerged. Respondents were unhappy about not being able to get through to their service provider, slow response rates, then customer service, not calling back and product performance, followed by comments about nbn and communication, see Table 54.

Table 54: Cross tabulation of Question 9 and the "Other" responses – Scale 2 to 5

Coded Theme	Number of Responses coded to the scale				Total
	Scale 2...	Scale 3	Scale 4	Scale 5	
Cannot get through	4	6	3	3	16
Customer service	2		6	4	12
Communication	1	1	1	1	4
Do not call back	2		2	2	6
Slow response rate	3	4	2	4	13
Performance of product	1	2		3	6
nbn				5	5
	13	13	14	22	62

A selection of supporting comments for scale 2 to scale 5 responses are listed in Table 55 below. Overall the respondents were unhappy that they could not get through to their provider and that the response rates were slow. Respondents were unhappy with the level of customer service provided. One comment referred to only getting assistance once BIRRR was involved, others commented that the customer service was unhelpful. Other unhappy comments surrounded ISP's not calling back, poor product performance, problems with nbn and a lack of communication.

Table 55: Scale 2 to scale 5 supporting comments

Q9 Are you happy with the customer service given by your provider

		N	Supporting Anecdotal Comments
		Scale 2 to Scale 5	Cannot get through
Customer service	12		<p>"Once we got some service it was fine, but it took for BIRRR to get involved before anything changed. Prior to that we were just fobbed off saying 'we can't do anything talk to NBN'"</p> <p>"Unhelpful regarding any issues with nbn - they say the satellite is installed and we have a plan, no further help available (eg routers, excessive usage)"</p> <p>"You speak to one rep, then another rings you and you have to re-explain. They need to communicate amongst themselves better"</p>
Communication	4		<p>"They don't have a status page to let me know if there are problems with the satellite. Their contact page only has a phone contact, no email address for support"</p> <p>"Haven't been installed (realise this is not entirely their fault), but they are not forthcoming with aiding the situation, keeping us up to date at all. May well change providers asap after install. Will see how it goes"</p>
Do not call back	6		<p>"Never get the call backs that I elect for while on hold - each time the issue has resolved anyway (usually due to unexpected/unplanned loss of service) but would have appreciated the call back before the issue resolved"</p> <p>"Lack of call back options.... "Please leave your number and we will call you back as soon as an operator is free"... 2 months on... still haven't received a call back. Thank goodness for BIRRR to be able to sort out issues!"</p>
Slow response rate	13		<p>"Had 1 call to them & took 10 days to respond!"</p> <p>"Very very very slow to respond to my call - took them 2 weeks and me 2 phone calls. Was only able to ask for someone to call me back, not talk to support directly"</p>
Product performance	6		<p>"When it works it works well but so many outages. As bad as having 3g that rarely worked. Even now have some websites that won't load..."</p> <p>"Going through data like I can't believe. Huge amounts and yet not on the net as much as when we had wifi"</p> <p>"Our 30gB data seems to be disappearing very quickly?!"</p>
nbn	5		<p>"I'm happy with the service in respects to phone service... However in respects to internet service, it's clearly an NBN issue. We are NOT receiving what we were promised or what we paid for. I want a refund and I should not have to pay until I am receiving the service I signed up for"</p> <p>"They have been ok, I think most of the problem is with NBN, but they also haven't gone to great lengths to fill me with confidence :/"</p>

The scale for Question 9 measured happiness between 1 extremely unhappy to 10 extremely happy, where mid-way happiness measured between 5 and 6. On the scale from happy (scale 6) to extremely happy (scale 9) similar themes emerged, as shown in Table 56.

Table 56: Cross tabulation of Question 9 and the "Other" responses – Scale 6 to 9

Coded Theme	Number of Responses coded to the scale				
	Scale 6...	Scale 7	Scale 8	Scale 9	Total
<i>Customer service</i>	14	8	8	5	35
<i>Communication</i>		1	1	2	4
<i>Do not call back</i>	2		1		3
<i>Slow response rate</i>	3	3	4		10
<i>Performance of product</i>		4	1		5
<i>nbn</i>	2	1	1	2	6
	21	17	16	9	63

A selection of supporting comments for scale 6 to scale 9 responses are listed in Table 57 below.

The majority of the positive comments surrounded customer service, although not all comments were complimentary, for example, *“Depends on what you mean by service. The person on the phone was polite and helpful, but this does not change the fact we need a better service that those on fixed wireless can get but we can't!!”* which clearly indicates the frustration that respondents are feeling. Next were comments about slow response rates, with positive comments surrounding that the service is getting better. There were some positive comments about nbn, however they were on the lower scale of 6. The remaining positive comments surrounded product performance, communication and ISP’s not calling back. While the comments were in the happy end of the scale, not all comments are positive, some examples of anecdotal comments are included in Table 57

Table 57: Scale 6 to scale 9 supporting comments

Q9 Are you happy with the customer service given by your provider
N Supporting Anecdotal Comments

Scale 6 to Scale 9	Supporting Anecdotal Comments	
	Customer service	Communication
35	<p><i>“Depends on what you mean by service. The person on the phone was polite and helpful, but this does not change the fact we need a better service that those on fixed wireless can get but we can't!!”</i></p> <p><i>“SkyMesh has done a lot to help with Sky Muster's drop outs and ongoing problems, but they can only do so much”</i></p> <p><i>“The initial install went smoothly. I had issues connecting the wifi through the router my provider posted me but after joining the 'please call me queue' and having no response for 24 hrs I sent an email message which was responded to within an hour. Very patient assistant talked me through things and decided the router was faulty. New router sent immediately, no problems ever since”</i></p>	<p><i>“Just starting to have intermittent problems now. If not for BIRRR I would not know if the satellite was down as we do not get messages from Harboursat”</i></p> <p><i>“The technicians are very helpful however being that English is their second language there are occasional communication issues. Also when I last phoned the help desk I had to wait nearly 45 minutes before I spoke to a person and that was after my third attempt at contacting them”</i></p> <p><i>“Being able to access help through BIRRR made a huge difference, was much more effective than any response I got from operators on the phone”</i></p>
4		

Q9 Are you happy with the customer service given by your provider

N Supporting Anecdotal Comments

Scale 6 to Scale 9	Do not call back	<p>3</p> <p><i>"Have had a few questions but because of call back I have not been available when they have called me back. So have given up at the moment as understand they are very busy!"</i></p> <p><i>"Happy with Liam Jacksons customer service through your [BIRRR] page, unhappy that Activ8 call back service never bothered to ever call back"</i></p>
	Slow response rate	<p>10</p> <p><i>"Waiting times for phone support have been getting longer but much better than I've been used to with the likes of Telstra and Optus"</i></p> <p><i>"I try to be positive and support a fully Australian company but it's been a bit slow in the response when there are problems. They do eventually get back to me though"</i></p> <p><i>"Seeing as I was supposed to be a priority install, The ball only started rolling when I contacted them after waiting 5 months to hear. Once I made that contact, it happened within 3 months but I wonder what would have happened if I didn't enquire. They were god via email after this as previously I had tried to ring and wait times were ridiculous. ie 77 mins"</i></p>
	Product performance	<p>5</p> <p><i>"There seem to be a lot of drop outs. There was a period where the satellite was down 2-3 times per week. It has been a little more stable recently"</i></p> <p><i>"Just more of the Bush compared to the city stuff. We only get quarter of the speeds available"</i></p> <p><i>"Better data amounts during peak times would be better. Off-peak data generally guess unused"</i></p>
	nbn	<p>6</p> <p><i>"They are prompt at answering questions but say outages are an NBN problem and they cannot do anything about it. No refunds are given when cannot access the service"</i></p> <p><i>"Most of my issues have not been directly due to my provider but from Nbn"</i></p> <p><i>"Usually excellent customer service is badly affected by poor NBN and Skymuster implementation of some services, and the terrible technical performance of the satellite platform. Many resources are being wasted by a badly implement roll out and system failures - NONE of which are the fault of the RSP, but they have to wear the results of the many issues that are totally of NBN Co's making"</i></p> <p><i>"Most of issues are not their issues, but rather NBN itself. However, that said, Ipstar REALLY needs a Service Status page where they can pass along NBN advisories about network outages and issues AND also post about open Service Tickets they have with NBN that are awaiting feedback. Communication with clients is everything - something the NBNC0 (not just the RSPs) need to remember. It is not enough to have twitter and Facebook accounts and whenever someone asks about an issue simply refer them to their RSP. There should be an Advisory page on NBN Co web site that people can check so we aren't wasting time rebooting modems, routers ad nauseum"</i></p>

Question 10: Please rank your provider

The respondents were asked to rank how happy they were with their provider, 37% said that they were “happy”, 19% selected “very happy” and 14% said they were “extremely happy”. Fifteen percent were “very unhappy” and 14.3% were extremely unhappy.

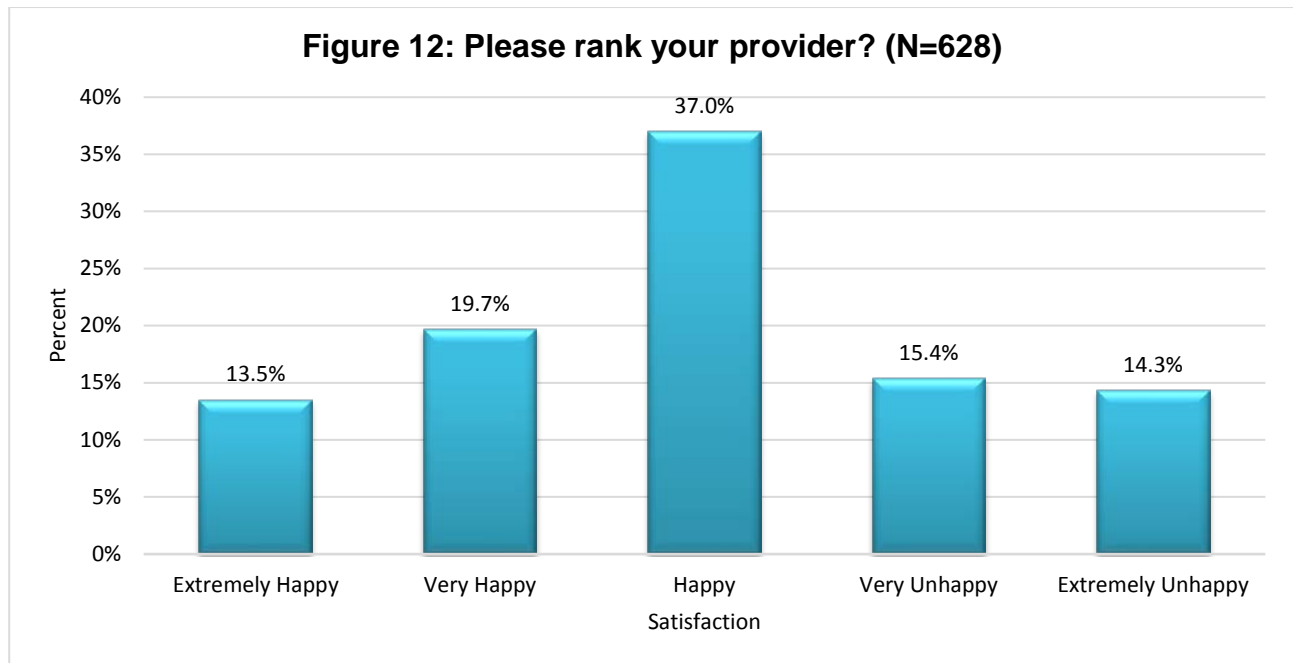


Figure 13: Please rank your provider?

The respondents were given the option to select “Other” to provide anecdotal comments to support their choices. One hundred and forty eight respondents gave an “Other” reason why they had chosen the rank for their provider. Of those 17 referred to a previous answer and were not included in the analysis, leaving 131 comments. A cross tabulation compared anecdotal responses with answers selected in Question 10. The findings are summarised below and anecdotal comments are used to support the summary.

Table 58: Cross tabulation of Question 10 anecdotal responses with scale categories

Coded Theme	Number of Responses coded to the scale					Total
	Extremely Happy	Very Happy	Happy	Very Unhappy	Extremely Unhappy	
<i>Internet Service Provider</i>	2				6	8
<i>Expensive/Data Plan</i>	5	9	14	3	2	33
<i>Happy with the service</i>	3	3	3	1		10
<i>Support/nbn</i>	8	11	23	6	6	54
<i>Unreliable speeds/dropouts</i>	2		1	1		4
<i>Installation</i>	1	3	6		1	11
<i>Peak and off peak usage</i>	4	4	2		1	11
Total	25	30	49	11	16	131

Each of the coded themes will be discussed with examples in the following tables.

Internet Service Providers (ISP) – Supporting comments for ISP’s were either extremely happy or extremely unhappy. Extremely happy supporting comments for internet service providers include that they chose their provider because they had a Whirlpool forum, where they could seek support. By contrast extremely unhappy comments include having difficulty in contacting the ISP, poor communication, problems with offshore helpdesks, and poor product knowledge, see **Error! Reference source not found.** for supporting comments.

Table 59: Anecdotal comments for Question 10 about “Internet Service Provider Rankings- extremely happy/unhappy”

Extremely Happy	<p><i>“Chose SkyMesh purely because they were reachable on whirlpool”</i></p> <p><i>“Like being able to contact SkyMesh via whirlpool.net.au & other online sources. That was the decider in my choice”</i></p>
Extremely Unhappy	<p><i>“Contact with SkyMesh is currently difficult due to the overwhelming troubles with Sky Muster.” “However contact via email is fine and SkyMesh are visible and very responsive on the BIRRR Facebook page and on Whirlpool”</i></p> <p><i>“No confirmation email sent to confirm on-line order. Modem not sent until after satellite install when I rang and asked about it. Was told by the technical staff at HarbourISP that I would not be charged until I rang and activated the connection. First email arrived (10 Sept) saying I had an invoice waiting online, but no prior email sent to specify log in details and passwords. Invoice showed I was being charged from the day of satellite install on 8 August (even though the modem hadn't arrived yet). I rang to query and was offered a weeks credit. I argued for longer and they relented with crediting all of August, but requiring me to pay for September. I asked for a statement showing the current balance and was sent one for an account holder in Melbourne. This was returned with a request for the correct statement for my account and this has never been received. Finally got connected on 18 September after having to ring to get system rebooted. Since then cloudy days has meant no service. I am submitting this survey from Wireless Broadband as you guess it, today it's cloudy. On Tuesday, 4 calls to HarbourISP were disconnected after sitting on hold. Yesterday I finally got through, and had a pleasant consultant who might have resolved my account - finally. Another thing I've noticed is that HarbourISP plans differ on their customer portal to their main website”</i></p> <p><i>“Offshore incompetents, with no idea and care factor zero”</i></p> <p><i>“SKYMESH ARE HOPELESS”</i></p> <p><i>“They couldn't find my address in their database and made no effort to rectify until I contacted them”</i></p> <p><i>“Westnet do not seem to know the product or how to activate”</i></p>

Expensive/Data Plan – Supporting comments for expensive contracts or concerns with data were across the scale. Comments included either that data was expensive or that there was not enough data or that the plans were not adequate. Those that were ‘extremely happy’ still commented negatively about data being expensive and limited. Those who commented ‘very happy’ also gave negative comments as feedback. For example, issues with plan limits, wanting more generous data limits and more flexible plans. There was one positive comment about being happy with the service, however, it also comments on the price and lack of data.

Table 60: Anecdotal comments for Question 10 about “Expensive/Data Plans- extremely happy /very happy”

Extremely Happy	<i>“Billing/plans - not enough data and expensive”</i>
	<i>“need more data and bills are expensive”</i>
	<i>“Ridiculously small amount of data.”</i>
	<i>“The plans offered are expensive and crap, but seem to be on par with everyone else except Telstra, who is even more expensive and crap”</i>
	<i>“Although it is not SkyMeshs fault there just isn't enough anytime data for our needs, We have to continually monitor our data and we do most of our updates to our phones and tablets when I go and visit my brother”</i>
Very Happy	<i>“Issue with plans is the limits imposed by NBN. Rural users should have access equivalent to city users. We spend more for our 95gb than a city user spends for unlimited. And we can only use 35gb during the daytime hours over a month.</i>
	<i>require increased plan size”</i>
	<i>“The SkyMuster plans on offer are pathetic compared to ADSL - but that's not the provider's fault”</i>
	<i>“Would be great if Sky Muster services offered unmetered content, and more generous data quota limits. This is not a negative comment against Skymesh. All providers are limited by the rules set by NBNco”</i>
	<i>“Would like more flexible plans over 30 GB”</i>
	<i>“May 2016 install and so far really happy except for the price and lack of data as this peak and off peak stuff is ridiculous”</i>
	<i>“Never going to be happy paying huge cost per Gb then find its unreliable as well”</i>
	<i>“Plans are better than the interim service But significantly inferior to Metro plans”</i>
<i>“There is a big difference in the cost of internet between city and country, which is not entirely acceptable”</i>	

While the respondents who selected happy were generally happy, they also left negative comments about billing not taking into account the times that the service is not available, the data and the times that it is available, the price of the service, and plans not holding up to what was promised, see Table 61.

Table 61: Anecdotal comments for Question 10 about “Expensive/Data Plans- happy”

Happy	<i>“Bills don't take into account times when there is no internet access”</i>
	<i>“Haven't had a bill yet but plan seems to have a lot of data for use between 1am and 7am when compared to what can be used when the majority of people are trying to do business and kids are supposed to be doing homework”</i>
	<i>“How do you work from home with limited data allowance. Moved to country vic will be able to telecommute if I can get enough data might have to get adsl until it is disconnected - we are in a new owner built house”</i>
	<i>“I'm generally happy with my provider but acutely aware that Internet is cheaper in other areas of Australia”</i>
	<i>“If we were paying this much in town the data limits would be much higher”</i>
	<i>“Installation went without a hitch and we have never had cause to contact customer service. However, the data cap and price have forced us to have an alternate (mobile broadband) connection. So we have two internet providers plus each of us has data with different providers on our phones”</i>
	<i>“It's poor at its best it seems that they work to be below average”</i>
	<i>“Not very unhappy with billing or plans but not happy. We have a much more limited service for the cost than ADSL or wireless users. Not unhappy nor happy with troubleshooting as the problem is uncertainty with usage and I don't know who is right, them or me”</i>
	<i>“Plans are not compatible with fixed wireless as promised”</i>
	<i>“Plans are way too expensive with not enough download. Although I realise NBN Co has limited the amount of data we can use”</i>
	<i>“Satellite plans are a joke compared to FW and fibre, regional customers are second class citizens when it comes to the internet!!!”</i>
	<i>“Unhappy about both the cost and download limits with Skymuster plans, but I gather that isn't my provider's fault”</i>
<i>“Very expensive plans . Not as fast as hoped. Peak off peak is a joke!”</i>	
<i>“Would like more data for less money.”</i>	

Comments for 'very unhappy' and 'extremely unhappy' also cited cost, but also highlighted data limits as negatives, see

Table 62: Anecdotal comments for Question 10 about “Expensive/Data Plans- extremely unhappy/very unhappy”

Extremely Unhappy	<p><i>“Still very expensive, faster than old NBN satellite but much more unstable - Constantly having outages and down time”</i></p> <p><i>“The data is a joke. This is 2016, why is Joe 2km up the road from me paying the same amount for unlimited data usage? Because the infrastructure for internet hasn't changed in the 8yrs I have lived here”</i></p>
Very Unhappy	<p><i>“Expensive. Hard to contact”</i></p> <p><i>“Plan costs are okish but compared to city folk they suck”</i></p> <p><i>“The cost of internet is way too high. It is actually a consumption tax - the more you use the more expensive each chunk of data becomes. No other Internet service charges like this”</i></p>

Happy with the service – Supporting comments for happy with the service were across the scale. Comments were positive and a little tentative. ‘Extremely happy’ comments indicated that respondents were happy with their service provider. ‘Very happy’ comments noted that respondents had not had to contact for service as yet, with one participant elated with their service. The ‘happy’ comments also indicate that they are happy with the service, but they have not had a reason to contact their ISP at this stage. Although the last respondent selected very unhappy, their comment indicates that they are happy with the service their ISP provides.

Table 63: Anecdotal comments for Question 10 about “Happy with the service – all scales, no comments for extremely unhappy”

Extremely Happy	<p><i>“have been very happy with activ8me”</i></p> <p><i>“I haven't needed to contact provider at all once service was activated”</i></p> <p><i>“I have only been on the satellite for one day :) Too soon to tell”</i></p>
Very Happy	<p><i>“Haven't needed to contact”</i></p> <p><i>“no problem yet”</i></p> <p><i>“So far this service is vastly better than the LSS and we are able to run our farm business better”</i></p>
Happy	<p><i>“Haven't attempted to do any troubleshooting or contact as yet”</i></p> <p><i>“I have been super lucky and never had an issue that required 'fixing' or contacting the provider”</i></p> <p><i>“No issues with SkyMuster connection. Had some on previous connection but it seems to be easing”</i></p>
Very Unhappy	<p><i>“Whenever I have phoned them I always have been able to speak to a tech guy straight away”</i></p>

Support/nbn - Supporting comments for happy with support/nbn were across the scale. Comments identified that respondents were in general happy with their ISP at the same time being frustrated by problems with nbn, see Table 64.

Table 64: Anecdotal comments for Question 10 about “Support/nbn – extremely happy/very happy”

Extremely Happy	<i>“All the issues were with NBNCO”</i>
	<i>“[my provider is] One of the best I have dealt with, whose reputation is being tarnished by an incompetent NBN”</i>
	<i>“Queues for NBN problems are so long and you always need answers instantly not hours “later when hopefully the service provider gets back to you. I do not think this is a specific provider problem but it is very frustrating”</i>
	<i>“A bit of a wait for support, but think that’s due to providers being inundated”</i>
	<i>“Skymesh are currently inundated with problems from Sky Muster, and hence hard to contact. This has not been my experience previously”</i>
	<i>“Support has been slow to respond at times, but I think they’re swamped at the moment”</i>
	<i>“Unfortunately the install process for many has not been as easy as mine, therefore difficult to quickly contact provider as they are swamped with customer service requests. NBN impossible to contact”</i>
<i>“When I have phoned and requested call back it never happened sure to over burden of the help desk. I have issues to talk to them about but they are relatively minor compared to others”</i>	
Very Happy	<i>“H-IPS were required to expend significant time and energy to solve NBN Co / Skybridge problems”</i>
	<i>“I don't think skymesh were responsible for the problems I encounter I believe it was NBN”</i>
	<i>“Plans are NBN driven”</i>
	<i>“Put n/a next to plans - want more data but that is NBN limit not Skymesh”</i>
	<i>“As I said earlier, if it hadn't been for BIRRR I would still be doing what I did on the first day of install - gone back to my Telstra connection through sheer frustration. Telstra are extremely hard to deal with but Harbour ISP are hopeless - probably not their fault though, how many staff do you need to be able to handle so many unhappy customers.</i>
	<i>“Because there are so many issues with Sky Muster, it takes longer than average to be able to contact the ISP. It's not their fault however. Until the Sky Muster service delivers on its promise, the ISPs are going to be very busy taking calls”</i>
	<i>“Had to wait 10 days for a call back from Skymesh, they emailed saying to email them. Didn't give me an email address so waited for call. All seemed to go well with call.</i>
<i>I've only marked "unhappy" on ability to contact because all the Sky Muster issues have clogged Skymesh's 'phone lines”</i>	
<i>“No weekend help desk is an issue”</i>	
<i>“Sometimes I have minimal waiting times, other times not so..but, unlike my experience with Skymesh...they do seem to actual 'hold my place in the queue' and tend to ring back within a reasonable time...”</i>	

Respondents who chose that they were 'happy' with support/nbn also commented negatively. Negative comments were about not being able to make contact when the internet is down, not being able to contact the provider, about dropouts and that the troubleshooting staff were inadequate or unavailable. Other negative comments were about not being called back, having short opening times or not having service staff available on weekends. The comments indicate that while the respondents are happy with the ISP, they are frustrated with the ISP not being able to provide service, whether it be at the fault of the ISP itself or caused by flow on problems from nbn.

Table 65: Anecdotal comments for Question 10 about “Support/nbn – happy”

Happy	<i>“Continually unable to contact. Have received emails apologising for us not being able to phone”</i>
	<i>“Due to the number of callers trying to get assistance this is still very hard if you need to talk to someone about something”</i>
	<i>“Frequent drops on some days and not meeting promised speed at times”</i>
	<i>“Good intentions, but cannot cope with the problems. Have always had good service from the Activ8 support.... sometimes involves a 10 minute wait however”</i>
	<i>“I have put extremely unhappy for troubleshooting as no one is ever available for this”</i>
	<i>“ISP does all they can but are constrained by the inadequacy of the NBN Co”</i>
	<i>“It wasn't until we went through BIRRR that we could get in contact with Activ8me. We spent many hours on hold and in a Que waiting to speak with them to organise an installation date before speaking with BIRRR”</i>
	<i>“Level 1 Service Desk agents don't have a high enough level of skills/knowledge for my needs”</i>
	<i>“Calls to Clear Network's tech support go unanswered, and message "send us an email", which is useless when internet connection has dropped out. I doubt there are any people at Clear Networks with any proper tech skills”</i>
	<i>“Contact is near impossible. If you don't have internet you cannot email support!”</i>
	<i>“Never call back and on hold for long amounts of time waiting for a response”</i>
	<i>“No return of calls. Extreme wait list. Inaccurate/disinterested”</i>
	<i>“No weekend support”</i>
	<i>“Not Mac compatible”</i>
	<i>“Short opening hours. Wait time and they don't inform of outages”</i>
<i>“Tried to contact them about wifi outside, but found info on your [BIRRR] website very helpful??”</i>	
<i>“Very disappointed with Bordernet”</i>	
<i>“Very hard to get technical support. Cannot get hold of them when system goes down. Plans are far too expensive!!!!”</i>	
<i>“Very hard to get through on the phone”</i>	
<i>“We have constant problems with dropouts etc, have had troubleshooting support several times but it has not fixed the issues and haven't had time to keep calling them to try and sort it out”</i>	
<i>“Accounts dept. easy to contact via email only, but Tech support call back for me was 3 days”</i>	

Reasons were similar for those who left comments for 'very unhappy' and 'extremely unhappy'. Comments include long waits on the phone, or getting the wrong information when they do get to talk with someone. One comment highlights that the respondent could not answer the question about their provider because the problems were not their fault, see Table 66.

Table 66: Anecdotal comments for Question 10 about "Support/nbn – very unhappy/extremely unhappy"

Very Unhappy	<p><i>"Always on the phone or waiting for a call back that never happens"</i></p> <p><i>"Can usually get to speak to someone, just can't get info and creditable answers to queries. It was important to us to be speaking to an Australian, in Australia"</i></p> <p><i>"I once spent over 3 hours on hold to fix Ann issue, then waited 2 weeks for a call back and missed the call. Gave up trying. Only got a response when I contacted Activ8 rep through BIRRR"</i></p> <p><i>"I was a SkyMesh customer on the Interim Satellite Service and was very happy with them. They are now under huge pressure and it shows"</i></p> <p><i>"Spent over 45 mins on phone only to be cut off very rude service people"</i></p> <p><i>"The call back service is very slow and resolving of connection issues as well."</i></p>
Extremely Unhappy	<p><i>"Not happy with contacting NBN. No matter how desperate the situation there is no responsibility taken. My husband is severely disabled and the internet is his ONLY source of socialising with his friends when he is bedridden. There is not enough download for him to watch videos etc. and for what little he does watch has such severe latency that he can't enjoy it. For \$50 per month I want unlimited...and a 1st world class internet service"</i></p> <p><i>"1.5 hour wait times for support are common"</i></p> <p><i>"Ability to contact is hopeless. They advise on their answering message that email is the fastest way but they do not respond to emails. Then if you sit and wait on hold for 45 minutes to make a complaint they advise you that they have no one that can take complaints. I then emailed their general email with the complaint and had no response"</i></p> <p><i>"Waiting on calls back or reply a to emails"</i></p> <p><i>"Personally, the whole process is flawed. I really don't see how I can rank my provider when so much of the process is out of their hands"</i></p>

Unreliable speeds/dropouts – Supporting comments for happy with unreliable speeds/dropouts were across the scale. While the participant selected that they were extremely happy with their ISP, their comments identified negative aspects such as not getting the promised speeds. For those who selected happy, they were also disappointed with the speeds. The comment that joins ‘very unhappy highlights problems with Skymuster.

Table 67: Anecdotal comments for Question 10 about “Unreliable speeds/dropouts – all scales, no comments for very happy and extremely unhappy”

Extremely Happy	<p><i>“Can be intermittent and rarely get the 25/5 promised speeds”</i></p> <p><i>“Liam is great in the BIRRR group for contact point and actioning things. I'm paying for 25/5 but haven't got above 11/3. What a waste of money”</i></p>
Happy	<p><i>“It's disappointing to see limited data plans for customers on sky muster vs customers that have access to other NBN services, whilst we are on sky muster and it is faster than the previous satellite internet we still experience drop outs and buffering when trying to view some audio/video”</i></p>
Very Unhappy	<p><i>“Have had a couple of drop outs but they seemed to be with the Skymuster itself and not a provider issue. But all the time we were on ISS there were never really any drop outs!!!! Only slow speeds in the end”</i></p>

Installation - Supporting comments for happy with installation were across the scale. The majority of respondents selected happy, very happy or extremely happy as the rank for their ISP. However, their associated comments highlighted problems with the installer not confirming the booking, having trouble getting extra connections for the school room, the installer getting lost and problems with the install. For one participant who selected extremely unhappy, they commented that they felt like a Guinea pig, see Table 68.

Table 68: Anecdotal comments for Question 10 about “Installation – all scales, no comments for very happy”

Extremely Happy	<i>“installer did not confirm arrival on day of install”</i>
Very Happy	<p><i>“Had to pressure them to get the schoolroom connected but they came through so all good”</i></p> <p><i>“Had trouble with road name. Gps was correct but couldn't change to correct name”</i></p>
Happy	<p><i>“Installation stuff arounds were woeful but I do not blame activate me for this. Plans are terrible. Again, not activateme’s fault”</i></p> <p><i>“No one connected me for 3 months regarding my address not being able to be found”</i></p> <p><i>“Not happy about dish location. Billed for installation but service not working. Contact with provider pathetic”</i></p> <p><i>“The original installer never tested for 3m height to see if we could receive a signal from the wireless tower in our area. He held the antenna above his head and stated that was the same as 3 metres (about 2.2m) and nearly got a good enough signal for wireless. Even though he wrote down that a “non standard installation” of 4.8m would work, the contractors just put us down for a satellite service instead”</i></p>
Extremely Unhappy	<i>I feel like a guinea pig with a faulty satellite again</i>

Peak and off peak usage - Supporting comments for happy with peak and off peak usage were across the scale. The majority of comments surrounded the times that peak and off peak data could be used. Respondents felt that bonus data was a “rip off” and that plans were skewed towards high users. Others thought that the plans were cheaper but the off peak data was “virtually useless”, see Table 69 for supporting comments.

Table 69: Anecdotal comments for Question 10 about “Peak and Off Peak usage – all scales, no comments for very happy”

Extremely Happy	<p><i>“Outrageous 'bonus data' use timeframe from 1am , for only 5 hours, an obligatory purchase, is a completely unfair unjust rip off. Plan designs too are similarly unfair, skewed towards family use of 30 or 40 gigs a month. With the outrageously overpriced \$5 per gig to get any extra”</i></p> <p><i>“Plans cheaper than mobile broadband but still expensive and off peak data virtually useless”</i></p> <p><i>“Why are we given such limited amounts of internet. And have to be up so early to make use of bigger amounts of data”</i></p> <p><i>“The amount of Peak Data is just not enough when you have 5 people connected, And off Peak data is just a joke, 1am-7am who is up then, and I gave up on Scheduling stuff to download because most of the time it either failed or skymuster went down overnight”</i></p>
Very Happy	<p><i>“52 GB off peak is excellent but from 10 pm until 4 am is not.”</i></p> <p><i>“Have not been able to lobby to discuss off peak times, or data amounts offered by NBN (and NBN has blamed retailer)”</i></p> <p><i>“Need more Gb on peak. Not the providers fault but still an issue”</i></p> <p><i>“Plans have too much off peak data which isn't used much because of the times</i></p> <p><i>The only problem with contacting Activ8 is the long wait times (I usually plan for 1-2 hour holding time before I speak to someone) but generally they are very helpful once I get through”</i></p>
Happy	<p><i>“Billed for Off peak data when not used”</i></p> <p><i>“Changing the bonus data times means it's virtually unusable, used to be great before 11am on interim satellite”</i></p>
Extremely Unhappy	<p><i>“I think the off peak is unreasonable and the number of outages for nbn updates are numerous”</i></p>

The final comment for Question 10 includes a personal reflection from one participant about issues surrounding service provision.

Table 70: Question 10 – Participant’s personal reflection about issues with service provision

“Plans: (1) Let’s remind ourselves that the NBN was supposed to level the playing field and provide equality of access. The price of a GB of data should be equal across all plans. This means the MANY in the urban areas each pay just a few cents more per GB so the people on less advantageous access means pay a lot less than cost of GB data. The price of a GB should be the same everywhere in Australia on the NBN. (2) Limits on plans should be the same, regardless of the access method. If someone on FTTP can get a \$69/month Unlimited (anytime) Data Plan, then people on Sky Muster should be able to get a \$69/month Unlimited (anytime) Data plan. Simple. And if there is a concern about congestion on Sky Muster then the NBN Co needs to make sure that only premises with no other alternative are actually accessing it. NBN Co should also be legally prevented from selling any capacity for any other purposes (TV broadcast, govt departments, etc) until they have installed all of the 3% of population that are destined to use Sky Muster AND have provided equal data access (unlimited, if that is available on other access means) to all those on Sky Muster that which to have additional data capacity. Remember, this capacity is to be provided at the same cost per GB as urban citizens enjoy. Then, IF there is excess capacity, it can be sold on short term contracts only to allow for flexibility for those NBN internet customers who are stuck with Sky Muster access. On current plans you couldn’t stream more than a few hours of TV (which in regional WA is necessary as we don’t even get equal access to digital TV signals. for example, 9Life disappeared on July 1. No one in power seems to give a hoot about universal service except as a theory of academic interest only) and you couldn’t stream movies from Netflix or look at too many government department videos or YouTube or your data is gone in a week - and then you get limited at speeds sending you back to the dial up era. Yet people in urban areas can get Unlimited Data or can have Netflix streaming not included in their data plan, or other 'bonus' type deals. Nothing like that for Sky Muster - you need to stay up until 1:00 AM if you want to do any downloading and that doesn’t help in a world of streaming where you can’t download, save and watch later. EQUAL COST per GB data and EQUAL Data Plans for all Australians. Simple. A Fair Go”

Question 11: What is the main use for your Sky Muster Connection?

Respondents were asked to rate the main use of their Sky Muster connection from 1 = mainly used to 5 = least used for business, education, health, personal/social and gaming/streaming.

A means analysis identified that **Sky Muster was mostly used for Business** (M=2.13) and for Personal and Social use (M=2.17). Personal and social use may include marketing the respondents business using social media as indicated in Question 22 comments on page 99. It is also important to recognise the value of social connections, which are important to the well-being of RRR people, who often live vast distances away from friends and family, and therefore online communication, whether by email or social media becomes critical.

The next main use was for Education (M=2.88) and then Health (M=3.65). Children in RRR areas often live far away from school and attend school through distance education. These students are severely disadvantaged by limited downloads, shaped data and poor speeds. In addition, not all school aged children are eligible for education ports (this includes remote teaching staff as well, see comments in Q22). A close score to five (M=4.17) indicates that gaming and streaming are rarely used, which reflects the limited data available on Sky Muster.

Interestingly, the standard deviation (SD=0.94) for health tells us that a smaller proportion of respondents are using Sky Muster more for health related use than for the other main uses, which ties in to the telehealth tools becoming more widely available.

Table 71: Means analysis of participant uses for Sky Muster

	Business	Education	Health	Personal / Social	Gaming / Streaming
Mean	2.13	2.88	3.65	2.17	4.17
N	628	628	628	628	628
Std. Deviation	1.398	1.169	0.943	1.048	1.210

Question 12: What is your peak data plan on Sky Muster?

Forty two percent of respondents PEAK data plan was between 21GB - 40GB per month, nearly 13% of respondents had between 41GB - 60GB per month and almost 6% of respondents had less than 20GB per month. Less than 2% of respondents each had between 61GB and 80GB or 81GB and 100GB per month.

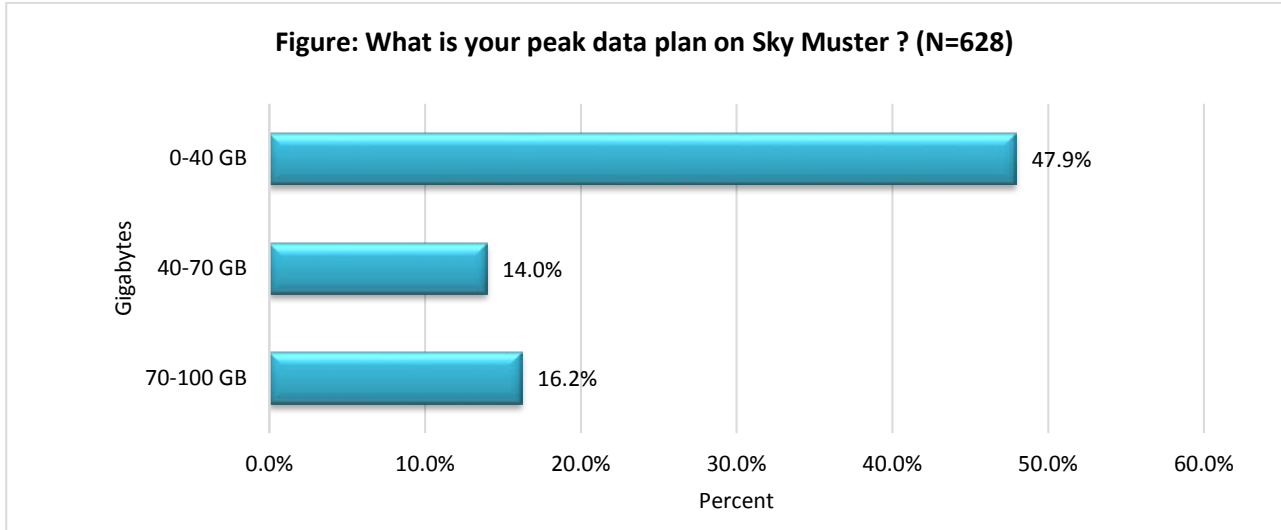


Figure 14: What is your peak plan on Sky Muster?

Question 13: What is your off peak data plan on Sky Muster?

Nearly 31% of respondents had between 41GB - 60GB of OFF-PEAK data per month, 15% had between 21GB - 40GB per month and nearly 10% had between 61GB and 80GB of off-peak data. Nearly 6% had less than 20GB of off-peak data and 2.5% had between 81GB and 100GB of off-peak data per month.

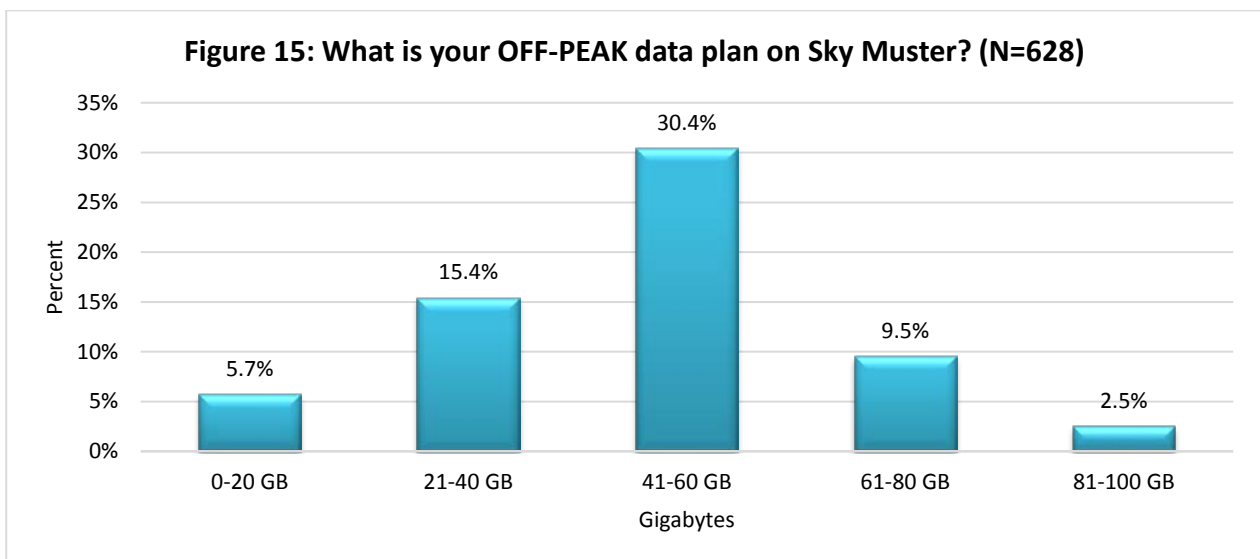


Figure 15: What is your OFF-PEAK data plan on Sky Muster?

Question 14: Do you use much of your off peak data? Off Peak Sky Muster Data is Data from 1am - 7am.

Just over 60% of respondents use a very small amount of off peak data, 10.2% use under half of their data 6.5% use half of their off peak data and nearly 5% use all of their off peak data. Nearly 9% don't know how to use their off peak data.

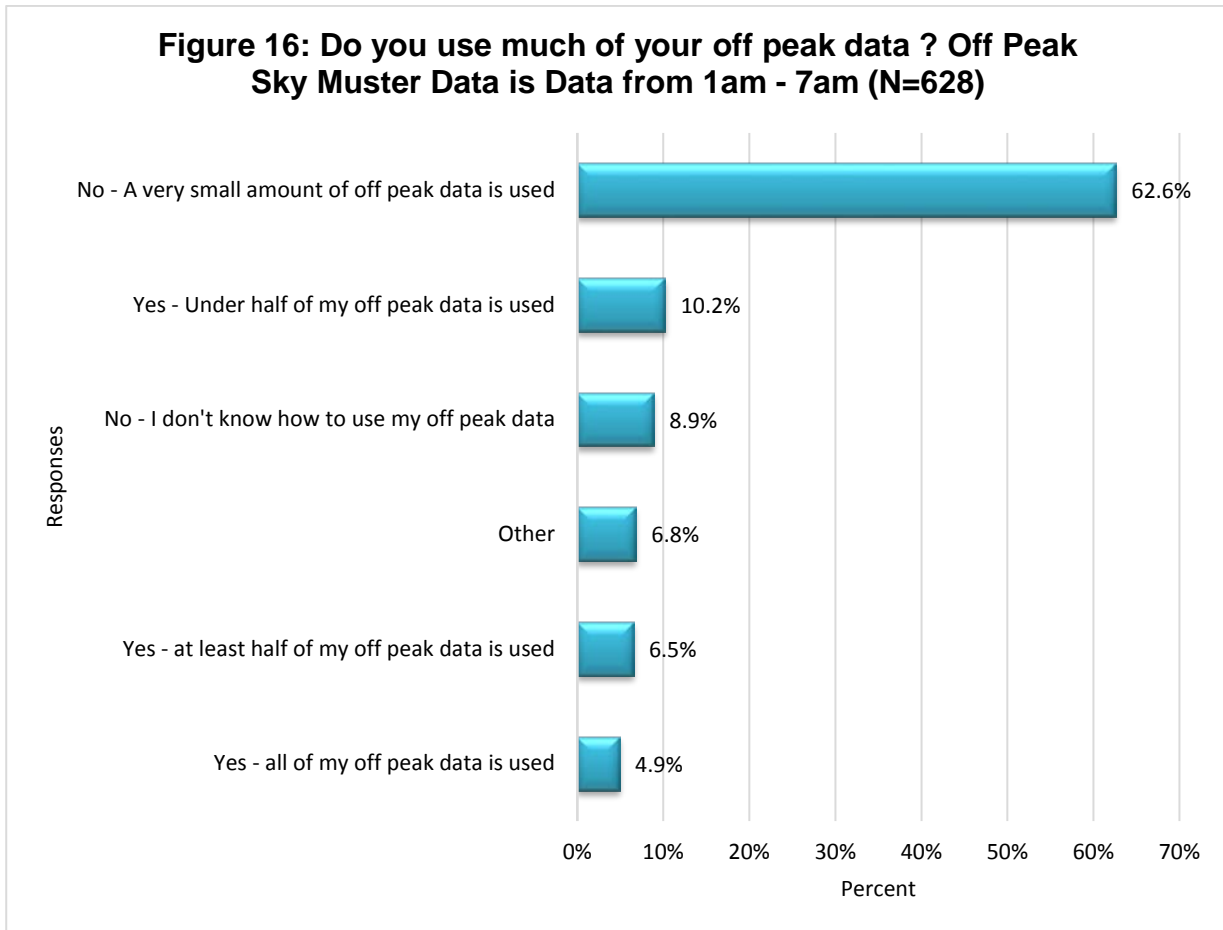


Figure 16: Usage rates for off peak data?

The respondents were given the option to select “Other” if they could not choose from the list provided in Question 15. One hundred and forty two respondents gave an “Other” reason not listed about their off peak data use, 13 responses referred to a previous question leaving 129 comments to be analysed. Anecdotal responses were coded into themes that describe the main problem in the comment. Each theme is supported by participant comments. Note that not all comments are listed.

Supporting comments for those who do not use all of their data indicate that it was mostly because they thought having the **off peak time between 1am and 7am was inconvenient and made off peak data unusable**. Some respondents noted that this is the time when they would be sleeping. Although some respondents used some data during this time period by scheduling downloads during off peak times.

Table 72: Anecdotal comments for Question 14. Cross tabulation of 'No, a very small amount of off peak data is used' and other responses (1)

"How could ANYONE use off peak data with the hours of 1am - 7am????????? Seriously - our previous plan on interim had off peak as 11pm - 2pm - this is unworkable!"

"I have tried to schedule updates etc during these hours and have found that they have failed or skymuster has gone offline so it is not usable to me"

"I think that our Off peak is between 1am and 7am in the morning. Too early to be able to do much business at that time of the day."

"In WA and off peak times are based on AEDST so not convenient"

"Unfortunately because of the time of use we are unable to use much of this allocation"

"Extremely unlikely I will use any off peak data as I am usually asleep between the hours of 1 am and 7 am"

"I'm asleep I pay for it but don't use it what a rort"

"We work in agriculture, usually 5am until 8pm. Sleep is more important than getting up within that window"

"Never up that late in the Bush, early am off peak time to busy"

For some respondents a small amount of data is being used but they are unsure how, but for many who get up early to use the off peak data, it is not working. Some of the respondents highlight congestion or maintenance as the reason.

Table 73: Anecdotal comments for Question 14. Cross tabulation of 'No, a very small amount of off peak data is used' and other responses (2)

"I often never use any of my off-peak, though a very very small amount is shown used (one device - off of a night - modem left on)"

"Something has used some of my off peak data, figuring it is updates!"

"We would like to but not sure how to use it other than stay up half the night"

"I am changing my daily routine to utilise the off peak data, will do computer downloads first thing each morning on rising"

"I don't believe in getting up in the middle of the night to use the internet however I do rise early in the morning so probably around 1 1/2 hours per day"

"I have had to change how I do things to meet the current billing method. I'd love a bit more sleep so sometimes getting up early to do my work is ok in summer but a bit harder in winter when it's dark."

"Ridiculous times! But even when I've made the effort to stay up late or get up early to use off peak data, it's so unreliable. I regularly get a 'no internet connection' error message. Can't access data for hours and sometimes days at a time on a regular basis"

"So much maintenance done by NBN during the very small Off Peak window that it's almost a waste of time having it."

"Many nights the internet just doesn't work. I've set computers to do automatic upgrades which don't happen because there's no internet access"

One participant wrote a personal reflection about how data should be distributed, highlighting anytime data at an equal price with equal plans.

Table 74: Participant’s personal reflection about issues with off peak data use

All data should be ANYTIME. Or, alternatively, start charging the FTTN, FTTP, wireless NBN customers the same price per GB as Sky Muster customers. Limit their data plans to what Sky Muster offers. Tell them they can't use their data any time they please. And tell them their speed is going to drop to 128/128 kbps is they dare to use more at the wrong time of day. See how long the government (any government) stays in power with that trick. EQUAL PRICE per GB data. EQUAL Data Plans. ANYTIME. For ALL Australians.

Respondents that selected ‘Yes - Under half of my off peak data is used’ also cited not being able to connect as a reason. One participant commented that they could not find a scheduler so they are waking early to use the off peak data. Others are noting the inequity between their service and others.

Table 75: Anecdotal comments for Question 14. Cross tabulation of ‘Yes – under half of my off peak data is used’ and other responses

“Can't use it its out so often”

“Has been under half used due to very little available connection”

“Off peak times are ridiculous. I have had no luck in finding a reliable download scheduler so I get up early to use the last hour or so of off peak in the mornings”

““Off peak” data times are a sick joke. I'd love to see the brains trust that came up with the plans actually have to use them on an ongoing basis”

“Usually sleeping whilst off peak is available”

“Why do we even have to have restricted off peak hours. Everyone else on the NBN doesn't have to fit into a certain time frame to make use of data allowance”

For those who added comments when they selected ‘Yes - at least half of my off peak data is used’ the respondents either get up early to use the off peak data or they set an alarm to start downloads. The majority of respondents are doing so because their data allowance is not enough.

Table 76: Anecdotal comments for Question 14. Cross tabulation of ‘Yes – at least half of my off peak data is used’ and other responses

“A pain to get up at 1 AM to start a download. Off peak times are too restrictive.”

“I get up early (5-6 a.m.) and have no problem scheduling all my large data downloads (Windows updates, etc.) before 7 a.m.”

“I set my alarm to get up and download my sons online preschool stuff prior at 5am or if I wake up in the middle of the night I will start it downloading. It is a massive hassle to have to do it this way”

“There is a major problem with off peak times. I am not sure if it is my provider’s problem or not as they do not answer my questions. In short I can only guarantee off peak if I use between 2am and 6am”

“I start on a lower plan then half way through the month I upgrade”

“I’d use all if the connection was working”

“My son waits until late at night to use it”

“Only because I wake early and I usually chew through my normal data very quickly”

“We only use the off peak data because we don’t get enough peak data”

“Only because we have to use it as we have almost used up the entire months ‘peak’ in 2 weeks. Compared to fixed wireless where you can get an unlimited download allowance, our allowance is nowhere near what we need. (I’m lying on the bed because of a medical condition most of the time) The internet is my communication with the outside world”

“This is because I have adjusted my ‘working’ hours to suit Skymuster”

The respondents who left comments for the response ‘Yes - all of my off peak data is used’ cited that they use it to schedule downloads and to upgrade devices. Some comments indicate that respondents are confused about how their data is used for example *“Always go over and get slowed to almost nothing, we’ve increased plan several times. Don’t know where the data goes”*.

Table 77: Anecdotal comments for Question 14. Cross tabulation of ‘Yes – all of my off peak data is used’ and other responses

“Although they turn it off almost every night i use it up when available. What choice do we have but to become nocturnal”

“Always go over and get slowed to almost nothing, we’ve increased plan several times. Don’t know where the data goes”

“One use - for scheduling downloads, if your device isn’t capable of scheduling downloads then you’re forced to use your minuscule peak data or disrupt sleep!”

“We mainly use off peak to upgrade devices”

“What choice do we have? Become nocturnal”

“Yes half way through billing cycle”

Similar to previous themes, five respondents left comments that they did not know how to use their off peak data, citing that that they “don’t really get the peak/off peak thing” or that they are not awake to use it or they have not connection.

Table 78: Anecdotal comments for Question 14. Cross tabulation of ‘No – I don’t know how to use my off peak data’ and other responses

I don't really get the peak/off peak thing on the Skymesh Skymuster plan because it says this on my Skymesh page: ""Please note that your Normal Data Allowance can be used at any time. It is not a peak data allowance and usage is not restricted to peak hours.

I have no connection

No. I am not awake at that time

Off peak data is only available in unusable hours, ie, when I'm asleep!!

Other comments include that the participant has only recently been installed so have not been able to use the off peak data. Other respondents have the education portal so do not have access to off peak data. Similarly, some respondents are on an anytime plan, therefore do not have access to off peak data. The final comments for Question 14 include that they do not have service, that the computer is turned off in off peak times or that they are on generator power and it is turned off at night or that they cannot tell what data they are using as they cannot get access to their account information from the ISP.

“Haven't had skymuster for a week yet Have been able to use off peak data for upgrades, updates and some audio downloads though”

“I haven't had service long enough to use either peak or off peak data...”

“Education port only so all data is counted as peak”

“I have anytime data though I wouldn't get allot of use out of off peak being those times”

“We have little to no NBN service most of the time so unable to use it.”

“No- our generator goes off during the nights so not able to access any of it”

“No. Computer does not get used during the ridiculous times set for off-peak.”

Question 15: What speed is your sky muster plan?

Eighty four percent of respondents have a 25Mbps download 5Mbps upload service from Sky Muster. While 16% have 12 Mbps download and 1Mbps download.

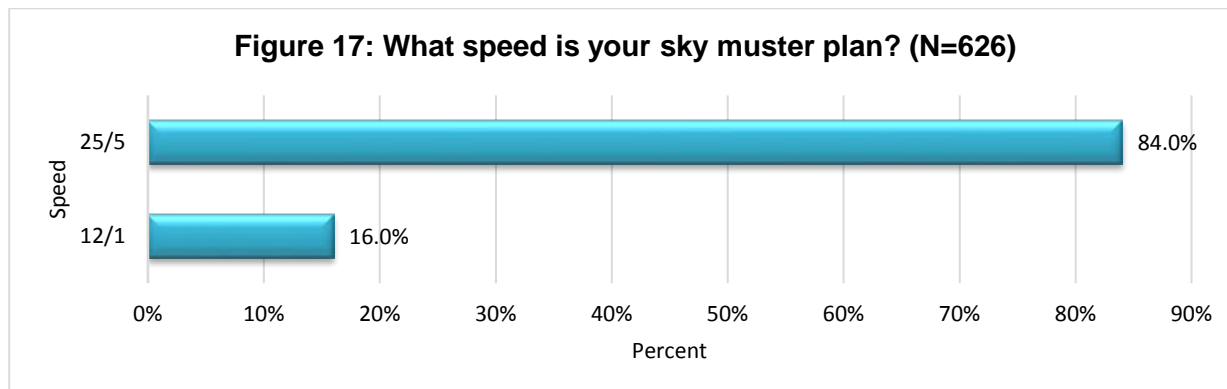


Figure 17: What speed is your sky muster plan?

The respondents were given the option to provide anecdotal comments to support their choices. One hundred and twenty one respondents provided comments about their speed, 4 comments were not considered as they referred to “see before” or “see previous question”. A cross tabulation compared anecdotal responses with answers selected in Question 15. The findings are summarised below and anecdotal comments are used to support the summary.

For those who selected the 12/1 speed, 16 respondents commented that they were unsure or did not know how to find out what speed they were on. Others (3 comments) had the education portal, which is limited to the 12/1 speed with certain providers. The final two comments stated that they tried or were initially on the 25/5 speed, but it made no difference so they changed back to the 12/1. One person commented that they were upgrading and another commented that they were not connected.

Table 79: Themed anecdotal comments from respondents to support 12/1 speed selection

Theme	N	Example Comments
Unsure	17	<i>“I don't know what it is supposed to be but it is in actuality extremely slow”</i> <i>“How do I find this out? I'm not sure what this is”</i>
Education Portal	3	<i>“My home one was on the 25/5, but with the education plan Activ8 I formed me that I couldn't have 2 on the 25/5, so both the home and ed port are now on 12/1”</i>
Was 25/5 changed to 12/1	2	<i>“I tried 25/5 for a month but it made no significant difference”</i>
Not connected	1	<i>“No connection”</i>
Upgrading	1	<i>“Am upgrading to 25/5”</i>
	24	

For those who chose 25/5 speed in Question 15, some thought it was better than before, one thought it was worse than before, four comments were about dropouts or outages and others were that the speeds were intermittent, but **most of the comments were about being slower than before or rarely or never reaching the 25/5 speeds**. Other comments included for respondents that selected the 25/5 speed was that they were unsure if that was their plan speed, that the speed was good, that they pay for more each month and that 25/5 would be their speed if the connection was working. Three respondents indicated that streaming was unavailable, and two indicated that they did not have any speed.

Table 80: Themed anecdotal comments from respondents to support 15/5 speed selection

Theme	N	Example Comments
Slower	24	<p><i>“Apparently (it’s what we’re paying for). But not even close. Most speed test run at 3-5mbps”</i></p> <p><i>“I’m lucky if I had that speed for 6 days in 6 month”</i></p> <p><i>“Plan speed - reality much less”</i></p>
Speed never reached	16	<p><i>“Have never actually achieved this in any speed test but around 90% of the speed. Latency when it’s all running slow is a killer, times out before you can open a page or log into a site”</i></p> <p><i>“In my dreams , that is what I am signed up for, but do not get , I use too but the last few weeks have been dismal”</i></p>
Intermittent	7	<p><i>“Has been very slow, especially when compared to my neighbour who is with a different skymuster supplier. Not consistent speeds at all.”</i></p> <p><i>“Have reached these at times, but very intermittent”</i></p>
Speed rarely reached	7	<p><i>“Rarely do I see speeds of 25/5. Lucky to get 12/1 when downloading files”</i></p> <p><i>“This speed is rarely available and more often I get less the 5mbps up and 3-4 down”</i></p>
Unsure	7	<p><i>“Not sure which but it is the fastest that they provide”</i></p>
Good	6	<p><i>“It’s actually comes at 21/4 when it’s working. At the moment their site won’t load up to check current speed test”</i></p> <p><i>“The speed is great - was a bit patchy for a while but overall it’s been good. Upload speed is excellent which is great for VoIP”</i></p>
Pay for more	5	<p><i>“I think? We pay an addition fee per month for sonic speed - which is most of the time rubbish”</i></p>

Theme	N	Example Comments
		<i>"My lower plan for the month is at 25/5, but I upgrade half way through the month and it's at 12/1 speed"</i>
When it works	5	<i>"Doesn't work at that speed at all!"</i> <i>"When it was working it was much slower than 25/5"</i>
Can't stream	3	<i>"12/1 doesn't even allow streaming without buffering"</i> <i>"I haven't run a speed test as yet. Does not seem much faster than ISS. Some pages do load faster. Youtube videos still buffer"</i>
Dropouts/ outages	3	<i>"[Selected 25/5]... but still has many outages every day when I use it, who knows what happens when I'm working or sleeping"</i> <i>"OK except for drop outs and no service on several occasions of varying length. Latency is a big problem"</i> <i>"Speed very slow and variable, frequently drops out"</i>
No internet	2	<i>"It really is 0/0" or "Zero at the moment"</i>
Same as or better than before	4	<i>"It isn't any faster nor is it any more efficient than when we were on a SAT-55 Plan with Skymesh. Although Skymuster is cheaper"</i> <i>"Opening pages it is bit faster than previous internet but I thought it would be even faster. Downloading updates etc is lots faster than previous"</i>
Worse than before	1	<i>"Very rarely get above 12mbps download, 4 Mbps upload. Very very disappointed with speeds compared to my old mobile wifi!"</i>
	97	

Question 16: What do you pay per month for your Sky Muster Connection?

When asked how much they pay for their Sky Muster connection, 48% of respondents selected \$40.00 to \$59.00 per month, 26% selected \$60.00 to \$79.00 per month and nearly 8% selected that they pay \$80.00 to \$99 per month. Less than 1% pay between \$5.00 and \$19.00 per month and nearly 3% pay between \$20.00 and \$39.00 per month. Five percent of respondents pay between \$100.00 and \$119.00 per month. The remaining respondents pay more than \$120 per month (\$120-\$139 = 4.5%, \$140-\$159 = 3.0%, \$160-\$179 = <1%, \$180-\$199 = 1.8% and 1.3% pay more than \$200 per month).

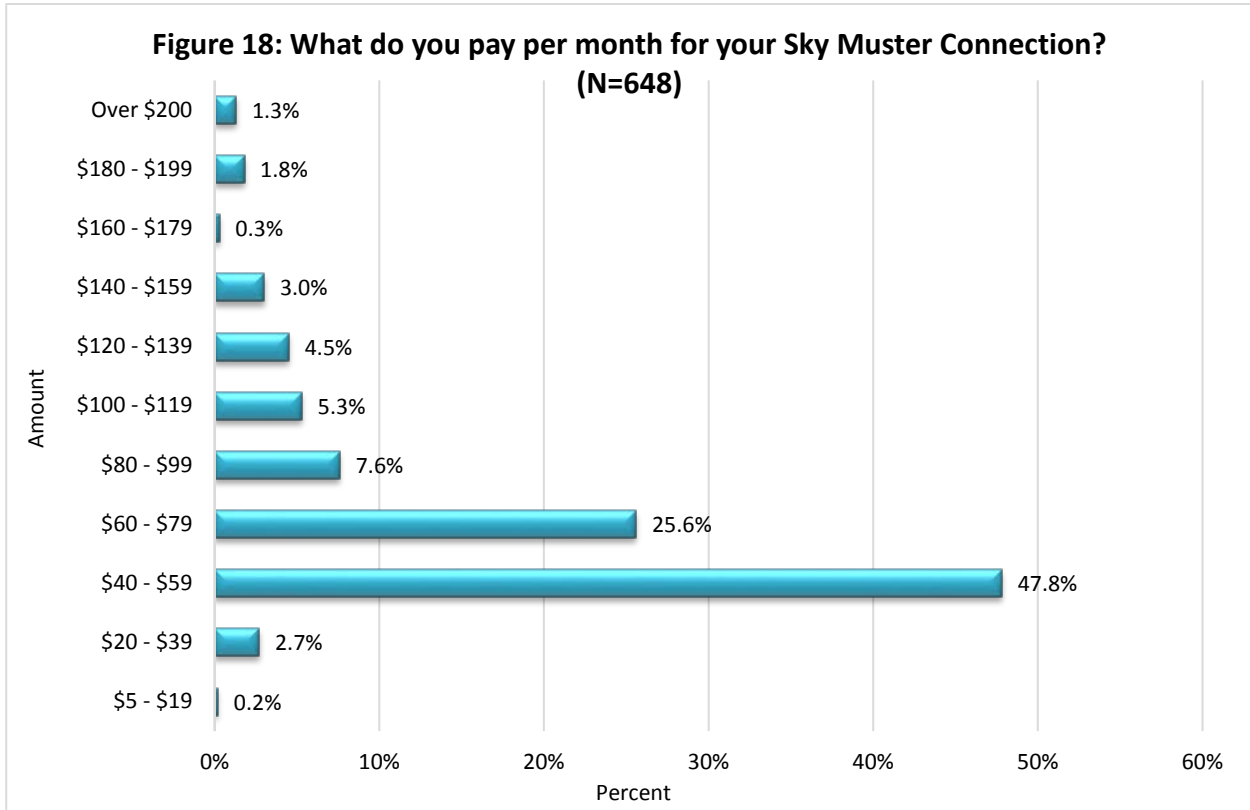


Figure 18: Amount respondents pay for their Sky Muster connection

The respondents were given the option to add comments to a text box in Question 16. Nearly 38% of respondents supplied extra information about the cost of Sky Muster. While most comments are included in the summary, some are not relevant to the topic and so are not used. A cross tabulation was performed between the comments and the responses, and is summarised below:

One respondent on the \$20-\$39 plan receives a \$10 bundling discount on a \$39.95 plan, so only pays \$29.95 per month. For those on the \$40-\$59 plan, the comments become more negative for example, one respondent commented that they are paying “about 200 time per gigabyte than what a city person pays” and another says “they are ridiculously expensive”. Another respondent clarifies that for between \$40 and \$59 they get 30GB of data, in response. Another respondent said that they could not do anything (updates, gaming, etc) with 30GB. A third respondent is paying around \$12 for VoIP depending on the type of calls made, which is charged separately.

Some of the comments highlight that respondents think they should ask for a discount to recoup time that Sky Muster spends in outages or when it is not working for some other reason. Respondents claim that the plans/deals are not as good as nbn wireless or prices in the city, they feel “ripped off” and “discriminated against” because they live in the bush. One respondent who is a pensioner commented, that the \$40 -\$59 plan is the most a pensioner can afford and that they plans are not comparative an average ADSL plan. Nor are the plans comparable to the city plans, with one respondent commenting that the data allowance will not be enough in the long run.

Some respondents are still paying for their previous plan as well as their nbn plan. While others are still getting their daily allocation, but don’t trust that things won’t change in the future. The final comments include viewing nbn as expensive if PEAK data is regarded as standard data and OFF-PEAK data is viewed as bonus data, and that respondents are getting slow speeds and the same daily use but for less days.

Table 81: Anecdotal comments about how much participant pay per month for data \$40-\$59 plan

“About 200 times per gb what a city person pays”

“Ridiculously expensive” “For 30gb”

“We need more data. 30 gig isn't enough. Can't do updates Can't do gaming. When we were first connected originally, it was fine u til too many on the same sat. It doesn't work. I want to change and see if we can get wireless. Not Happy”

“I have a VOIP service with Activ8me which is billed separately to my broadband connection (although the VOIP services runs over the Sky Muster connection). This costs roughly another \$11 or \$12 depending on volume of outgoing calls, duration and type (calls to national landline services vs calls to mobile phones)”

“I guess I should ask for a discount or compensation because we are not getting what we are paying for”

“I wish I could pay more and get less, alas I'm am unable to connect to upgrade my plan.....”

“Disappointed skymuster deals are not as good as nbn wireless. Once again I feel discriminated against because of where I live”

“Discriminated against because of where we live. For the same price in the city, we could get faster connection and unlimited download”

“RIP OFF when compared to our city counterparts - we are rated as second class citizens as usual because we live in the bush!”

“As a pensioner, any higher plan is unaffordable. ALL satellite plans are third rate compared even with an average ADSL ONE plan for cost comparison.... so much for the digital divide being PROPERLY bridged”

“Not comparable to city NBN plans. I can see that the data allowance will not be enough in future”

“As we still have Telstra connected and paying \$49 for 8gb as our plan doesn't expire until October 2017 we are on a lower plan with NBN. When Telstra runs out we will increase to the next plan with harbourisp”

“We have been told by Activeme that our service costs won't change, but I don't trust them>”

“Assuming we pay for peak data and off peak is bonus data, data is expensive compared to other forms of NBN”

“Increased from ISS, assumed it would suffice, slowed speeds are worse than previously. Same daily use but for less days before limiting. No vids movies or tv catch ups etc!”

For those on the \$60-\$79 plan, respondents claim that the price is ridiculous and expensive, that the plans are not comparable in price regardless of connection, and that there is a disproportionate jump in price for plans over 30GB. Respondents claim that they purchase more data each month or that they have to upgrade their plan or risk running out of data. One participant commented that the price is too dear for the amount of peak data and another has made the statement “EQUAL PRICE per GB data. EQUAL Data Plans. ANYTIME. For ALL Australians”.

Table 82: Anecdotal comments about how much participant pay per month for data \$60-\$79 plan

“Ridiculous considering the NBN is supposed to be comparable in price no matter what type of connection you have. Fibre is much cheaper as is fixed wireless”

“Expensive”

“But ends up more cause I always have to buy data blocks”

“I usually end up buying a couple of data blocks per month on top of my 'allowance”

“Plan had to be upgraded to \$99 as all data was used with 17 days to go. This only gave an extra 5g. Overpriced for such a poor service”

“This is very expensive compared to Metropolitan plans available in Melbourne”

“There seems to be an enormous, untenable and disproportionate jump in costs when a plan moves past 30gb peak data”

“Too dear for the amount of peak data.”

“EQUAL PRICE per GB data. EQUAL Data Plans. ANYTIME. For ALL Australians”

Respondents who are spending \$80-\$99 per month on their plan, have compared their plans to “urban dwellers” and feel as though they are not getting a fair go. However, they acknowledge that the plans are better than mobile data costs. One respondent commented that they chose an Internet Service Provider (ISP) with a good reputation over price. Another commented that at the high price of \$80-\$99 per month the internet is constantly slow and the computers time out. Highlighting that price of plans may not make a difference to service with Sky Muster.

Table 83: Anecdotal comments about how much participant pay per month for data \$80-\$99 plan

“Compared with non satellite NBN plans, the amount of data and the cost of data is a complete roort. Another example of rural people being screwed to the wall for what urban dwellers take for granted. Better than non-NBN mobile data broadband plans though”

“Miserly amount considering the price and volume afforded urbanites. Rural disadvantage exacerbated again. Will we ever get a fair go”

“I know cheaper prices are available, but reputation, speed test results and customer satisfaction played a part in selecting my ISP”

“Is constantly so slow that that the computers time out”

Those respondents on the \$100-\$119 plan have more data, but comment that it is used quicker even though they are not using the internet differently. One respondent pays \$90 per month but purchases extra GB to have enough data. The third comment highlights that Sky Muster pricing is not equivalent to fixed wireless and that it does not include VoIP, which can be bundled on other broadband options.

Table 84: Anecdotal comments about how much participant pay per month for data \$80-\$99 plan

“We now have more data since changing to NBN satellite but it goes faster even though used the same. No explanation as to why & we aren't the only ones with this problem since changing.”

“\$90 plan, but always need to buy 3xtra gigs x 6 or so”

“Not the least bit equitable in price to fixed wireless as the only other possible option I would have. Plus I need to pay for VoIP or a landline on top of that. Other broadband options can bundle phone and unlimited data for the same price”

There were three supporting comments for the \$120-\$139 plan, they include that although the respondent is already paying a high price for data, that they purchase extra data blocks. Another had to price match with a competitor to get the plan price and the third comments that there is no data listed on the account, and hence no way to keep track of usage.

Table 85: Anecdotal comments about how much participant pay per month for data \$120-\$139 plan

“Pay \$110 for 60gb/per month but end up buying a data block 2gb for \$10.....”

“To get this price i had to price match with a competitor provider”

“Very expensive and no data listed on account”

As the plan price increases (\$140-\$159) the respondents feel like they are getting ripped off because they live in the outback/bush/RRR Australia. While they comment that, they pay “too much” and it is “a typical Government rip-off, they also comment that there is not enough population in the bush for the providers to care about. On the other hand, two respondents justified the high cost to be from both home and education plan.

Table 86: Anecdotal comments about how much participant pay per month for data \$140-\$159 plan

“As expected in the outback, outrageous cost but of course there's not enough of us for anyone to care about”

“Too much”....“Typical government rip-off”

“Ed plan plus home plan”

“This is for the commercial and education ports combined”

At the price point of \$180-\$199, the respondents think that the cost is too expensive for the amount of data provided.

Table 87: Anecdotal comments about how much participant pay per month for data \$180-\$199 plan

“Far, far far, too expensive!!!!!! And nowhere near enough data!”

“Very expensive for limited peak data”

“Way, way too expensive have 3 connections - office/homestead \$75; schoolroom \$75 govie quarters \$40”

“I have always spent between 100 > 200 for my internet data but the bandwidth was much higher. If it was in proportion to what I previously used it would be helpful”

The final plan for over \$200 has supporting comments about having multiple plans and of having found an error in billing, see Table 88 below. To access the highest amount of data (70GB) offered during peak hours, consumers would need to pay over \$200/month.

Table 88: Anecdotal comments about how much participant pay per month for data over \$200 plan

“I have to contact Activ8 because my plan I thought was \$114.95 but is \$233”

“Several \$70 a month plans”

Question 17: Have you had any issues with your Sky Muster Connection?

Sixty percent of respondents are having connectivity issues with their Sky Muster connection. Twenty two percent said that they experienced dropouts, nearly 19% said that they experience slow speeds and nearly 19% said they suffered outages. Ten percent are having issues with excess data usage and nearly 23% are having issues with their hardware. Just over 9% have no blue light or connection, 8% are experiencing delays in the NTD start-up and 5% are having router issues. Three percent selected that the desktop programs won't work. **Only 5% are happy with their connection.**

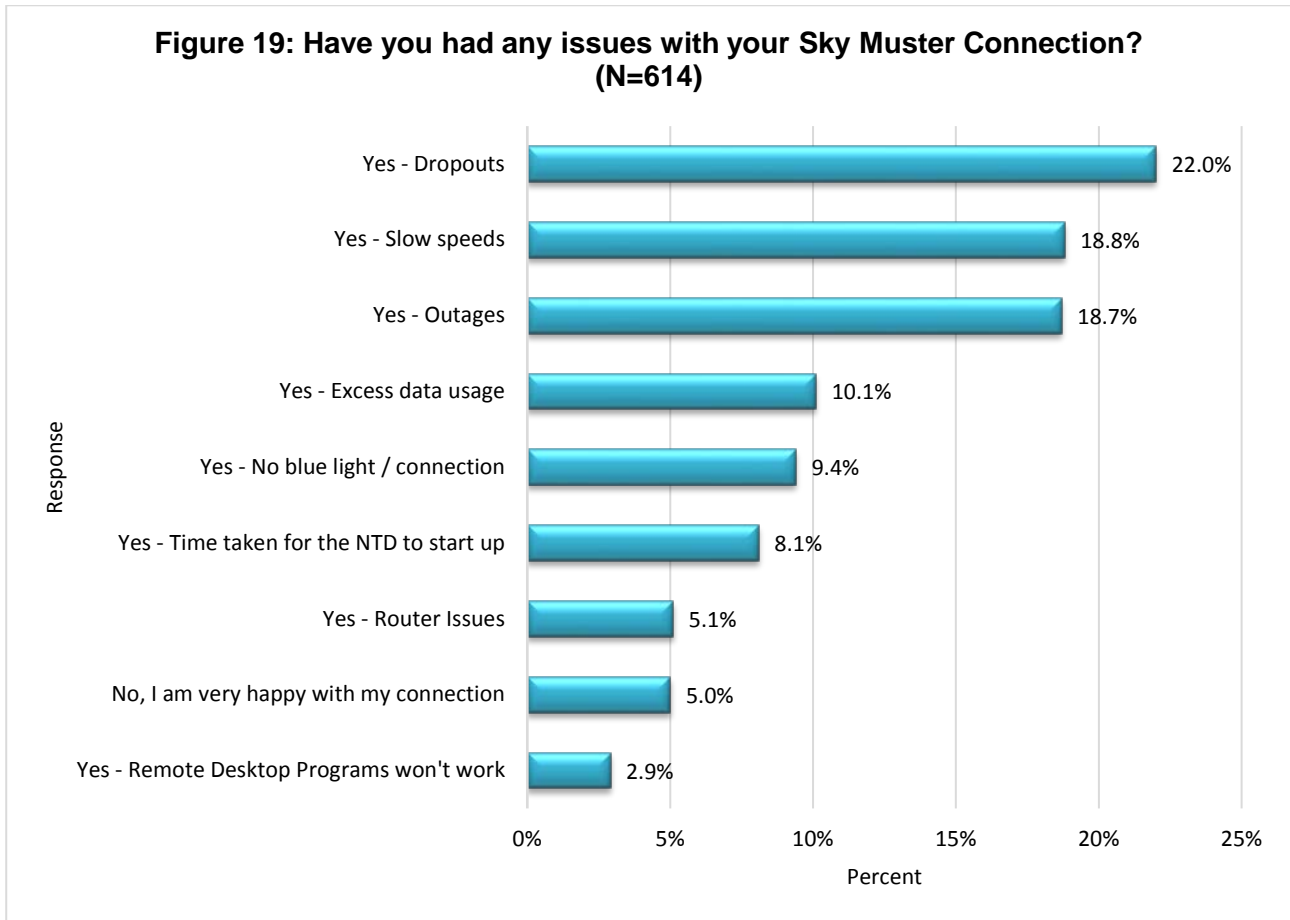


Figure 19: Have you had any issues with your Sky Muster Connection?

The respondents were given the option to select “Other” to provide anecdotal comments to support their choices. One hundred and seventeen respondents gave an “Other” reason about issues that they had with their Sky Muster connection. A cross tabulation compared anecdotal responses with answers selected in Question 17. The findings are summarised below and anecdotal comments are used to support the summary.

Respondents who selected that they did not have any issues and were happy with their connection also noted that they did have some issues in their comments. For example some had dropouts (6 comments), slow speeds (3 comments), not being able to stream (1 comment) and that the NTD was not working (1 comment). Indicating that while they were happy with the service they were still experiencing issues. Seven respondents said that they had not had their connection long and that it was too soon to know.

Table 89: Anecdotal comments for Question 17, from respondents who did not have any issues with their Sky Muster connection – “no – I am happy with my connection”

“I am basically very happy with my connection, just have the occasional dropout issue”

“Outages and drop outs but I feel it has been an acceptable amount as I realise this is a very new service.”

“Couple of small dropouts, but overall, happy with connection.”

Twenty-one respondents made comments about dropouts. Six respondents said that their connection was not working or that they were not connected and one respondent said that their connection drops out while streaming video’s on YouTube. The remaining comments about dropouts include that the service is unreliable, that dropouts are ongoing and that the connection quality has been poor. However, many of the respondents justified the dropouts as happening before - but stable now, too many people are on the satellite and that the number of dropouts have been acceptable for a new service. By contrast some respondents have commented on dropouts affecting downloads and streaming, remote desktop programs, apple devices and chrome cast. One respondent commented that they suffer a loss of income each time the service goes down. The following comments give a sample of respondent’s thoughts.

Table 90: Anecdotal comments for Question 17, from respondents who did have issues with their Sky Muster connection – “Yes – dropouts”

“HOPELESS SITUATION will go back to mobile broad band”

“Nothing works”

“Reliability of Sky Muster is very poor. I works well when it works. “

“Connection quality has been very poor. Even at the best of times it has a high level of packet loss - and at times I've experienced packet loss levels above 40% of all data packets (tested using `ping` from my router to the default gateway of the connection).”

“Compared too many others though I feel very lucky. I have found each time there is a maintenance advise another issue my end is solved or the impact from dropouts and not being able to connect to Remote Desktop becomes less of an issue. However the loss of income when on an hourly rate is felt as is the inability to pay wages to employees based some 1200km”

“Connection is bad because u have far too many on this Satellite. Not enough data to streamline all the things we need. Dropouts, searching, slow, basically it's bad. ??”

“Outages and drop outs but I feel it has been an acceptable amount as I realise this is a very new service”

“Lots of dropouts. Doesn't work with apple devices and they can't tell me why. Can't use chrome cast”

Twenty two respondents left comments about slow speeds, for example that the speeds fluctuate all of the time, and that they have seen that others were effected by slow speeds too and that the speed is slower than they thought it would be once the data has run out. Some of the comments were about how the speed of the connection was affected by the weather.

Table 91: Anecdotal comments for Question 17, from respondents who did have issues with their Sky Muster connection – “Yes – slow speeds”

“Huge speed fluctuations. Very slow a lot of the time.”

“I have only had a few instances of slow speeds and outages, after the event I have seen on Facebook that it has been at a time when others have had the same problems.”

“If a drop out occurs during a download, it then has to start again, using up more of our data each time.”

“Once slowed down after data has run out. The speed is slower than I thought it would be”

“Our issues were only for a short period and it was Skymuster not provider. We have been experiencing some slow speeds of a night time mainly and only hope it was a whole Skymuster problem!!”

“Slow speed and dropouts during rain”

“Slower than when first connected, and slower or totally out during heavy storm. Had to purchase extra data blocks.”

“When measly data allowance used up, the slow speed service that we unfortunately cop for 2 weeks out of 4 is essentially unusable. The old satellite was better in this regard!”

Eighteen respondents left comments about outages. In particular, issues with outages include being offline for long periods of time, leaving the NTD and simply that it is not working.

Table 92: Anecdotal comments for Question 17, from respondents who did have issues with their Sky Muster connection – “Yes – outages”

“Have had a few outages (but not as many as some Whirlpool posters). I leave the NTD permanently powered on and I think this helps”

“Lots of micro outages (1 min to 10 mins), IRC reconnects often, some websites refuse to load, up to 1 hour to get an Ip address before it starts working.”

“NBN need to have a number we can ring for a recorded message on known problems. Like the electricity people do. Then you can find out whether the problem is just you or it's NBN, ie do you need to just wait or do you need to start troubleshooting/ringing your ISP. I have no alternative method of connecting to the internet. So even BIRRR info is unavailable when I have a connection problem. I would have to go into town and book a computer at the library - so that's only during library hours and if they have a vacant computer.”

“Right now it is useless, for 3 days can access certain sites but can't access any site that requires secure authentication. Can't get to banking site and it was the end of quarter and now time to pay mortgage. Can't get to a lot of important (for me) web sites. NBN (facebook) says talk to RSP. What??? RSP says NBN knows about problem and is supposedly working on it, but they've had no communication back since turning in service tickets. Shame. RSP also says NBN doesn't refund for outage”

“Was great at first. Now it is hardly ever working”

There were seven comments from respondents about the time taken for the NTD to start up. Power cycles are taking a long time to complete, with one respondent still waiting after 75 days. Another highlights problems for properties that use generator power.

Table 93: Anecdotal comments for Question 17, from respondents who did have issues with their Sky Muster connection – “Yes – time taken for the NTD to start up”

“And all this in under 1 week of being connected! 4 days of my time wasted which no one pays for, this sort of time wastage can really hurt anyone running a business. Power Cycles - what a joke - 1/2 to 1 hour wasted each time it needs to be done”

“Last time I had to restart the ntd it took three hours”

“Originally it was a little unreliable, but we had a generator and I understood that turning off and on when refuelling didn't help. I have found since having power, and leaving it on all the time it's been better than I expected”

“So far it's taken 75 days to start up”

“When first started back in May, there were no problems (once the initial connection was working), but after a couple of months the problems started, and have now been going on for months”

Nine respondents were having issues with the blue light / connection. Many of the respondents simply cannot get connection, or the connection that they do get is poor. See Table

Table 94: Anecdotal comments for Question 17, from respondents who did have issues with their Sky Muster connection – “Yes – No blue light / connection”

“Blue light but no connection

“Blue light on but no transmission. Reboot ntd seems to fix it sometimes. Sometimes it's just down and out. Usually when you have something important to do. I won't use cloud storage because of risk if not being able to access when needed”

“Connection quality has been very poor. Even at the best of times it has a high level of packet loss - and at times I've experienced packet loss levels above 40% of all data packets (tested using `ping` from my router to the default gateway of the connection)”

“It either works or it doesn't, there is no in between for me”

“Nothing works”

“Only orange light showing blue one briefly after powering off. Quick to reboot only a minute or so before the blue light shows but so brief I cannot connect. Computer says 'unidentified ' not connected”

“Service installed but no service”

“Still awaiting service connection. Equipment has blue light but no service available”

“They haven't activated the switch over yet”

Three respondents were having issues with the router. One was unsure of the problem and was trouble shooting the router, another's router was dropping out and the third had purchased their own router and could not connect other devices.

Table 95: Anecdotal comments for Question 17, from respondents who did have issues with their Sky Muster connection – “Yes – Router issues”

“Don't really know but these are things that have been suggested to try to rectify the issue”

“Definitely an issue with time taken to start up. May be a router issue. We are trying to access another router to try to see if this is the problem”

“The wireless router drops out”

“We bought our own router but have trouble with our iPads not connecting intermittently for no apparent reasons”

Fourteen respondents were having issues with excess data usage. Some respondents were unaware of the data usage being used, while others expected their data to be reduced, but not to the extent that it was. Other respondents had issues with the price of the data blocks. One respondent commented that their usage was not charged to the correct date frame, therefore the data allowance for the upcoming month was already reduced when the billing period started.

Table 96: Anecdotal comments for Question 17, from respondents who did have issues with their Sky Muster connection – “Yes – Excess data usage”

“We joined during the month (20th) on 29th & 30th we really used it up trying out Netflix for the first time etc as the usage resets on the 1st. We didn't use internet much at all on 1st, 2nd & 3rd of new plan month.....when I checked usage on Harbour ISP website it showed no usage for 29th & 30th (which should have been a couple of Gb) and 7Gb usage for 1st, 2nd & 3rd. Should not have been that high at all!! Was very strange to find the end of month usage was obviously moved into my new month. Not disputing amount used, just WHEN it was used. We will be keeping an eye on it for sure”

“We seem to get days where we use extreme amounts of data. We have double what we had with the old satellite and we are using so much more with no change in usage.”

“Seem to have similar data usage issues to everyone else, bigger plan same similar usage to previous plan but notifications of high usage?”

“It's been a nightmare. We need a better service and a more realistic plan for data usage please.”

“Data limits are my only complaint about the service. I would be happy if extra data blocks cost less than current price, particularly if purchased in bulk. Eg 10 x 1 GB costs \$50, which is the same price as prepaid 3G internet, but not as convenient.”

“Almost died of shock in the first week. Tens of megabytes thankfully not gigabytes like some people. WPO off but not that much difference I think. No way to accurately compare.”

“Chunks of data disappearing, no extra data offered.”

Nine respondents commented about other issues including a limited use of the service... having connection for 15 weeks, but only having about 4 weeks of service. Another has issues with turning the equipment off on the off grid property. Off peak and peak issues are similar to other question responses and relate to the timing of off peak data.

Table 97: Anecdotal comments for Question 17, from respondents who did have issues with their Sky Muster connection – “Yes – Other issues”

“15 weeks of connection (22 /6/2016) and roughly 4 weeks of service”

“Inability to turn off currently without a possibility to turn back on and use is a huge issue living off the grid when night time needs huge reduction in power intake”

“Nbn should not be charging for a service that is substandard and unreliable. Have kept Telstra 3G as I do not trust the reliability of NBN SKYMUSTER. Another cost accumulated.

“Not excess data, just not enough data”

“One of main problems I have is the peak/offpeak timings. I can only guarantee data usage being assigned to offpeak between 2am and 6am. I have tried to get answers from Ant but the only (verbal) reply I have got is ""it depends on the session hour"" I have no idea what they mean by this. I am also having problems with excess usage. I have found out that to achieve the 24mps speed NBN is using ""prefetching"" which can add %20 to what you think you are using. This means that we are only getting 24GB out of 30GB plan”

“Slow speeds and drop outs happen from time to time, but don't affect me as much as they could as I don't spend all day everyday on the computer. Our data usage was big until I got Skymesh to turn off webpage optimisation and it's been good since then”

Question 18: Are you happy with your Sky Muster connection?

Eighteen percent of respondents are extremely unhappy with their Sky Muster Connection, nearly 17% are at the midway point, neither happy nor unhappy and only 5% are extremely happy.

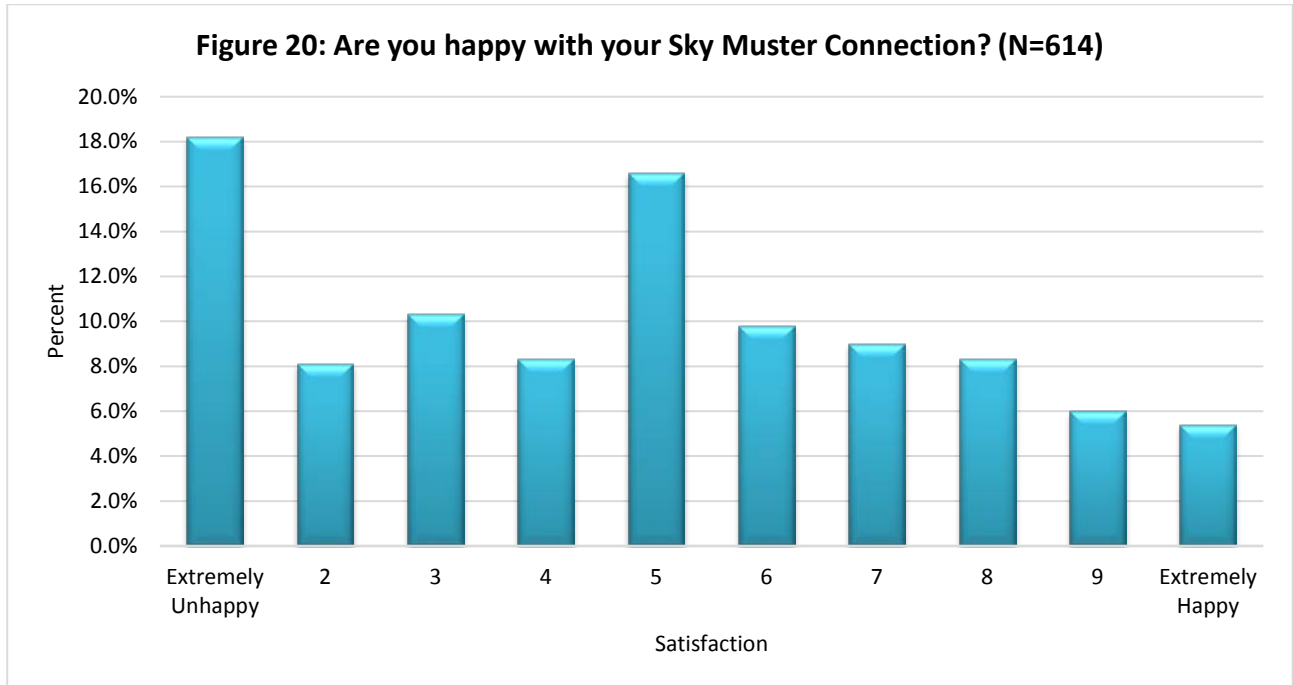


Figure 20: Are you happy with your Sky Muster Connection?

The respondents were given the option to select “Other” to provide anecdotal comments to support their choices. One hundred and thirty five respondents gave an “Other” reason about their happiness with their Sky Muster connection. A cross tabulation compared anecdotal responses with answers selected in Question 18. Fifteen comments were omitted because they wrote N/A, they had only recently been connected or that they were unable to use their connection. The findings are summarised below and anecdotal comments are used to support the summary.

Forty seven percent of respondent comments were negatively related to data limits, reliability, speed, dropouts/outages and unexplained data use. In addition, comments were about the service being expensive and that the service overall is disappointing. Participant comments generally indicate that respondents are unhappy with Sky Muster in comparison to the interim satellite service previously experienced

In terms of data, comments surround data being used too quickly, not having enough data and peak times of use, see Table 98

Table 98: Negative anecdotal comments for Question 18, from respondents about their happiness with Sky Muster, negative comments about data

“Data is not sufficient. 1) For our business 2) For Year 12 students 3) Is worse than interim satellite”

“Data plans for today's world well and truly below what they should be! Try running two businesses and a child studying on 40GB - impossible!”

“Even when it was working properly, the available data limits and especially the off peak hours were very disappointing. I have my grandchildren for school holidays, and they are used to living in a small country town, where the family internet plan, costing about the same as mine, copes happily with their using 30GB/day. Makes Sky Muster look very poor value”

“If it worked reliably, my data cost per GB was same as in the city, I had access to plans/bonuses the same as the city, then I'd be happy even though it was 25/5 speed. The current offering 'package' makes paying \$60 BILLION dollars a very sad, sad joke.”

Respondents commented that the service was unreliable and that they are frustrated with the time it takes to get things fixed as well as the length of time they are offline.

Table 99: Negative anecdotal comments for Question 18, from respondents about their happiness with the reliability of Sky Muster

“If it was a reliable service would be extremely happy”

“Incredibly unreliable, too expensive. No thought of compensation for lost business due to no internet access”

“Reliability is poor. I can never be sure that the service will be working, when I need it. The ISS was a superior service in every way. VoIP on Sky Muster works ... except for the reliability issue”

“Ridiculously slow and unreliable. Odd data usage and that ridiculous peak / off peak data breakdown”

“Service not reliable and we can't get it fixed”

“When it works”

“When it works it is great, but I have been offline for 16 days out of the last 5 weeks. Incredibly frustrating”

In terms of speed, most comments indicated that the respondents thought it would be faster and that the current speeds the service delivers “poor user experience”, see Table 100.

Table 100: Negative anecdotal comments for Question 18, from respondents about their happiness with the speed of Sky Muster

“I thought speed and reliability would have been better.”

“If this is the fast NBN promised it is very slow”

“Ping is too slow makes for poor user experience. This is a feature with satellite still not my fault why should we pay above NBN standard price for less quality service?”

“Useless other than for general web browsing. Cannot work on it, have to switch over to 4g to do anything work related (software development services)”

Some respondents had multiple comments about their Sky Muster service, for example they stated frequent dropouts, lengthy outages, high latency, no communication with ISP’s and poor data limits as reasons for being unhappy.

Table 101: Negative anecdotal comments for Question 18, from respondents about their happiness with multiple facets of Sky Muster

“Frequent dropped connections, lengthy outages, no communication from nbnco, poor quota for maximum price”

“High latency means VoIP, remote desktop or other interactive remote access is very time consuming. Any online gaming is impossible. Uploading of files is also very slow, and often fails and needs to be re-started. We experience high levels of packet loss on our connection, and it regularly drops out and has to reconnect - sometimes after only being connected for a minute or two. The connection has also had a number of extended outage periods since it was installed with no compensation or even reasonable acknowledgement and explanation of what has occurred”

“Latency too high. Makes the experience feel slow. Gaming is impossible. Cost too high. Data too low. Doesn’t work in the rain - we’ve had a lot of rain”

“The actual sky muster install was successful with my business/personal port working Ok most of the time, but again the Ed Port is a no show, so because I was expecting an extra 50gb on the Ed port I am struggling with the plan that I selected”

“This is the worst internet connection we’ve ever had. Dropouts happen daily. In December 2016, we had at least 33 outages, some lasting a few minutes, many lasting up to an hour and some lasting for 2-3 hours. And there were probably many other outages when we weren’t trying to use it. In short, it’s awful, and we feel we’re being ripped off every day”

Other respondents commented about unexplained data use where Sky Muster is better than the previous service, but that it is either not working or it is very slow, that data is being used up faster and that they are having more problems now than ever. The respondents state the service is barely usable.

Table 102: Negative anecdotal comments for Question 18, from respondents about their happiness with Sky Muster, in terms of unexplained data use

“It is better than the old service but it seems to be either not working or very slow at least half of the time. We are also going through a LOT more data than we did on the old system with no changes in the way we use it. Mind you right before we got skymuster during the last billing period on the old system we went through all our data in 6 hours and nobody was home”

“Uses about double the data for no change in use so we are no better off for data availability. Cost/speed is better than Next G though reliability is poor and getting worse”

“Would have preferred to stay on the ISS, have more problems now than ever, even though we have double the data I have no idea how we use it all as our habits haven't changed at all. It's unreliability is really frustrating as well”

“It is barely usable when you all peak data is used half way through the month and our usage hasn't changed from ISS where we had 20gb. It is beyond frustrating - we have no other access to internet and are so reliant on it”

Other general comments were made by respondents that included high expectations not being met, better than having no other options, and that the service is not what was promised. Overall, respondents commented that they thought that rural Australians were given an inferior product.

Table 103: Negative anecdotal comments for Question 18, from respondents about their happiness with Sky Muster, general comments

“After 6 months of use and high expectations; the service is currently a dud.”

“Better than nothing but very poor compared to other options for non-rural Australians”

“I feel like rural and remote people have once again been given an inferior product. This service is quite unreliable and when it works it is good but over the past month it has got progressively worse”

“ISS was so much better, can't believe how bad SkyMuster is. Also can't believe that I now think ISS is good, in fact I wish it was connected again, at least it worked”

“It's not what we were promised and we still pay a fortune”

“It's better than nothing right? :/”

Three comments were about the service being expensive and four comments were about the service having dropouts or outages.

Table 104: Negative anecdotal comments for Question 18, from respondents about their happiness with Sky Muster, in terms of the service being expensive, dropouts and outages

“Glad to have at least something but very indescribably sad and disappointed with the frequent drop outs and almost-insulting (and pitiful) NBN data allowances”

“I was initially [happy], but now have had no internet for 3 weeks consecutively due to an outage. The time taken for the NBN to recognise there was a major problem has been very disappointing”

“When it was initially installed it was perfect. Never missed a beat, very few outages other than severe weather. A month or two ago, something changed and it's become flakier than puff pastry. Constantly getting small outages. Service has gone downhill badly”

“Too expensive. Not enough data. Not reliable”

Eighteen percent of the comments were generally unhappy with the service. Comments include that the service is much better than the interim service but it is more unreliable. That they are resigned to a poor quality service, and that they should not be on the Sky Muster service given their location. The comments include participants being treated like a second rate citizens, see Table 105 for a sample of comments.

Table 105: Negative anecdotal comments for Question 18, from respondents about their happiness with Sky Muster, in terms of being “treated like second rate citizens”

“Compared to the Interim Service, Sky Muster is much better when it works. But it seems to be more unreliable”

“I am resigned to a low data cap high latency connection when I am within 20 minutes of 2 tourist destinations, within 1 hour of 3 major rural centres. We could have a fixed wireless tower that would serve 150 residences, but no, we are obviously in the most remote and rural parts of Australia and get satellite”

“I don't want Sky Muster, I want NBN broadband which I understood all Australians would be able to access. How come cities which had fast, cheap internet have got NBN and rural and regional populations have Sky Muster which is expensive and unreliable? Second-class citizens AGAIN!!!”

“I feel like a Guinea pig testing a service I am paying for! No reimbursement for outages. Can't complain about NBN to the TIO as the RSP is the one that suffers for no fault of their own. NBN should be held accountable and provide reimbursement for outages.”

“I find it no better than we had before, and we were told how much better it would be but being rural we don't have much choice and are treated like 2nd rate citizens, like we just don't matter”

“It's OK. It's better than nothing, and if I were truly remote it would probably be a godsend. But I am only living a half-hour drive from a capital city CBD. I shouldn't be on a ""last resort"" connection”

“Not as advertised, not fit for purpose. As a tax payer can I get my money back, I'm sure I've got a copy of the receipt”

“The problem is...I've gone from absolutely appalling internet connection to something vastly better...but The NBN no way lives up to what's promoted...but 4 stars compared to 0 stars before is still 'good”

Sixteen percent of the respondent comments were positive mostly because the respondents had upgraded from an older system. However, the respondents comment that the service still does not perform as promised and there has been outages or dropouts. Table 106 shows a selection of the positive comments.

Table 106: Positive anecdotal comments for Question 18, from respondents about their happiness with Sky Muster

"It doesn't perform as promised but is still a significant improvement to our previous options"

"Mainly because I upgraded from the old government broadband guarantee which was slow, severely limiting in capacity, and grossly over-priced"

"The old AGBS system we were on was terrible...so yes this is an improvement...same stress in household, same if not more expensive costs. Maybe twice the data, off a very low base. 3 kids to help through school...no data"

"There has been one day plus a couple of drop outs in three months. Telstra wifi was twice as expensive, ten times slower and dropped out constantly"

"We had no internet before. So what we have is better. But very very slow"

Eight percent of the respondent's comments indicated that they were both happy and unhappy. Initially the respondents were happy with the service, but then indicated that their unhappiness was caused by excess data, outages, re-connection times and plan restrictions. See Table 107: Anecdotal comments for Question 18, from respondents about their happiness with Sky Muster, who were both happy and unhappy.

Table 107: Anecdotal comments for Question 18, from respondents about their happiness with Sky Muster, who were both happy and unhappy

"Connection is very good, data downloads very poor"

"Excellent when it is operating but outages are annoying and time taken to connect after powering on is very poor. I have a remote area power supply and switch off the modem when not in use. This is necessary to save power and was no issue on the interim and earlier satellite service. Connection often takes one to two hours. Occasionally occurs in 15 minutes. 15 minutes would be acceptable if it was consistent"

"I am happy with it when it is working, but the outages are not good"

"It is faster when it is working and we do get slightly more data than we were allowed before"

"It is great when it is actually working"

"It's all comparison to what we had before but certainly the speed is much better. I feel it is easier and less time consuming to do many tasks"

"The first six weeks after connection was excellent. Since then, we have had the same sort of poor quality internet as we had before being hooked up to the NBN"

"was very happy , now it is worse than interim"

"When it works well, its ok (except) for FUP and plan restriction and peak/ off peak... when it's bad, it's half a step above dialup."

"When it works, it works fine. Too unreliable. Insufficient data limits for a modern household"

“Worked fantastic for the first 2 weeks after installation, speeds seemed different - faster. But after that on and off issues, speed sometimes seems slower than when I had ABG”

Question 19: Does Sky Muster meet your needs - speed, data, cost & reliability?

Nearly 21% of respondents selected that Sky Muster data does not meet their needs, 20% said that it was not reliable, 14% said that Sky Muster does not meet their speed needs and 13% said that it is not affordable. By contrast 11% said that Sky Muster did meet their speed needs, 10% said that Sky Muster is affordable, 7% said that the data met their needs and 5% said it was reliable.

Table 108: Multiple response analysis of Question 19, Does Sky Muster meet the respondent’s needs in term of speed, data, cost and reliability

Multiple Response Analysis	N	Percent	Percent of Cases
No - It does not meet my data needs	376	20.9%	61.2%
No - It is not reliable	353	19.6%	57.5%
No - It does not meet my speed needs	257	14.3%	41.9%
No - It is not affordable	228	12.7%	37.1%
Yes it meets my speed needs	195	10.8%	31.8%
Yes - It's affordable	181	10.1%	29.5%
Yes - It meets my data needs	122	6.8%	19.9%
Yes - It's reliable	86	4.8%	14.0%
Total	1798	100.0%	292.8%

The respondents were asked to provide supporting comments for their response to **Question 19 “Does Sky Muster meet your needs in terms of speed, data, cost and reliability”**. Overall, the comments were quite negative, indicating that the respondents were not satisfied with the offering.

The response themes have been divided into the four categories of speed, data, cost and reliability and are presented below with supporting comments provided by respondents.

When asked about the speed, 14% said that Sky Muster did not meet their required speeds, see Figure 21.

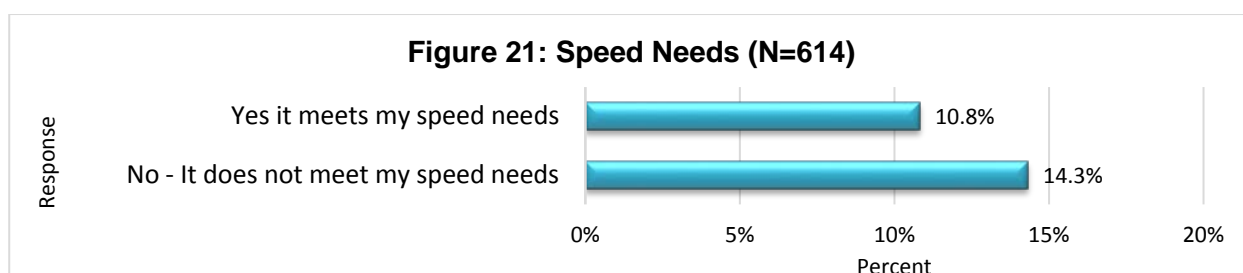


Figure 21: Does Sky Muster meet your needs for speed?

Nearly 11% selected that Sky Muster was meeting their speed needs. Supporting comments include that 25/5 would be the slowest acceptable speed and that they would be happy with, if Sky

Muster was working. The reliability rating of 4.8% supports this statement. While the respondents were happy with the speeds, they commented that higher plans are less affordable and that Sky Muster was only meeting speeds because the family had left home. Those that were unhappy mentioned consistency and reliability as barriers to speed and that for the amount they paid, Sky Muster should be faster. Some respondents have chosen to pay more to get the speeds that they want and others have commented that the service does not suit their area.

Table 109: Anecdotal comments supporting respondent answer about Sky Muster’s speed meeting their needs

“Ok when working”

“So far it meets my needs as far as I can tell”

“Yes, majority of the time”

“Not sure about the others. Was delighted when installed. All went well, connection and speed were fast”

“If it was working it would meet my speed needs, massive contention somewhere”

“It meets my needs now that my family have left home”

“Only because there are no children in the house, would not meet the needs of young game players. When children are here, it does not meet our speed or data needs”

“This is the case as we no longer have children at home studying via distance”

“Compared to mobile 3G”

“I think it’ll meet my speed needs but I haven’t done some serious work on it yet”

“For the time being, Sky Muster would be adequate if it was reliable. Next year, it will probably not be adequate in any case”

“Speed comes and goes usually about 22 upload 4 download”

“I grew up in a country where we had unlimited high speed cable internet for less than \$40 per month....I never realised how frustrating slow, unreliable and data capped internet could be until I moved to Australia :(“

“If it was consistent it would meet our speed needs, but it isn’t”

“When it [speed] works, it works fine, but it’s frustratingly unreliable”

“For what we pay it should be more reliable, faster”

“I have applied for the turbo upgrade”

“Much more reliable and better than the mobile broadband I had but still not totally great. Speed has certainly decreased since first connected and I pay the extra to get faster speeds”

“Not fast enough to stream content Not enough data allowance”

“It’s nowhere near the quality of city speeds, data plans, affordability or reliability. Disappointed to say the least especially after what we were promised”

“It’s not good enough to be able to run a business and have students rely upon it”

“Not fast enough to stream”

“We can’t stream any video without quickly hitting our peak download limit. Given our local DVD shop has recently closed down due to the rollout of NBN wireless and NBN FTTN in our local area (Warrnambool, VIC), this technology is not suitable for my area”

Twenty percent of respondents said that Sky Muster was not meeting their data needs and nearly 7% said it was meeting their needs.

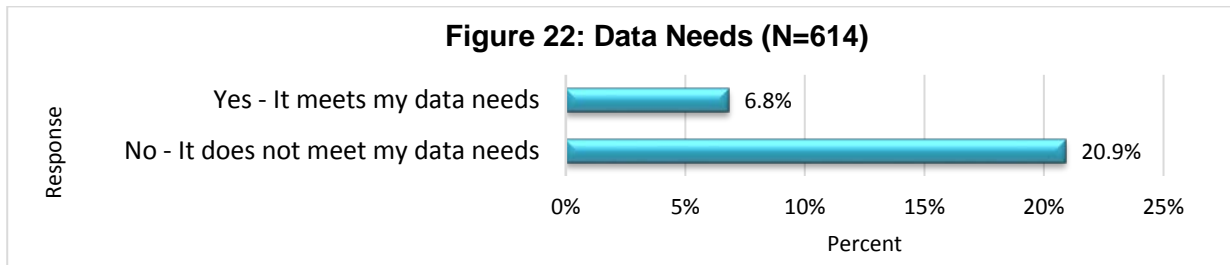


Figure 22: Does Sky Muster meet your needs for data?

Supporting comments for not meeting respondent’s needs for data are related to not enough data or peak data available to be used at the correct times and that data is used a lot faster when on a VoIP phone plan, it is also more expensive. Respondents are frustrated that the plans are restricted compared to their city cousins and that business plans did not change to like for like plans when moved to Sky Muster. They are also frustrated about the peak and off peak times to use data.

Those who said the data limit is meeting their needs, also state that it may not be adequate for the future and that they are not using as much data as when with a mobile connection. Others did not have enough data to stream content and others were happy with the data that they have. Finally, some of the comments indicate that respondents are frustrated because the data allocation is not what was expected.

Table 110: Anecdotal comments supporting respondent answer about Sky Muster’s data allocation meeting their needs

“Data needs would be OK if usage was correct and bonus data was usable at a sensible time”

“Data availability would have been fine in 2010, but not now”

“Mostly meets my speed needs, when it’s working. Obviously IS affordable, since I currently afford it, but is not meeting my [data] needs. A bigger plan is unaffordable for us”

“The nbn FUP restricts the plan size vs cost. Businesses in the bush need access to larger affordable plans”

“For businesses it is criminal. For remote users - we are only 2kms away from wireless. Why were the mobile towers not used? And the 'fair use' policy of 150GB should be offered to those that were using it for business previously - and now we have only 45GB???”

“60% of my data allocation is 'off peak' when I am asleep. I use very little off peak data. Therefore, I am paying for what I can't conveniently use”

“Catch 22...more data would be great, but for me the price would not be affordable”

“30gb on peak is barely enough now. My baby daughter will need a much better connection when she is in school. I cannot see nbn providing it. If I was on FW, \$90 gets me 25/5 with essentially unlimited quota. On satellite, \$200 gets me about 75gb on peak.

It's not future proofed at all! Get as many people off satellite as possible so the ones that really need it can have a decent data allowance. Currently the digital divide between satellite and the other 2 technologies is massive and getting larger!”

“Still extremely expensive compared to our city cousins”

"It obviously doesn't meet my data needs as even though I do not use my laptop any more than I did previously each month I run out of data"

"Our needs will increase as the kids go through higher education. Even now we can't stream tv as our city neighbours do, and I have to be very careful what we download. Definitely not future proof"

"Still waiting in education ports!!"

"The cost is too high to go to the bigger plans in comparison to city folk who would get unlimited data for the same price"

"The peak period is not at a time favourable to business"

"We do not use it to watch movies Or gaming. Too worried we will run out of data"

"We have more problems now than ever, even though we have double the data I have no idea how we use it all as our habits haven't changed at all. It's unreliability is really frustrating as well"

"We would love to be able to stream movies and TV shows"

"Not enough peak data available"

"For \$60 I'd like more data..."

"Data - Currently adequate for me, but I fear that in a few years' time, we will be back in the same boat as before"

"Using a lot less data on Sky Muster than I did with Telstra Mobile connection?"

"Not fast enough to stream content Not enough data allowance"

"I really feel let down in this area. Thought it would work out cheaper and we'd have data to spare, but not the case. Feel it's not much faster than the old satellite system"

"Somehow we are using more data than previously when we were on an 8Gb wifi plan (reset through each month so we mostly had 16Gb), even though we now have more data and our usage pattern hasn't changed"

When asked about the cost of the service, nearly 13% of respondents said that Sky Muster is not affordable and 10% said that Sky Muster was affordable.

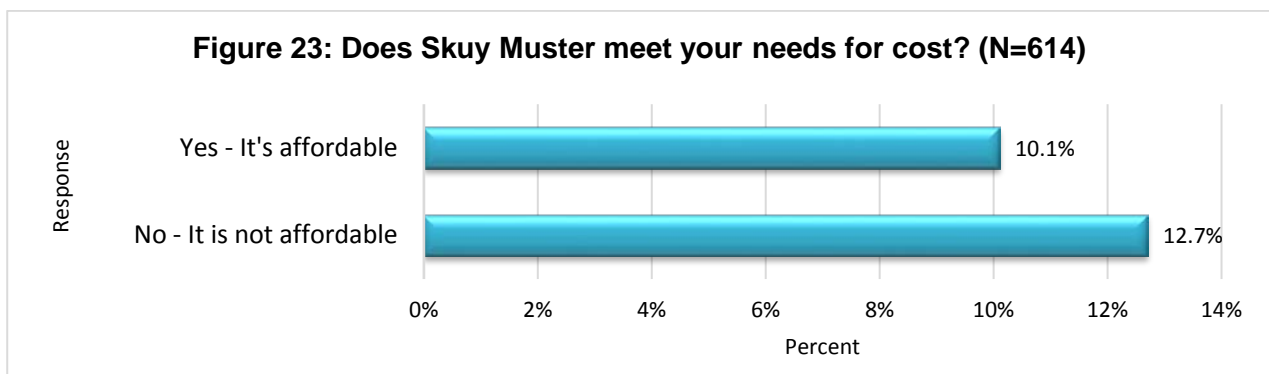


Figure 23: Does Sky Muster meet your needs for cost?

The supporting respondent comments agree that Sky Muster is more affordable in terms of price than mobile broadband, but not compared to ADSL. **However, there is consensus that the cost is disproportionate to the allocated data and inequitable compared to urban services.** In addition, respondents commented that it is a **waste of money because it does not always work.** Some respondents are paying for two services to obtain enough data to maintain their business.

Table 111: Anecdotal comments supporting respondent answer about the cost of Sky Muster

"Data needs would be OK if usage was correct and bonus data was usable at a sensible time"

"It is affordable up to 30gb then the cost is disproportionate to the increased data. I would be better off purchasing one and a half plans (which obviously isn't an option under the system) than purchasing data blocks or a higher data plan"

"Affordable in comparison with Mobile broadband"

"For me, the price is pretty much in line with what I have been paying but I am a business user. What doesn't add up is the data in relation to what others have with their fixed NBN"

"I think it is affordable if more peak data was available, and off peak hours extended"

"It is affordable compared to Next G. Not compared to any other form of NBN or ASDL"

"It is affordable however it is a waste of money as it always fails"

"It is more affordable than wireless broadband but crazily unaffordable compared to fixed wireless or cable nbn"

"Price is a huge improvement on our previous Telstra plans, still disappointed in data plans compared to in town. Speed is very hit and miss - test range from less than 1 to 23ish for no apparent reason"

"To get the amount of data I would prefer, it would not be affordable"

"Affordability is not even remotely close when you compare with what they can get in town"

"For what we pay it should be more reliable, faster"

"It's a stinking pile of dog xxxx and we're being crucified and hung out to dry. Equalise the byte for byte cost across the whole NBN. Costs need to be a quarter of current rate"

"Significantly more expensive than fibre"

"Pensioner concessions should be available"

Nearly 20% of respondents commented that Sky Muster is not reliable, whereas less than 5% found that Sky Muster is reliable.

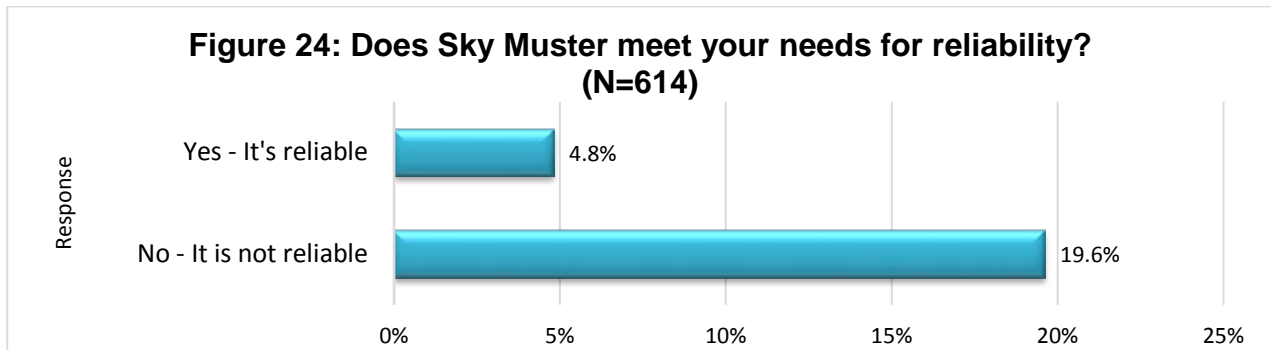


Figure 24: Does Sky Muster meet your needs for reliability?

Supporting comments confirmed that respondents thought that the Sky Muster satellite service was unreliable.

Table 112: Anecdotal comments supporting respondent answer about the reliability of Sky Muster

"My service is usually reliable."

"Certainly unreliable. Would love to test speed."

"Everybody should have access to the same service for the same price. Everybody should have to pay equally for data used. Everybody should have access to unlimited internet. Everybody should be able to access the internet, not only those living in cities. Peak/off peak data should both exist"

"If it was consistent it would meet our speed needs, but it isn't. Somehow we are using more data than previously when we were on an 8Gb wifi plan (reset through each month so we mostly had 16Gb), even though we now have more data and our usage pattern hasn't changed"

"It's nowhere near the quality of city speeds, data plans, affordability or reliability. Disappointed to say the least especially after what we were promised"

"It's not good enough to be able to run a business and have students rely upon it"

"Most unreliable internet service i have ever had"

"This is what we are expecting!"

"Very disappointed with Skymuster, this has not bridged the gap between the country and the city"

"We have been sold a lemon"

"We have daily drop outs and poor download speed (1-5 mb/s only)"

"We want more data We want something reliable Not good enough"

"Worse than before."

"Would be happy paying for something that was reliable and faster"

"When it works, it works fine, but it's frustratingly unreliable"

Respondents also offered “other” comments that were related to speed in their responses, for example while the speed was meeting their needs, a higher speed service was not affordable. For one respondent who no longer had children at home, the speeds, data and reliability were meeting their needs, but the cost was not. For another respondent, a lack of reliability caused by frequent latency was making his or her speed unreliable. Another respondent would like to participate in online courses. The respondent agrees that Sky Muster’s speed is adequate, but the data allowance and affordability do not meet the respondent’s needs to complete online study. For those who had adequate data and affordability, the speed was slow and the connection unreliable. Another postponed a distance education course because the data, speed, cost and reliability would not support the task. This analysis gives some insight into how speed, data, cost and reliability are affecting users of Sky Muster.

Table 113: Anecdotal comments supporting “other” respondent answer about Sky Muster meeting their speed, data, cost and reliability needs

	Yes - Speed	Yes - Data	Yes - Affordable	Yes - Reliable	No - data	No - Speed	No - Affordable	No - Reliable
Higher plans are less affordable								
	✓						✓	
Only because there are no children in the house, would not meet the needs of young game players. When children are here, it does not meet our speed or data needs.								
	✓	✓		✓			✓	
Latency frequently causes issues. Though relatively affordable, cost and limitations (both data caps and speeds) are not equitable.								
	✓	✓	✓					✓
I have several courses I would like to take online. I can't as they're mostly delivered by video lectures and it's not possible to download hours of video with the paltry allowance that nbn co allows Sky Muster satellite users.								
	✓				✓		✓	
Speed - Bandwidth is great, but latency is poor. Data - Currently adequate for me, but I fear that in a few years' time, we will be back in the same boat as before. Price - a big improvement, obviously not as good as ADSL/or other NBN, but still a lot better than before. Reliability - Probably as good as my old mobile broadband. Not that that was good. I hope the current unreliability is just teething issues, which go away soon.								
		✓	✓			✓		✓
All of the above [speed, data, cost, reliability]. Is not fast enough to Watch any videos not matter how small.								
					✓	✓	✓	✓
Had to postpone my distance education course, as it is too slow in the evenings for access. 2 kids coming up to high school and they can't do activities teacher has recommended								
					✓	✓	✓	✓
It does meet my speed & data needs, I can afford it but COMPARED to what is advertised for other types of connections (like unlimited data at lightning speeds for the same price) it's really a second rate offering.								
	✓	✓					✓	✓

Question 20: How much PEAK DATA do you require to meet your CURRENT NEEDS?

Twenty two percent of respondents selected that they require up to 40 gigabytes of peak data to meet their current needs, a further 22% need between 40 and 70 gigabytes and another 22% require between 70 and 100 gigabytes of peak data to meet their needs. Twenty percent of respondents require between 100 and 200 gigabytes to meet peak data needs, 10% need 300 to 500 gigabytes and 4% of respondents need more than 500 gigabytes to meet their current peak data needs.

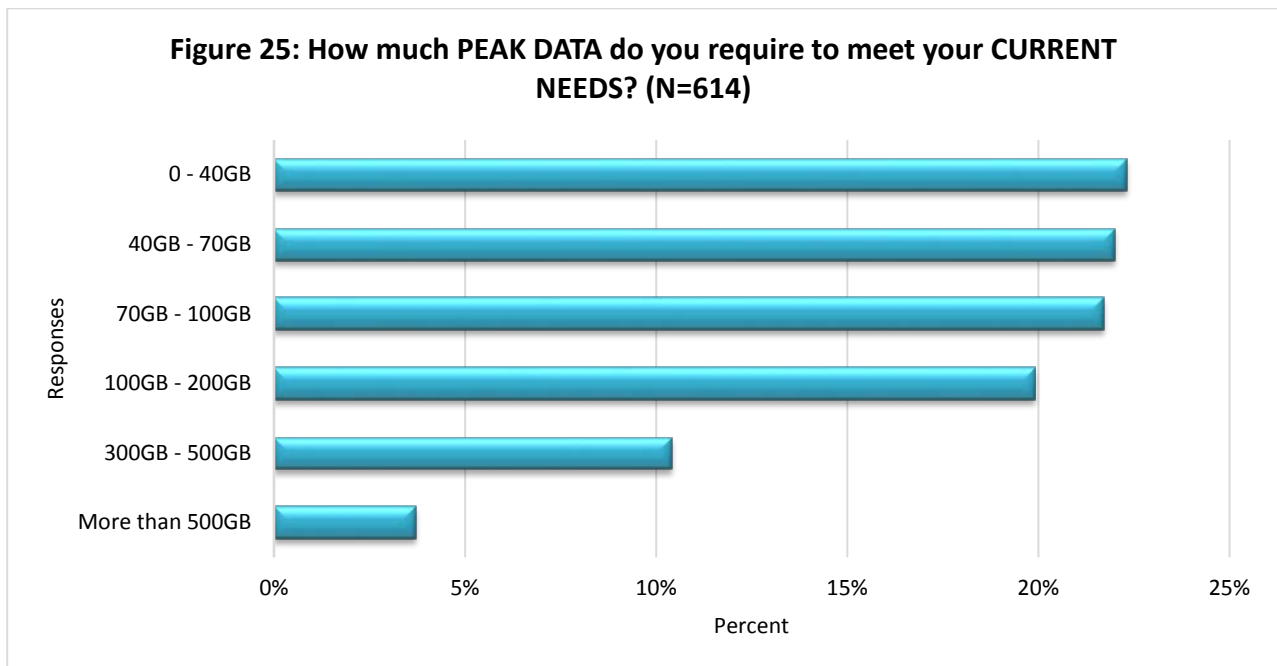


Figure 25: How much PEAK DATA do you require to meet your CURRENT NEEDS?

The respondents were given the option to select “Other” to provide anecdotal comments to support their choices. Ninety one respondents gave an “Other” reason about their peak data needs. A cross tabulation compared anecdotal responses with answers selected in Question 20. The findings are summarised below and anecdotal comments are used to support the summary.

For those who chose that 0-40 GB was enough peak data for their needs, the respondents commented that this was because they watched their usage to ensure they did not go over the limit. Two respondents commented that they watched their usage because they could not afford a larger plan. Another three comments noted that it was enough as long as the children/family were not home or visiting. Another commented that while it was enough for one person, the other used the data for University study. The remaining comments were about the respondents still determining what their required usage would be.

Table 114: Anecdotal comments supporting “other” respondent answer about how much peak data the respondent needs to meet current needs – 0-40GB

“But I have learnt to manage on small data and I do not stream or watch YouTube still. 40 - 70 would enable me to stream but the cost is a factor when you also have monthly landline fees and two prepaid mobile fees plus a mobile internet device for when you are away but it doesn't work here”

“I have plenty when kids aren't home. Holidays are a different story”

“Unless the kids are home from school. They have access to unlimited data and you then have to flow them into submission and remind them that we here in the bush are still 3rd rate citizens”

“It only meets my current needs because it is too slow to stream anything so can't use as much data as I would like to”

“Have to watch usage but can usually keep within data allowance”

“If we had more we would probably use more. We are definitely conservative users who constantly check quotas and modify internet usage to meet limits”

“Who knows? Current situ on ISS we are restricted. We would use more if we could, we must watch usage carefully or risk shaping and then have issues running the business”

“Only because we are so careful with data and use no cloud based applications”

For those who chose that 40-70GB peak data was enough for their needs, they commented that it was because they had never had any other offering, another three comments stated that if the service was better, they would use more data and the remaining comments stated that they should have access to unlimited data – “like the rest of the world”.

Table 115: Anecdotal comments supporting “other” respondent answer about how much peak data the respondent needs to meet current needs – 40-70GB

“Because we have never had the opportunity to live in the way we would like”

“My 'current needs' are curbed by the poor service. If I had better service my 'needs' would be greater”

“Just give me unlimited like millions of other people have access to. Why the discrimination?”

“Unlimited - like the rest of the world!”

“How can you watch Netflix YouTube and game as well as use social media. It's impossible We have to go to my parents 3 k away to do the things we require because skymesh is unreliable and my parents' house have nbn wireless. We have line of sight to the tower? Beats me why we can't have nbn wireless. I want a twat done please; hopefully someone is reading this”

Similarly, those who chose 70 to 100GB as being enough peak data, respondents commented that they would like the same data as other “normal Aussie families”. The respondents are also watching their data usage, for slightly different reasons for example to watch television or a movie online and to “not have to think about it” and “to just be able to do things without rationing”. Some commented that they need the extra data just to be able to use the internet as it is designed. Others commented that they needed this limit (and more) to be able to Skype medical appointments, and stream videos.

Table 116: Anecdotal comments supporting “other” respondent answer about how much peak data the respondent needs to meet current needs – 70-100GB

“Like any normal Aussie family”

“Would love to have same plans available to us as those in town, \$80 unlimited incl phone. But would be happy with less data at least at same price”

“I would like to have more data than currently where I try to minimize use. It would probably not class as a NEED but being able to watch some cricket & occasional movies would be nice”

“It would be nice just to be able to maybe watch a movie now and again. We all know it is possible with Sky Muster, but profits before customers counts I suppose”

“I would love more just so I don't have to think about it. But I don't want to pay more. Trying to save money”

“We would be able to access and use the Internet without rationing”

“The web uses more data as it is designed in cities, not for satellite customers. If 'off-peak' hours were extended - would also improve this”

“If we were able to get more data we would love to use it for personal reasons such as skype medical appointments or even video streaming - but I couldn't even guess how much data that would take!”

When deciding about how much peak data they needed to meet their current needs, the respondents who chose 100-200GB compared their peak data choice to plans to city plans, to their current usage and to what they would need to complete their education. They also commented on what they thought they would need for future internet usage.

Table 117: Anecdotal comments supporting “other” respondent answer about how much peak data the respondent needs to meet current needs – 70-100GB

“I don't think that's unreasonable as our city counterparts get that no problem”

“Just the national average. Not greedy”

“Going on data usage lately & that's not downloading movies, gaming etc, mainly web browsing & reading emails”

“Hard to assess - we currently use nearly 100GB per month across the NBN plan, mobile data broadband and the data attached to our phone packages. We limit data use to ensure that the kids have sufficient data to access what they need for school and their extra-curricular activities so having more would be good”

“We would like to be able to use (often data heavy) educational websites for our children who are only awake during peak times”

“100-200GB, may be more. As they centralise everything in urban areas and take away things that we enjoyed (digital tv channels, access to govt and educational services, etc) and tell us to participate/stream via internet the need for ANYTIME data increases”

“I want to be able to participate in 21st century entertainment like my city counterparts do”

“Windows Update a couple of months ago (for two computers and two tablets) chewed up nearly all of our data allowance for the month”

Those who chose 300-500GB as their required peak data to meet their needs commented that it was because they wanted the same as users in the city or that they would prefer an unlimited plan. They also commented that they would like more than 300-500GB if the service was faster. Respondents commented that those studying distance education are unable to watch YouTube instructions and video and that their children are not able to complete online tasks. Two comments stated that they had other internet services, which allowed them to complete their internet based tasks and two others were planning for future usage.

Table 118: Anecdotal comments supporting “other” respondent answer about how much peak data the respondent needs to meet current needs – 300-500GB

“The same as the rest of Australia's average”

“To be able to run our household like my siblings in the city with family this is how much I would like. We can't use our smart tv or Netflix due to this”

“I'd prefer unlimited”

“Why can't we have unlimited??”

“I could manage on between 100 and 200 but if I wanted to stream netflix and backup my data to the cloud, I need about 350gb per month”

“I would love to back up my important data and have the flexibility to work from home. Using spatial data for my work precludes that as bandwidth and data needs are high. 30gb on peak is not sufficient. I'm not going to get up at 1am to do work!”

“Distance education course uses a lot of you-tube instruction and other live videos, have never been able to watch them so not sure how much data they would use up??”

“We have children who need to access the internet for school work, particularly our son in secondary school. There is an assumption that 'everyone has broadband' and he has been in trouble for not completing online tasks, that he can't do unless on NBN (not satellite). It is also difficult as I work from home using the internet for communication”

“A simple university assignment used 8GB in three hours. Internet features are made for the majority of users with very large plans. Leaves satellite users with meager data out in the cold and not part of society”

“Distance education course uses a lot of you-tube instruction and other live videos, have never been able to watch them so not sure how much data they would use up??”

“We have children who need to access the internet for school work, particularly our son in secondary school. There is an assumption that 'everyone has broadband' and he has been in trouble for not completing online tasks, that he can't do unless on NBN (not satellite). It is also difficult as I work from home using the internet for communication”

“We have to keep our Telstra 3g internet service (heaps more reliable) so its has become a very expensive service per month”

“WE run a number of business off the service, advertising and media copy are very data hungry we therefore have to a second service to back up the data lite skymuster”

“Currently 300-500. Next year, next decade, needs will change. it needs to be unlimited”

“More and more things are required to be completed online, in business, in education and health. With four people trying to study in our home plus trying to run a farming business we really need much more data than we are currently allowed. It means missing educational information, paying bills late, not receiving emails as there is always an error and not being able to keep up with safety information especially at the moment with all the floods”

Question 21: Do you think the current peak data limits on Sky Muster will cover your needs in 2 years' time?

Seventy five percent of respondents do not think that the current peak data limits on Sky Muster will cover their needs in two years' time, 18.6% are not sure and 5.5% think that their needs will be covered.

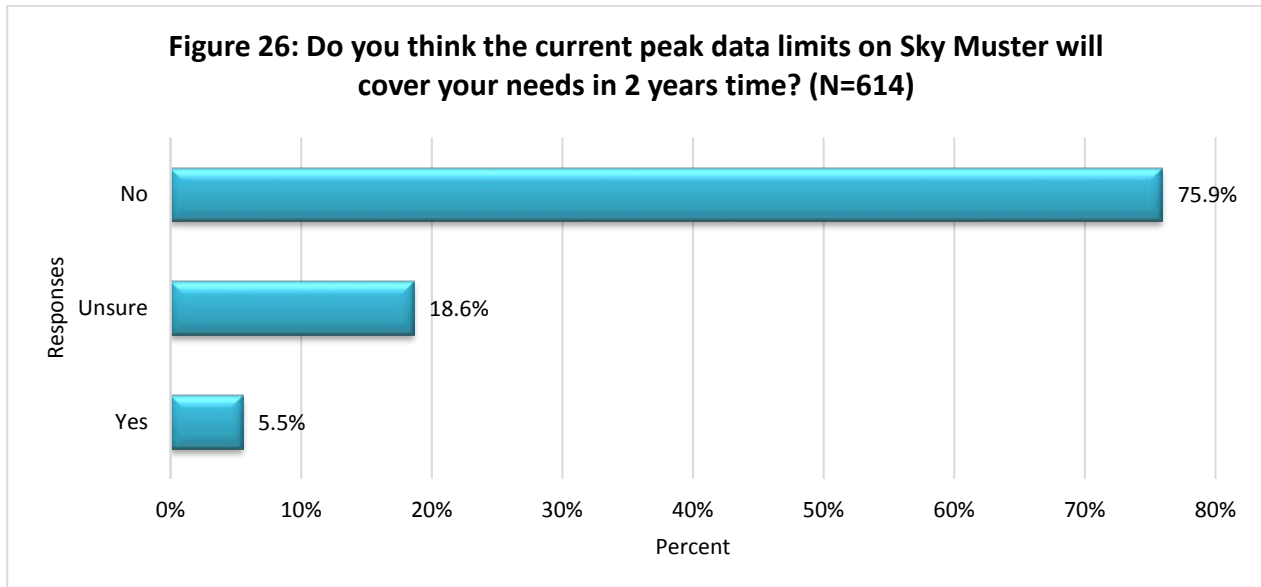


Figure 26: Do you think the current peak data limits on Sky Muster will cover your needs in 2 years' time?

Eighty six supporting comments were left by respondents that overwhelmingly support the respondent's choice in Question 21, that the current peak data limits on Sky Muster will NOT cover their needs in two years' time.

Table 119: Anecdotal comments from respondent to Question 21, peak data limits will not cover respondent needs in two years' time

"Absolutely not. Everything is moving over to internet now (centrelink, medicare, banking to name a few), and the children will be needing access for more school work as they hit secondary."

"As greater reliance on technology increases it will come under strain already our business is talking about Direct cattle sales and grain marketing through the Internet."

"At the moment we are using on average just over half our data each month. We are quite frugal though with what we use our internet for - no gaming, streaming movies etc. So currently Sky Muster is meeting our needs more than adequately however with the changes happening in the technological world who knows what our requirement will be like in the future"

"I will possibly have 2 students studying distance education. No option of education port in WA"

"Average Australian data use is now above the maximum allowed on Sky Muster, and increasing at about 30% per year. While a lot of this is entertainment, increasingly, everything from your phone (on Wifi) to your computer, to your battery controller, to your new tractor, or even your car, is expecting to be internet connected, and ""calls home"" regularly for software updates. A family such as my son's with five Windows 10 computers in the house will come close to using my entire monthly data allowance just with Windows updates alone. (Yes, I know

it is possible to download the software once and update all the computers, but not for ordinary humans!)"

"Definitely not!! 2 adults running 2 businesses from home, and 2 kids studying secondary education!"

"Everything is done online nowadays, and demands on us are forever increasing. I want to move to cloud based admin but I'm worried..."

"Doesn't even cover them now, so how the hell could anyone expect them to cover us in two years? When on the Interim Satellite Service, peak hours were between 1 pm and 11 pm, which mean we could do data intensive tasks (such as study video lectures) in the mornings. But with peak now going from 7 am to 1 am, it's ridiculous."

"This largely depends on the requirements for distance education over the following years, especially if more technology use is adopted by SDEs once they think/know students have better internet connections. Also, with the increase in what has been provided to us, I am sure we will try now to investigate how we can use Internet more in our business/everyday lives compared to the past when we had to conserve our data for basic education/business needs."

"We will still have 3 people studying and still have a business to run. More and more pages are covered in streaming ads and education is relying more and more on technology for research, assignments, classes etc. Many business activities must be carried out online now"

"We would like to use cloud based programs for file storage and accounting, no way we are in a position to take this step even now, so I doubt we will move on this decision unless sky muster becomes reliable and we can figure out when all the data goes..."

"Each app and software programme is becoming cloud based and data hungry. I think we will have to spend more on data in future"

"Absolutely not. I can't even stream a couple movies a month now let alone keep up with TV shows that have gone missing in regional WA now. I don't online game - unthinkable at current data limits even if speed is almost acceptable now."

Question 22: If you don't have enough data on Sky Muster, what types of things are you restricted from doing?

Seventeen percent of respondents indicated that they are restricted from streaming when they do not have enough data on Sky Muster. A further 15.6% cannot complete updating, 13.9% cannot do research and 12.2% cannot participate in webinars. Eleven percent would like to participate in Skype or FaceTime, but cannot because they do not have enough data. Nearly 7% would like to use social media more, 4.9% would like to join online gaming and 4.9% would like to shop online.

Nearly 11% of respondents would like to complete other business tasks and nearly 3% listed other things that they are restricted from doing. Both of these responses will be discussed after Figure 27

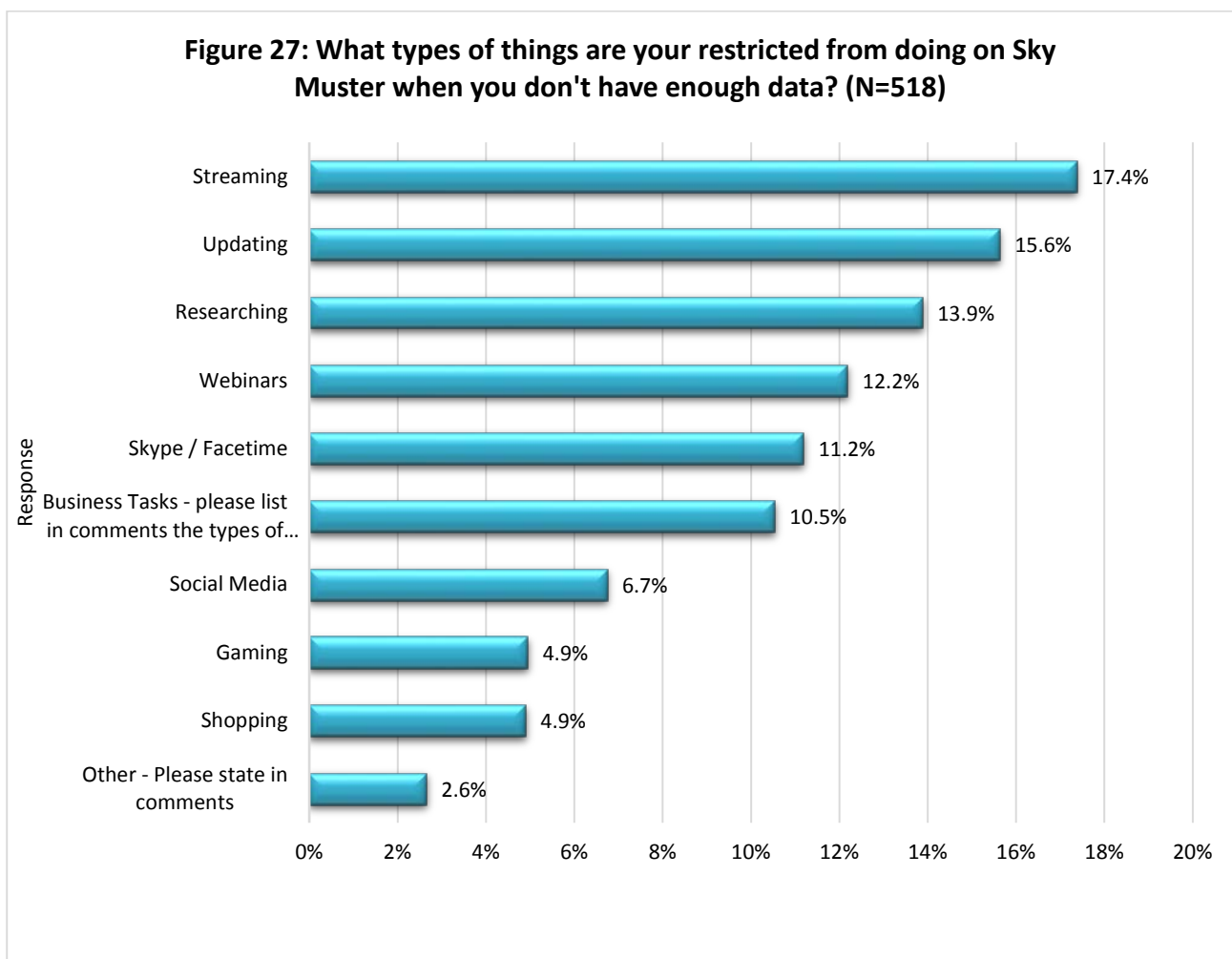


Figure 27: What types of things are you restricted from doing on Sky Muster when you don't have enough data?

The respondents were given the option to select “**Business Tasks**” and “**Other**” and provide anecdotal comments about restrictions when they don’t have enough data. A cross tabulation compared anecdotal responses to each topic, which were coded and themed. The findings are summarised below and anecdotal comments are used to support the summary.

Of the respondents that selected the option “**Business Tasks**”, 18% commented that they are restricted from doing online banking, 16% commented that they would like to be able to send

emails with large attachments and 15% said they are restricted from watching instructional videos, webinars and updating business websites. Fifteen percent are restricted from using the cloud and 13% cannot access online accounting. Nearly 12% are restricted from accessing study materials for school, TAFE or University. A further 10% are restricted from accessing government services with the Australian Tax Office including paying BAS, they cannot access Centrelink and other online services. Eight percent are restricted by limited data from doing research, 6% are restricted from Skyping or FaceTime, 4% have IT business that are restricted by data limits with Sky Muster and 4% would like to be able to access online cattle sales, auctions and other areas of farming business. Nearly 2% are restricted from using business based social media. Twenty one percent suggested other restrictions such as:

- after hour's communication
- file sharing
- syncing company data (back-ups)
- video conferencing
- software update
- online mapping
- online farm programs
- ordering product
- comparing pricing for stock
- large files - photos of cattle for sale
- job applications
- telehealth,
- automation technology
- remote sensing/security,
- updating farm machinery software

Table 120: Reoccurring themes from anecdotal comments for “Business Tasks” in Question 22.

Theme	N	Percent
Banking	38	18.0%
Email + large attachments	34	16.1%
Websites/ how to video/ webinars	31	14.7%
Cloud/ remote access	31	14.7%
Online accounting	27	12.8%
Education	25	11.8%
Govt. Services ATO, Centrelink	20	9.5%
Research	17	8.1%
Skype	12	5.7%
IT work	9	4.3%
Cattle sales	8	3.8%
Social Media Marketing	4	1.9%
Other	45	21.3%

Additional comments about how respondents were restricted included “anything related to a farming or photography business”, and “everything, participating in life”. The following personal statement reflects the comments made by respondents.

Emails are always slow coming in, many are days later as there is always an error. We also have to limit the size of emails coming in and out. Paying bills online and banking can be a joke as the sites time out. Signing and paying BAS can be frustrating and time consuming. Ordering products for our farming business is difficult. Updates get left for months then things on the pc stop working. Forget skype, Netflix, games etc. - they just don't work and use far too much data. Webinars are pointless to watch as they stop all the time and take far too long to load.

Figure 28: Anecdotal comment by one respondent that sums up the themes for Question 22 “What types of things are you restricted from doing on Sky Muster when you don't have enough data?” – Business Tasks

The responses to “Other” were also themed with duplicate comments removed. Just over 28% of respondents commented that they are restricted from using tools for education because they do not have enough data on Sky Muster. Twenty six percent are restricted from watching how to videos and webinars and updating websites. Nearly 8% are restricted from completing updating, 5.7% cannot stream, another 5.7% are restricted in research, and 5.7% cannot complete online accounting. Nearly 4% cannot access banking and another 4% cannot access the cloud. Just under 2% each are restricted by Sky Muster data limits for email with large attachments, social media marketing and teaching. Advisory teachers do not have access to the education ports. Other comments include “forget anything that uses bandwidth in rural oz”!

Table 121: Reoccurring themes from anecdotal comments for “Other” in Question 22.

Theme	N	Percent
Education	15	28.3%
Websites/ how to video/ webinars	14	26.4%
Updating	4	7.5%
Streaming	3	5.7%
Research	3	5.7%
Online accounting	3	5.7%
Banking	2	3.8%
Cloud/ remote access	2	3.8%
Email + large attachments	1	1.9%
Social Media Marketing	1	1.9%
Teaching	1	1.9%
Other	1	1.9%

Anecdotal comments supporting the themes for “Other” are included the following examples, which support the restrictions felt by respondents because of data limits.

Table 122: Anecdotal comments from participant for Question 22 - "Other"

“More and more these days to run a home with connected devices a base-line rate of 30-40 gigs per month is needed even without streaming any content, simply with updates, everyday browsing and social aspects (FaceTime etc). So moderate usage without streaming is already hitting the capacity of the system. And keeping things updated is simply not an option in the increasingly insecure modern computing environment”

“Would be nice to be able to watch Netflix or a movie sometime! We need all our data for business use no chance to use it for social things”

“High school students needing to watch online videos/programmes for school work/assignments. Our business tasks must come first so we have to say No to the kids watching these education tools”

“AVT (Teacher) that covers an area bigger than Tasmania in QLD and needs lots of data and a steady connection to do her work. This would be nice if the Education for distance also covered there Advisory Teachers who travel to these places”

“Can't view any YouTube videos which is essential for research, can't stream any movies, can't upload big photo files to agencies, can't watch video on social media, can't buy movies online as don't have data to download them, can't do big system updates through apple etc etc etc etc”

Question 23: What type of power do you use for your Sky Muster Connection?

Nearly 90% of respondents are using 240 volt or normal grid power to run their Sky Muster connection. Nine percent are using solar power and 2% are using generator power.

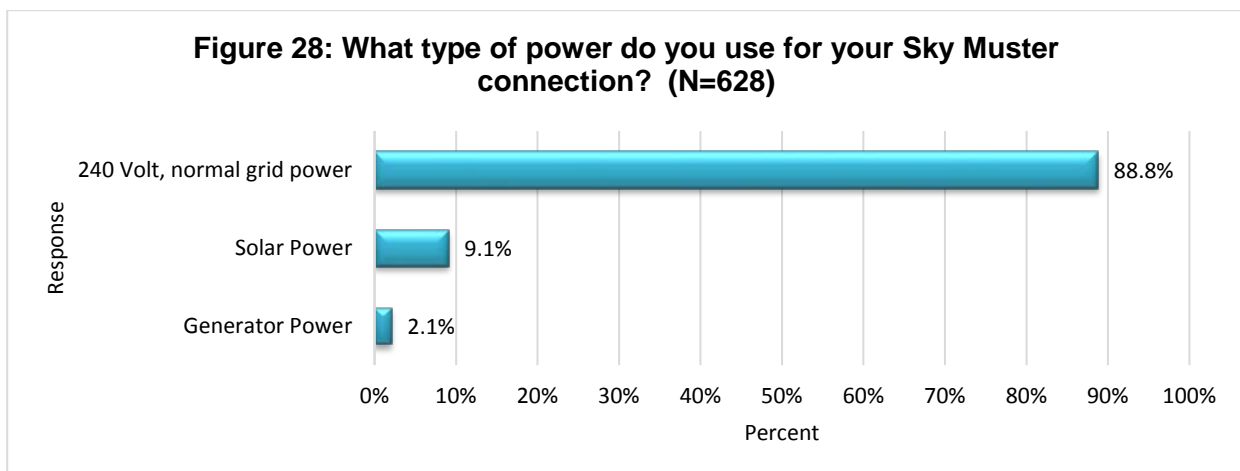


Figure 29: Type of power used for Sky Muster

Note: In most cases Sky Muster under normal working conditions use maximum power consumption of 70W, which requires AC (normal grid) power. A DC powered NTD is available for locations that run from battery sources with input voltages of 8-24VDC (<http://www.nbnco.com.au/support/articles/000001886/what-is-the-power-consumption-of-the-standard-sky-muster-ac-equipment>).

Question 24: Do you use VOIP on your Sky Muster Connection?

Only 11% of respondents use Voice over Internet Protocol (VoIP) on their Sky Muster connection. Respondents were asked to give some comments about their VoIP service. Overall, the comments about VoIP over Sky Muster were negative. While 11% of respondents had access to VoIP nearly all of the comments stated that the service, **importantly, only worked when Sky Muster was working**. When it was working, it was unreliable and suffered from latency where it was patchy, slow, and laggy and it regularly cut out (Table 125). Respondents noted that their telephone was their only form of communication, so were worried about what would happen in an emergency (Table 126 and Table 127). Respondents were also concerned about having enough data and what would happen to VoIP in their data ran out or if they were shaped (Table 128). A complete discussion of participant comments follows Figure 30.

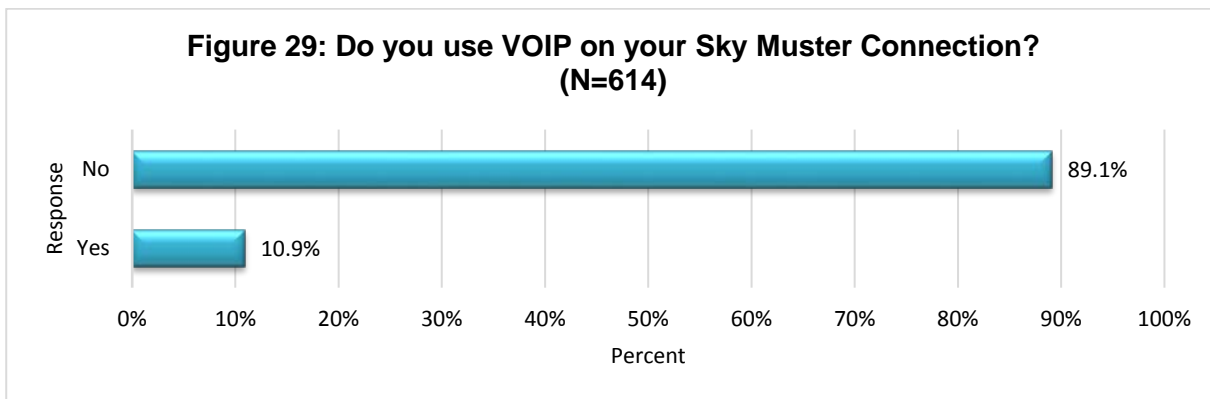


Figure 30: Do you use VOIP on your Sky Muster Connection?

The respondents were asked to supply supporting comments on their VOIP experience on Sky Muster.

Ninety-four responses were given. Two respondents commented that they use VOIP with their education portal, see Table 124

Table 123: Question 24 - Anecdotal comments from respondents about using VOIP for education

“Use Elluminate through Longreach Distance Ed for 3 x children. I have only had SkyMuster installed for about three weeks of the last term so I am hoping that the Skymuster will be sufficient to cover all the schooling on-air without the slow loads we used to experience prior to Skymuster”

“Only via the Education Queensland Collaborate platform”

There were forty-two comments given by respondents that were rated as poor, average and good. Some of the good comments included **that VOIP was only good so long as Sky Muster was working**, and that it had improved since the ISS. Two comments said that VOIP was Sky Musters single biggest success story. While others say, it was **terrible to begin with but is good now**. The average comments included that **VOIP can be patchy and unpredictable, delayed, slow or laggy** and the poor comments included that **it cuts out and that it has terrible quality**. VOIP for Sky Muster was **rated poorly due to dropouts, bad connections and it is generally unreliable**. See Table 125 for comments from the poor, average and good ratings.

Table 124: Question 24 - Anecdotal comments rated, poor, average, good from respondents about VOIP

Poor

"bad it never works yet i pay for it"

"Cuts out"

"Delay in conversation and ghosting of your speech inferior to standard landline"

"Delayed at times"

"have only had it connected for a few days, already thinking of going back to old landline, terrible quality and dropouts"

"Hopeless. two second gap when communicating with someone. Calling out can take up to 3 minutes to actually start ringing and when someone answers there is enough pause that they hang up thinking no one is there"

"Keeps dropping out of registration and is therefore unusable. So I guess my answer is No, I don't use VoIP"

"Kept dropping out multiple times a lesson (eg. 10) to begin with but not so much anymore"

"Long delay thinking about disconnecting voip"

"most often up to a 3 second delayed echo of either my voice or the other person's"

"My last experience using it was that the delay time made it unusable as I found it very distracting"

"No it won't work, the lag is far too great to have a conversation"

"Only one phone call so far, big delays"

"Shit"

"Very poor lots of drop outs, bad connections unreliable generally"

"VoIP performance is extremely poor. Callers often complain about the call quality and delay on our connection, and it regularly causes confusion when both parties start speaking at the same time due to not knowing that the other is speaking because of the lag. We've had to sign up for a separate 4G mobile connection on the Telstra network for our VoIP to be usable over"

Average

"Average"

"Extremely patchy and unpredictable. Voice quality can be excellent to indecipherable. Also many drop outs"

"Variable results are expected, based on 500ms and over ping rate"

"It can be a little slow"

"It is a little delayed but not too bad"

"Mostly ok, significant downtime"

"Not too bad. Just a bit of lag"

"Ok, sometimes there is a delay"

"Patchy"

"Pixelated dropouts"

"Rarely. It is laggy and takes a while to get used to, Due to high ping"

"Some days good - some days its unusable"

Good

"It's good. I used it before on 1.2mb upload speed, which is why I ended up paying a lot more for adsl, and I found this connection is as good, although there is latency, there is consistency - and that has surprised me because I thought satellite would be very unreliable as well as expensive"

"All OK. no real problems using mynetphone"

"Excellent so long as skymuster is working!"

"It's our home phone backup to our mobiles but haven't had need to use it yet still trying to get a reliable router "Excellent, once gets used to the latency"

"Have only started using it again as it didn't work well on the old Optus and interim NBN satellite. Seems to be OK but obviously need a connection for it to work"

"Generally works well. RSP charges for VOIP call, particularly mobile are totally unrealistic. Fortunately, third party providers work fairly well"

"Impressed with the VOIP on Skymuster, much improved over the ISS"

"It is ok if not during throttled period"

"it's been good when its working"

"Ok for school"

"So far good. We have a VoIP phone through activ8me"

"VoIP is working fine"

"VoIP on Sky Muster is the single big success story. :)"

"VoIP is one (the only one) of the few success stories of Sky Muster"

"Was terrible to begin with but is working well now"

"Quality is ok when service is working"

"Works good when sky muster is working properly"

Respondents commented that they were not connected or that VOIP was not available on their service. Some respondents said that they did not like VOIP for Sky Muster because it had high latency and others commented they did not want it because their telephone was their only form of communication in an emergency. Some of the respondents said that they did not know what VOIP was.

Table 125: Question 24 - Anecdotal comments about not being connected to VOIP for Sky Muster

"Awaiting provider to process application"

*"I was going to, but now that the bullsh*t about the ability to do so properly has been exposed, I doubt I will bother"*

"No, I doubt it would be reliable enough to serve as a normal phone. Particularly given we don't have alternative mobile cover in our remote region"

"Plan to use VOIP once Skymuster is stable and reliable"

"WAS THINKING ABOUT IT BUT WILL NOT AFTER HEARING HOW USELESS THAT WILL BE"

"We have the option to connect. But haven't due to dropouts"

"Provider doesn't provide VOIP yet over NBN. Stuck paying ever increasing Telstra landline charge as they attempt to gouge out the last dollars from their captive regional customers"

"We would if we could"

"Ok, but some latency issues"

"Wouldn't want to rely on VoIP we live in a fire zone"

"Good call quality. Latency is bearable but ok"

"Use to but latency was too much of a pause in the conversation"

"Using engin voice box, did work when the skymuster was working but being so unreliable was a real safety concern as that is my only form of communication, Now using a 3g dongle with a high external antenna and using the engin voip on that. at least now i can receive and make calls"

"No reliable 3G mobile reception here, no 4G at all (so no smartphone stuff), no wireless or any of that. I still have a landline because I need ONE reliable method of communication - couldn't consider VOIP with the way Skymuster is"

"I don't know what a VOIP is"

"No idea what voip is"

"Not really sure what it is/does"

Table 127 contains comments from ten respondents that highlight possible disadvantages towards using VoIP on Sky Muster.

Table 126: Anecdotal comments from respondents about disadvantages to using VOIP for Sky Muster

“Latency would be too high. Not even going to try”

“Much improved service quality compared to IPStar and ISS connections. Poor support from Activ8me - I basically had to figure it out for myself. The existing VOIP box (CISCO SPA-3102) provided by Activ8me never worked over the Sky Muster connection”

“If the voip service goes down our phone service would be lost as we don't have any mobile cover. Can't ring anyone if there's a fault so have to maintain a land line. Disadvantage because of call costs”

“seriously? this is a trick question isnt it?”

“There's no way this would be reliable”

“Too scared to try, but will try eventually”

“Too slow”

“too unreliable”

“Too unreliable”

“Too unreliable. Too slow”

Table 128 contains comments from another ten respondents who cited not enough data as a reason not to use VOIP for Sky Muster.

Table 127: Anecdotal comments from respondents about data and how VOIP for Sky Muster will use it.

“It's not fast enough, does not have enough data at an affordable rate and is not consistent enough”

“Too much data usage.”

“We would like to as our families live interstate but not enough data or speed to enable it. We tried FaceTime a few times, very frustrating”

“It works when I have data available but the delay is excruciating when it's run out”

“Worried I will run out of data and won't be able to make calls. Would like it because of great deals with nbn wireless”

“Would like to but worry about running out of bandwidth and we don't have any mobile signal at our property”

“Fine so far but we've run out of data”

“I will if the reliability and data allowances improve”

“Not enough data”

“Not enough data! Do not have a phone line (and should have for emergencies - and for kids to contact us!)”

Question 25: Do you have a backup internet option if Sky Muster has an outage or doesn't work?

Forty three percent of those who are connected to sky muster do not have a backup internet option if Sky Muster has an outage or does not work. When they do have a backup option, it is via mobile coverage. Thirty-nine percent have a backup option with Telstra, 6% with Optus and half of a percent use Vodaphone as their back up option. The remaining 2.8% are still waiting for their install.

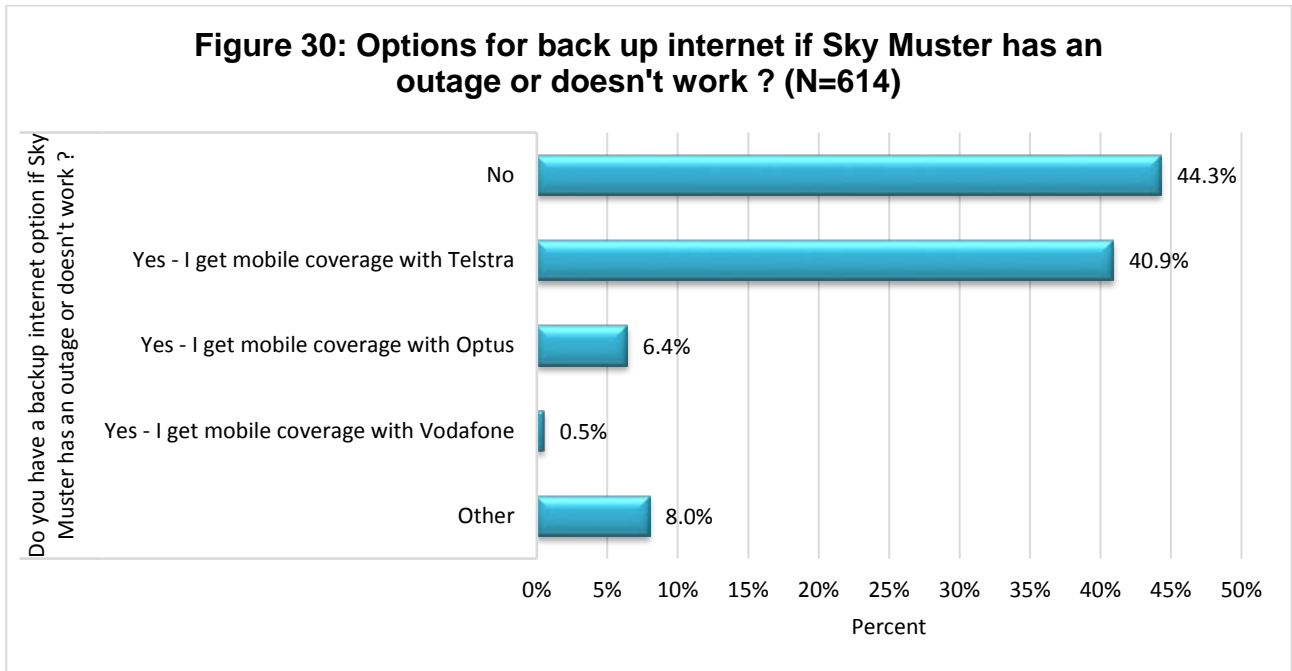


Figure 31: Options for back up internet when Sky Muster is not working

The respondents were given the option to select “Other” if they could not choose from the list provided in Question 25. Eight percent of respondents gave an “Other” reason not listed as a backup internet option if Sky Muster has an outage or does not work. Anecdotal responses were coded into seven sub categories that describe the main problem in the comment. The categories include:

- Table 129: Poor signal, congested and unreliable service
- Table 130: Other options
- Table 131: The participant required some sort of booster
- Table 132: The participant was in a blackspot
- Table 133: Expensive, poor signal, unreliable
- Table 134: Have to travel to get service using another option
- Table 135: Having to keep a backup option because Sky Muster is so unreliable
- Table 136: No other option

Respondents left 182 comments about other options for back up internet, which were mostly negative, with some making observations about why people with other options are using Sky Muster and that a backup service should not be needed, for example:

Why do people with other options use Sky Muster?

We should not need a backup service. This service is supposed to be the ducks nuts for rural and remote. What a joke, so many issues with so few customers.

The respondents reported that their other options for backup had poor signal, that the network was congested or that the service was unreliable. Comments included other options for a backup service that were not listed in Q25 for example a Pre-paid Telstra dongle or a separate Telstra connection (other than mobile), Aldi, inet, OVO and Virgin Broadband, or that they were on the old Interim Satellite Service (ISS). Some respondents reported that they had to install an expensive booster to access their back up service, or that while they had a backup option. They could not use it because they were in a black spot or that they had to leave home to get coverage. Some commented that they had a backup service but it was too expensive to use. Six respondents commented that there was no other option for a backup service. The final comments included that the respondents only had the extra service because they felt they needed a backup in case Sky Muster failed. Table 129 includes comments from respondents that support poor signal, congested and unreliable service.

Table 128: Question 25 - Anecdotal comments about “poor signal, congested and unreliable service” for Sky Muster back up options

<i>“3G coverage is very marginal - has poor signal/dropouts and is congested in peak times”</i>
<i>“although coverage is very limited”</i>
<i>“Backup coverage is hardly usable”</i>
<i>“Barely coverage just enough to stay connected to do basic internet things. Not as reliable but it is still there”</i>
<i>“But a weak telstra mobile service”</i>
<i>“but almost unusable”</i>
<i>“But very unreliable too”</i>
<i>“But we have very limited service areas particularly in the houses”</i>
<i>“Even the copper phone line in my valley is intermittent”</i>
<i>“I can get some wifi if I stand on one leg, by our living room window and the weather/ air pressure is just right!”</i>
<i>“I get one flakey bar of mobile service with telstra....but its definitely not a reliable back up service”</i>
<i>“I get MINIMAL phone service, useful only as a emergency backup”</i>
<i>“I have to place a phone up on a window sill to pick up a single bar for hot spotting”</i>
<i>“I would state no, as our mobile coverage is scattered at best as soon as we leave the house, and landline reliability is also not positive”</i>
<i>“Mobile coverage is a loose term given we are talking one bar from a tower 70 km away”</i>
<i>“mobile coverage of 1 bar is not a backup its for SMS and calls”</i>

"Mobile coverage unreliable and slow and only from top window in my house - not adequate either"

"Mobile reception is poor"

"My 3G phone with only one dot of reception is faster at times than my wifi internet. Faster download that is"

"My Telstra mobile coverage is very marginal, and requires use of external antenna, forcing use of outdated phones. No other provider is available. Landline is also unreliable... A combination of end of life, ancient lines and water ingress. Can take 10+ days for "repairs" that are short lived"

"Only intermittent, unreliable coverage via a Yagi antenna and Cel-Fi, generally only useful for short term personal use"

"Only just enough service with mobile"

"Our Telstra service is way too unreliable despite having yagi aeriels and smart antennas. Sometimes the service is really good but it just falls off when it feels like it as well"

"Poor mobile coverage with Telstra - and expensive per gigabyte."

"Poor mobile phone coverage so Skymuster is only viable internet option. No skymuster = dark ages"

"Satellite is too slow Ping is thumbs down"

"Sketchy telstra 3g coverage with frequent dropouts"

"Telstra coverage is weak n slow can't do FaceTime type calls to business associates n family interstate or overseas"

"Telstra only provider, but 3G abysmal in spite of tower 1.9km from house, & 5 bars. Will get even worse with 200 additional people for the mine. Wish we had 4G"

"The telstra signal is patchy, however"

"Tower often congested to the point of not useable"

"Unreliable mobile coverage.. Black spot. Weather affected"

"Very limited mobile cover outside corner of rural property which I am currently using to do survey because service has been down for four days"

"Very patchy as we only get one bar inside the house"

"Very poor occasional mobile coverage with Telstra"

"We have a Telstra 4g wifi connection as back up, but that is not always reliable in our area"

"We have very poor 3g coverage so at a push we can get a signal but this is not reliable"

"Work provided but little data avail on 4g network"

"Can access Optus mobile internet outside of the home on another side of property"

"Can use telstra on my mobile phone but telstra state they do not have coverage our area"

"I only just get Telstra mobile coverage"

"Very limited coverage with optus. None with telstra or any other providers"

"Very slow mobile bb in afternoons lately, using Smart Antenna, haven't upgraded it to 4G though. Thought Sky Muster should be better..."

"There is patchy 3G mobile coverage with Telstra outside, but no reception in the house"

"I don't get a decent mobile service even with an aerial, and the landline is that antiquated it is no using it for internet"

"Because we don't have mobile coverage"

"I SOMETIMES get mobile coverage with Telstra"

Table 130 contains comments about options that were coded as “other options” for back up services for Sky Muster and include having prepaid accounts, external aerials, a tower close by, ADSL, and coverage with other providers. Respondents commented that they need other services to ensure they have data available.

Table 129: Question 25 - Anecdotal comments about “other options” for backup services for Sky Muster not listed in Q25

“But I downgraded our plan so we have limited data to rely on there too”

“It's what I'm completing this survey with now!”

“With a prepaid Telstra USB stick in laptop I can get coverage with external aerial on a hill a couple of km from house”

“ADSL plus Telstra mobile”

“Aldi”

“we have a tower up the hill (which we built ourselves) and mobile wireless beamed to the house. Always use that as NBN slow or outage”

“This backup is used often due to outages and lost connections”

“It's a cost we could cut off there was more data available”

“It's more reliable and has less lag. I'd use it 100% except for data limits and cost”

“Aldi (Telstra 4G network)”

“Big pond satellite”

“Coverage with iinet”

“Have multiple mobile coverage to ensure overall data available”

“However am on a prepaid mobile plan with little data so only use if absolutely necessary. Since being connected to Skymuster I use it to connect to BIRRR to see if others have reported issues when I have no connection”

“I use my phone's personal hotspot. I am with Amaysim”

“mobile coverage with Aldimobile”

“old satellite connection still works”

“Only have mobile coverage if power is on for cel fi unit though - no power, no coverage”

“our old ADSL connection, we have no mobile access where we live!!”

“Ovo sim 50g for \$60”

“portable modem”

“Quarantined space in ISS”

“Use phone data but looking at OVO”

“Virgin broadband 12gb wireless and 5.5gb on my phone. Also access some at work”

“We are still connected to the ISS”

“We have a separate Telstra connection”

“We have extra data on our Aldi phone plans”

“Yes we have mobile data on our phones to share, with AldiMobile”

Table 131 gives an overview of the type of extra equipment that is required for respondents to use their backup, which includes smart antennas, booster boxes, cel fi and solar powered repeaters. Table 131 has a selection of supporting comments.

Table 130: Question 25 - Anecdotal comments about “requiring a booster” to use backup services for Sky Muster

“Had to pay a fortune for Yagi antenna and booster box. Still it cuts out and speeds are 0.04 Mbps”

“I get 3g signal with both Optus and Telstra but have to have a high external Yagi antenna which is hooked up to my 3g dongle. My mobile won’t get reception at my camp so I rely on the engine VoIP for phone calls. my phone diverts to my VoIP when it is not within range So reliable internet is essential”

“Had to pay \$1000 for antenna and cel fi to boost Telstra signal so it is usable at the house. No coverage over the farm to use any agricultural applications in the paddock”

“I have back up mobile coverage with Boost...only because of an antenna installed on the roof..otherwise no reception”

“I have Telstra reception on a mountain on my property. I use a solar powered repeater to 'wifi' 3G data down to the homestead. This provides a tenuous 3G data connection from a tower 39Km distant, that at best provides 2/1 and in congested times almost nothing”

“We recently spent a lot of \$\$\$ to have a new aerial put up high on our roof and also smart antenna so we can have reliable mobile coverage. This now gives us a decent backup”

“I only have mobile phone service because we bought a repeater”

“Limited mobile coverage with assistance of Yagi antenna and booster”

“Mobile coverage only after an investment of around \$1500 for a smart antenna and yagi antenna”

“My mobile coverage is provided by a self-installed WIFI relay from atop a hill in my property some 600m distance from the home. I have operated this critical solar powered back-up facility for 2 years now and it has proved 100% reliable. Unlike Sky Muster. :(“

“Only get mobile Telstra coverage after we installed a \$1200 smart antenna”

“Telstra mobile coverage required a manual 3rd-party install of a high-gain antenna. The connection quality is much better than NBN SkyMuster and we would be using this as our home broadband if it were not for its high data costs”

“Using a large Yagi Antenna to get 1-2 bars”

“Very poor 3G Telstra (one bar with booster box that constantly drops out) Speeds of .5 up and .05 down Totally useless for anything other than emergency basic use”

“We get mobile coverage with Telstra only by using a yagi and smart antennae”

“Yes - have paid to install a yagi/cellfi antenna so as to boost our pitiful mobile coverage and can access our expensive mobile data if necessary”

“Yes we have a very expensive 3g setup just to get a telstra signal as we are not in the 3g service coverage area”

“yes we now have an Ovo sim with 50g for \$60, we also have Telstra coverage with Boost (data & phone plan) plus an Ovo sim for phone with 8g data, all of which gets used, however it is the only way we can operate our business”

“Telstra smart antenna,, this is very poor and works 50% of the time , for texts and emails only”

Table 132 contains a sample of comments from respondents who are located in a black spot and have no other means of backup services.

Table 131: Question 25 - Anecdotal comments about “blackspots” for backup services for Sky Muster

“No mobile service at residence”

“But Telstra coverage continually drops out as we are in a black spot”

“Blackspot”

“I am in an area with no mobile phone service so I rely on the Internet to allow me to keep in contact”

“Live in area of northern SA with no mobile coverage”

“No mobile coverage at all”

“No mobile coverage here. One reason for keeping the landline!”

“No mobile coverage, no other options available to us other than Sky Muster satellite”

“No mobile coverage. No landline”

“No mobile service in the area I live and have constant issues with landline phone as well”

“No mobile, no landline”

“We are in a black spot. No other choice”

“We have no mobile coverage and our landline drops out for hours on end several times a week leaving us without any way of contact in case of emergency”

“We have no mobile coverage”

“We have no mobile phone coverage at our home!!!!”

“We have no phone service and our nearest town is over 500 km away”

“We live in a ‘black spot’ where there’s very poor mobile coverage, so our only backup option is to go somewhere else and use free wifi on a tablet”

“We live in a mobile black spot and have no other options for internet at this point than satellite”

“We live in an area without mobile reception. Once the internet is out we have nothing”

For many the backup options are expensive and unreliable as can be seen in the comments in Table 133.

Table 132: Question 25 - Anecdotal comments about backup options being “expensive and unreliable” services for Sky Muster

‘And don’t start me on Telstra... I say I have back up internet but that’s not really the case. Technically, it should be there and I can tether my laptop to phone to use the data allowance, but I rarely have enough signal strength to make/receive mobile telephone calls reliably, let alone rely on it for internet. And cost per GB is stupid for anything more than extremely urgent use’

“But it is very limited as the data costs are so expensive and the internet doesn’t always work to hotspot off”

“But it’s not reliable and very slow as well. Costs us more with extra data packages we need to allow everyone access”

**“BUT very patchy, unreliable and incredibly expensive.
Does NOT solve data issues”**

“CANNOT AFFORD ANOTHER \$60 per month”

“Excellent coverage and speeds but VERY expensive. Limit to amount of data available”

“Expensive Next G Wireless Link Bigpond plan so that I can connect to a remote server in Melbourne to do my work”

“I am not happy paying for two services”

“I am still contracted to Telstra with wireless broadband but it’s slower, have less data and it way more expensive. I only have coverage because of the Yagi antennae, my mobile coverage is only one bar at the kitchen window”

“I have an inmarsat terminal that costs a fortune”

“I was hoping to phase out or lower my Telstra plan but certainly won’t be risking it - therefore I’m now paying \$300 per month - \$150 of which is for an unusable service”

“I wouldn’t call it backup - our Mobile connection is our main Internet connection even though it’s ridiculously expensive as at least it works reliably and is reasonably fast”

“It is expensive but we have to have it to keep up internet connection when Skymuster is not working”

“It is not great either but thankfully I did not cancel my previous 8g plan as I wanted to ensure that sky muster was meeting my needs. Because of the speed / unreliability issues I have encountered, I am often still using up all the data from that plan as well. That means I am really paying \$120 per month for internet access when you combine both plans”

“My family & I are forced to resort to our phones if we need the internet which has led to massive phone bills due to how expensive it is to use mobile data”

“Not a viable alternative. While there is mobile coverage, on a prepaid phone, it’s cost prohibitive”

“Mobile data coverage via 3m pole and MIMO antenna, JUST. Mostly solid, but expensive”

Comments in Table 134 show that some respondents are required to leave home to access their back up services for Sky Muster. For some it is a 20 minute drive but for others their closest mobile tower is 200klm away.

Table 133: Question 25 - Anecdotal comments about “needing to travel away from home to use backup services” for Sky Muster

“I have an AARNET connection at work. But work is a 20 minute drive from home’

“Need to travel to get mobile reception to use Telstra 4G prepaid data device. Can only get Telstra mobile next G coverage here where you can get coverage’

“Telstra coverage if we walk to a location elsewhere on the property’

“Very little & have to drive’

“Drive 40 kms to get service from the Dugald River Tower north of Cloncurry’

“Go for a drive to the nearest place that gets mobile coverage. Note we can't get to these places during our frequent flood events’

“I drive to town & use phone data. No service here so have to drive elsewhere to access’

“If i go up on a hill 3 kms away’

“NO - go to town!!!! Only 100ks away - no biggie :-/’

“Not in the house but Optus mobile out in the paddock on the other side of the property’

“Not really. I need to drive to where I can get good mobile reception so I can use my Telstra mobile device. We have no mobile coverage here at the house do the answer is really no’

“On a couple of occasions during an outage I have bought one day's mobile coverage from Telstra and used on my iPad. The only issue is that I have to walk 100 metres up the drive from the house in order to get a Telstra signal’

“Our closest mobile tower is 200kms away’

“Public library! 25mins drive away! And not open 2 days/week’

“Wait until I get to town’

Respondents are also keeping their alternative back up internet to ensure that they have access to the internet in case Sky Muster fails.

Table 134: Question 25 - Anecdotal comments about “requiring a backup connection” in case Sky Muster fails

“I have to keep paying \$10/month for Wi-Fi data with Optus in case the Sky Muster fails”

“I would use this instead of Sky Muster if it was cheaper”

“I would like to cancel this connection as it is another added cost, but Skymuster is too unreliable”

“Only have 1gb on phone plan!”

“Still connected to ADSL as part of phone plan just in case ... Not on contract with NBN”

“I have kept the Big Pond connection going ... Not sure how long for”

Some respondents do not have any options at all so therefore need to spend extra money to remain connected, giving those respondents options for communication, see comments in Table 136.

Table 135: Question 25 - Anecdotal comments about “not having any options” for a backup connection in case Sky Muster fails

“I kept my Telstra connection as I have no mobile service”

“If I had a backup option I wouldn't have Sky Muster - it really is the last choice in internet imho”

“Don't have a mobile service so I'm stuck if Skymuster fails”

“I do wish we did. My biggest issue with rural communications is lack of access to mobile phone service. This is far far more critical to us than the frustrations we have with the satellite internet connection”

“I wish”

“NO WE WILL NOT HAVE A BACKUP OPTION”

“Sky muster is it for us...unless we travel 2 hours into town”

Question 26: Please share your story below, has Sky Muster made a significant difference to your connectivity. What can you do now that you couldn't do prior to Sky Muster ? If Sky Muster doesn't meet your needs - why?

Three hundred and sixty six respondents wrote comments about significant differences Sky Muster had made to their connectivity. The comments were copied to a word document, where sentence linking words such as FANBOYS (for, and, nor, but, or, yet, so), conjunctions (for example that, what, which, than, whether, who, how, as), and transition words (such as again, to, and, also, then, like, as, too, in, it) were removed. In addition, words that were mentioned less than 10 times, as well as descriptive words that were out of context were also removed for example “internet” (while important, the word was not used to describe some sort of significance). Words that were more significant when used together were joined for example Sky Muster became “SkyMuster”.

Next, the words were sorted and any duplicate word counts were combined for example “Data” and “data” were combined. The remaining text was added to a Word Cloud processor (<http://www.wordclouds.com/>), which counts the number of times a word is mentioned in a group of text and presents it as an image drawing out significant topics. The top ten words, shown in the word cloud in Figure 32, include data, SkyMuster, whenworking, reliability, service, speed, month, dropouts, connection and business. Anecdotal comments supporting these topics are presented below.



Figure 32: Word Cloud produced from participant responses to Question 26

The word “data” was mentioned 313 times. While most of the respondents were happy to have access to more data, nearly all of the comments (see Table 137) related to not being able to use off-peak data.

Table 136: Negative anecdotal comment from survey participant about “data” allocation

[...] The excessive data usage is also a concern, as we can barely get 20 days into the month without running out of on-peak data.... And the off peak thing is just a joke using the internet between 1am and 7am is bullshit and completely unrealistic for 95% of the population, the on-peak and off peak data should be joined into one big data plan that can be used over the whole month. Fixed NBN users can use whatever they want when they want, why can't we??????!"

"I find Skymuster faster than iss. With iss, we only had 20gb peak and we didn't go over our limit as we had usable off peak times, whereas with Skymuster I have to check my data usage daily as the off peak is so unfriendly with its times. Before FUP was brought in with ISS we were on a plan 60gb anytime for \$60. Now with unusable off peak, we are virtually paying \$70 for 40gb, so we are paying more for less[...]"

"It is faster but I am more concerned with the data usage recording as we seem to be continually going over the limit with no change in our usage and we have updates turned off on everything. I don't feel it is right that the service is broken into two parts with the off peak being pretty well useless. We should have the same access as the urban areas"

"Sky muster has not made a great deal of difference... speeds are a little quicker..... use more data with the easier connection so unless I upgrade to more data and more cost, have to monitor data usage more carefully.. or change my sleep patterns to use off peak !!"

"Sky Muster was a good idea, faster a bit more data...but what a disappointment it has been. Expensive, not enough data, too much 'off peak' data at stupid hours, unreliable, cannot turn it off in case it won't come back on for hours, goes off for no reason, signal fades if it rains.....it is a 'lemon'"

"Off-peak data times are ridiculous"

[...] Needs...the 'off-peak' data is a complete waste...rarely use it. I would like more data available in peak times. I am 'tired' of constantly monitoring my usage and mentally negotiating whether I can 'afford' to either watch something (mainly iView)..or up-load a video to my farm's page. I live alone so I can strictly mediate my usage...but whenever I have guests it's a challenge...I think for \$60 I should receive enough data for 2 people..that seems fundamental. I think since NBN is a government entity certain sites should be 'free' to use...like iView As another fundamental, remote Australian should have universal access to the National broadcaster...and I would be greatly appreciative if all of the ABC's radio platforms were also available free to stream"

However, there were some positive comments from respondents (see Table 138), they include that downloads are faster, that the respondents can stream movies, watch YouTube and other videos and that banking and applying security updates is easier. However, this is contrary to responses in Question 22, where the respondents said that if they had more data they could stream, apply security and other updates and participate in online banking.

Table 137: Positive anecdotal comments from survey participant about “data” allocation

“Compared to old satellite, trouble free and fast”

“Can now reliably get on the internet”

“Our agronomy newsletter previously would take 20 minutes to download, now its instantaneous. I am able to watch You Tube videos without drop out. banking is so much more easier without dropout”

“Wow, what a difference. My previous 100 Kbps “ADSL” service meant that I would spend days a month applying security updates to my IT systems (and nothing else could be done when this was occurring. Now it takes a couple of hours, and I can watch a movie while it's downloading. I can stream training material to further my education (I used to pay for a 3G service just to do that). My partner now streams music videos off YouTube (not possible before), and we are watching video streaming services for the first time (apple and Netflix). All up, a significantly better and faster service than we were getting off ADSL and 3G internet”

“Apart from drop outs I can attend Skype medical appts now it is less frustrating . I can online bank and do tax except if there are drop outs while doing so I have to start again . Research for child's school assignments is better. Receiving emails from school now possible. Downloading a movie occasionally is now possible but not as fast as I had hoped”

Because there isn't as much lag in voip, we can now make reasonable video calls and doing actual work isn't quite as frustrating.

“Can now do app and operating system updates between 1 am and 7 am using off-peak quota - so better system security”

“Download speeds faster - most of the time”

“Downloading educational videos is much faster with sky muster”

Sky Muster was mentioned 226 times. Comments include topics such as unreliable connections due to weather (see Table 139). For many RRR people, computer work happens when the weather is bad outside, therefore the internet connection being unreliable when the weather is bad does not help the farming family. Respondents also include that Sky Muster is better than their previous internet, but they are finding that their data allowance is not enough and that they are much worse off with Sky Muster than with the interim satellite. Respondents are using mobile data in conjunction with Sky Muster, which is enabling them to use different data for different tasks, but this is costly. They are also commenting that this is very expensive and unsustainable and they highlight that there is inequity between themselves and urban-based users.

Table 138: Anecdotal comments from survey participant about Sky Muster

“Our sky muster connection is very unreliable. It does not work at all if rainfall is moderate or heavier and having a farming and earthmoving business this is sometimes my only chance to do business on it. Our provider tells us this issue can't be fixed”

“Sky Muster has made a significant difference to our connectivity - it made it much worse than was with the interim satellite. We can't depend on it at all, and we can't get enough peak data at a reasonable price. We're scared to turn the modem off in case it takes hours to re-establish a connection (which was happening a while ago when we turned it off each night to save electricity). We hate it. If we had any other option, we'd dump Sky Muster immediately. Started keeping track of dropouts and outages in August - record attached in next question”

“Prior to sky muster I had mobile broadband. Whilst it was more reliable and consistent, the speed was a maximum of 5mbps. Prior to mobile broadband, I had satellite and the speed was 0.02mbps, so pretty much non existent. With sky muster I can now download movies and have a speed of 25mbps however it does drop out regularly”

“Prior to Sky Muster we had mobile internet only. It cost \$160/month with only 25GB of data. At least with Sky Muster we now have double the data at a lower cost. But it is unfair that we have to pay so much more compared to other nbn customers. I have friends that only live less than 15km away that get 1000GB on nbn for less than \$100 per month. The data we require is at least 100-200GB, mostly for my daughter's education and to run our primary production business”

“Sky Muster currently offers us a very small data allocation for non-critical tasks and work that's not time critical or can be done in the most frustrating and slowest manner possible. Other than that, it's cheaper than Mobile Internet but given our first ever Internet usage goes back to the 1990's and AARNet, right through the days of dialup and early ADSL / ISDN it's hard to fathom how we have somehow been dumped back to service commensurate with those initial days. Having said that dialup was more reliable and technical support was actually technical”

“Sky Muster has changed nothing except the cost of internet as I am paying for my old plan as well as my NBN plan. It is pathetic and nothing like it was promoted as. Shame on you Government”

“Sky muster has given us cheaper, faster and a more reliable internet connection to do business transactions without dropping out and the kids to be able to research homework etc however I believe it will not keep up with the demand and I have noticed the decrease in speed as more people are connected. I believe that more mobile towers are needed to work along with satellite”

“Sky muster has made a huge difference in that we now have 15gb more than we had before. It will still not be enough for the future, I gave up a party plan sales business due to not having the speed or gb to place orders, there are also a lot of farming applications that we don't use as we don't have the download. My daughter has to go to town a lot more than she should to access data for her university course lectures and research. She would not be able to do this study without us having a place in town”

The words “when it works or when working” were used 144 times in the context of Sky Muster actually working. While many of the comments were negative and about participant frustrations of paying for, but not having, a service that worked regularly, some of the comments were more positive. Other comments were about having to monitor data, see Table 140 for examples of supporting comments.

Table 139: Anecdotal comments from survey participant about Sky Muster “when working”

“We have been able to use it for two days of the two months we have been connected. the speed has been wonderful when it works, but it has been unreliable for over 90% of the time”

“No, it has not made a significant difference to my connectivity. When it works, I am able to watch video and you tube clips for education but if the service is not working I am unable to do any of this. At least with ISS the service was slow but I had a connection. I have had more days of no service since my connection in July than I have had the whole time I was on ISS”

“Skymuster has made our business activities more pleasant and less time consuming social media works faster watching short video is now possible. We have to monitor our peak data usage but after the initial period we are easily staying within our limit. We don't download large lumps of data because it will blow our plan we accept that restriction and are grateful for our improved service. Long may it continue”

“When it works it good. But I have to restrict my home schooled children to how much studying they can do. Or all my peak data is gone in a short time”

“Even though it not a full four weeks since we were connected the service has been slow and intermittent , unreliablepossibly even slower than it was previously on the old satellite . It keeps dropping out at least 6 - 10 times a day. We do have records of our speed tests but I don't know how to attach them as a file”

Reliability was mentioned 109 times. Some respondents were optimistic that things would get better quoting “teething problems” as the current inhibitor, but they were also pessimistic about the future, discussing quotas and the number of household devices and how detrimental that would be to Sky Muster. Others commented that they were happy with the VOIP service. Many comments surrounded poor reliability for example dropouts, poor customer service and that the plans were inadequate.

Table 140: Anecdotal comments from survey participant about the “reliability” of Sky Muster

“Sky Muster is great, the connection is moderately reliable and install was painless. Perhaps with the teething problems lessening reliability will improve and the system will be enjoyable to use. However in this increasingly connected world it is a little unfortunate that capacity was not built into the system for future quotas. If devices use all the quota now just staying updated, imagine a 5 person family with a few devices each in 5 - 10 years. Even without thinking about netflix....”

“Sky Muster provides a great VoIP connection that has provided a cheap and effective communication for my business providing multiple concurrent phone calls. Poor Sky muster quotas and reliability are the number one issues for me”

“The reliability of Sky Muster [is] very poor, dropouts are a large problem, and the data plans are stupidly small compared to FTTx connections due to NBN's FUP, I'm very unhappy with the service and sick of paying for 2 internet connections as i need a backup when Sky Muster drops out”

“The unreliability of the Sky Muster service can be very frustrating for the delivery of distance education for my three children.”

“We can intermittently have good and bad days but business is dependent on reliability. We use the service for both personal and business use and the second service solely business. We do have better service than 3g but managing the issues is a nightmare. In addition this is made much worse because of the provider Clear Networks who’s customer service is non-existent”

“Except for a usable, (but not totally reliable) VOIP service, we have not progressed at all, and definitely have gone backwards in overall reliability. The slightly higher “on peak” data allowance we can afford is more than offset by unreliability and slow page load times, even after all the browser “tweaks” that can be done. (I am very tech savvy) I have actively discouraged people I know from signing up- that says it all”

While many of the comments relating to the word “service” (mentioned 95 times) were related to having an internet service, some of the comments captured service in terms of the provision of service, data as a service, customer service and unintended use and how that affects Sky Muster as a service. See Table 142.

Table 141: Anecdotal comments from survey participant about “service”

“Sky muster had provided Internet that wasn't available in the past but it's very unreliable, small data usage restrictive to standard business operations and the customer service from Skymesh is SHOCKING!!!! I do not believe this service will be appropriate in a few years' time judging the speed the data usage is growing. The data usage is outside user controls as videos ect are embedded into webpages and to run a business customers expectations expect you to be online, present and able to engage”

“Sky muster has not improved anything for us. We previously used 4g device through a yagi antenna. It was very expensive for very little data so we changed to nbn skymuster, however we have now had to purchase more mobile data for when the sky muster drops out and isn't working. We are now paying more all together, the service is not reliable and we can't do as much”

“Sky Muster is much worse than the last Interim sat. Very slow to start. Non connections all the time making it unreliable, waste a lot of time having to do things twice. Bad off peak hours make it unable to use off peak data. Lots of dropouts. High power use plus the inability to turn the ntd off makes this modem fail suitability for remote locations with limited power supply or on solar, off grid?! Horrible blue ring light that is way too bright and is totally unnecessary, a small white/red/blue led would suffice. Sky Muster should be world standard but it does not come close. Sky Muster is a joke and makes Australia look like a backwards country in comparison. I now pay more money for less service?!”

Respondents also commented about “speed” (mentioned 76 times). While most respondents acknowledged the extra speed gained with Sky Muster, some commented that the speeds were unreliable. Many comments again related to a lack of data as the biggest problem, see

Table 142: Anecdotal comments from survey participant about “speed”

“Due to the speed of nbn. All our house holds is now able to be online”

“For approximately the first couple of months Skymuster was great, but over the last few months we have been plagued with dropouts, slow speeds and connection problems!”

“Have noticed very little difference from my previous satellite connection. I have drop out or extremely slow. I have to revert to my hotspot on my mobile. Speed extremely inconsistent usually around 3mbps when i am a 25mbps plan. occasionally get faster so unreliable”

“I cannot do much since having skymuster. Have to check usage everyday, lots of buffering & drop outs, slow speeds at particular times of the day. Did work reasonably well for the first 2weeks!”

“Since going on Sky Muster it's true the 25/5 speed has been a massive improvement and very convenient when we can actually use it. However I have multiple friends in town with fixed wireless (normal) NBN and the speed they receive is still much better than Sky Muster, plus they receive gargantuan amounts of data for a lower price. Once again, rural areas are being penalised for their location and it's absolutely rubbish. Just because we're rural doesn't mean we're backward and cannot understand the power / potential of the internet and the way it makes life better.

“Although the extra speed and data is welcome it is still not enough data for running a modern business and raising a modern family. I am still the Internet ninja restricting everyone's data use on a daily basis”

“Anything!! would be an improvement on the NSS plan I was previously on. Having said that, after an initial period of a few weeks of getting good speeds (25/5 plan) with Sky Muster, my most common speed is between 2-3Mbps. Surprisingly, at the 2-3 speed, videos and iView are either slow or fail to load...and all except simply-designed webpages can take a good while to load as well. There is no consistency regarding the speeds...it'll go for a period at 23Mbps then suddenly it'll go down to 2.6ish for a few days/weeks...then back up (which make it hard to get a 'ticket' produced) Currently, I am writing this off-line....the modem's light is stuck on orange after doing a reboot because of the glacially slow speeds Positives....prior to Sky Muster I couldn't watch videos at all and I had far less data to 'play' with. I no longer need to compress images to 100kb so they'd upload..I can now upload videos

The word “month” was mentioned 74 times. Nearly all of the comments that discussed something happening monthly were to do with not enough data on the plans, being shaped, or having to have a backup service, which increased the cost of connectivity, see Table 144 for supporting comments.

Table 143: Anecdotal comments from survey participant that include the word “month”

“I have worked from home for last 4 yrs, and had planned to expand our business, update our IT systems, and kick in further on the installation of the NBN, that was meant to be better, faster and more. Yes - it's faster. However - we now have 50% LESS data than we had during normal working hours of 8 - 3pm... and one week EVERY month at least we have NO data as the downgraded data does not even load a web page or download an email. It is crippling our business, and my opportunity to work from home in a regional area. It must be fixed, for business, for education, for rural Australians!”

“I pay \$159 a month for 25GB with Telstra, and \$95 for 60GB Peak & 50GB Off Peak through Skymuster. I also have a prepaid mobile wifi modem through Telstra for when we use all the data. I run 3 businesses from home, and have 3 kids who all have their own devices. We live 5km from the nearest town, which has ADSL connections throughout, but we can't get a phone line. This amount of money for the measly amount of data we receive is disgusting and we won't be able to sustain it going forward”

“I previously relied on Vodaphone mobile wireless and my, my partner's and children's personal mobile hotspots which cost me between \$300-\$500 per month. Skymuster is much cheaper and fantastic when it works, but not enough data; offpeak is useless, doesn't work and is a ripoff. Outages during peak periods are very frustrating, especially because nobody (NBN or HarbourISP) provides any notification of them; and the constant need to do the power cycle to keep the NBN box running is ridiculous. Appears the NBN box just stops working (dropped out) even without an official ""outage"" unless it's powered off and back with great frequency. (Blue light stays on even when the box has stopped working - I.e. Dropouts)”

“I was with Telstra Wireless before and always had trouble with connectivity. Now with Sky Muster I have no problems except for when there is No Service because of a drop out. I find that I need more peak time data as I run out every month while hardly using any of my Off Peak data”

“Just a slight improvement on previous ISS connection in terms of data allocation. Of course we could pay for a bigger plan each month or buy data blocks when our allocation runs out but that's an extravagant expense we cannot afford”

“Sky Muster enables us to be more connected, for 2/3 of the month at least (until our data runs out)”

“Sky muster has been good but data allowance doesn't last the month. Thought it was the novelty early on but still data seems to be disappearing in massive blocks have tried all data saving tips”

The seventh most used word was “dropouts”, which was mentioned 72 times. Dropouts are occurring when trying to load pages and when doing the banking. Participant comments state that dropout occur frequently.

Table 144: Anecdotal comments from survey participant that include the word “dropouts”

“Less dropouts with skymuster more consistent downloads compared to mobile phone internet more data than offered on mobile plans but still not enough compared to what nbn wireless and Metropolitan nbn”

“[...] constant dropouts when trying to load pages, do banking, ect”

“Nothing much has changed.- probably more dropouts and takes a bit longer to load in morning”

“Sky Muster has made a significant difference to our connectivity - it made it much worse than was with the interim satellite. We can't depend on it at all, and we can't get enough peak data at a reasonable price. We're scared to turn the modem off in case it takes hours to re-establish a connection (which was happening awhile ago when we turned it off each night to save electricity). We hate it. If we had any other option, we'd dump Sky Muster immediately. [...]”

“Sky Muster is currently worse than the old interim satellite - more dropouts, poorer service. We have no mobile coverage and so no alternative to satellite. The service is adequate when working but is erratic and poorly supported”

The word connection was mentioned 69 times. It refers to being connected to Sky Muster, to how the connection works and what the connection gives the participant. The Sky Muster connection is not performing well in terms of apps or business/gaming software.

Table 145: Anecdotal comments from survey participant that include the word “connection”

“Skymaster seems to be more reliable and a bit faster than our previous satellite connection, and more reliable with less dropouts than our Telstra 4G wifi connection”

“SkyMuster has made my Internet connection useless, my business from home is close to dead, I will now have to travel and use an office to work from where I can get a real Internet connection. Simply put - SkyMuster doesn't work as the software I need to do business doesn't work via SkyMuster. All my software worked well on ISS. SSH and Telnet both drop connections all the time, and that means reconnecting after each time. Remote management software won't even connect. Along with no support. I'm getting close to just turning it off and have no Internet at home because it is so frustrating trying to work on remote systems and takes so long to get anything done. Every morning it takes hours to get a connection, light rain will kill it, sometimes heavy cloud cover will kill it, then wait a couple more hours for it to come back. ISS worked rain, hail and shine - faster than Sky Muster, much more reliable but not enough data”

“Sky Muster has indeed increased our ability to use online gaming, BUT, a lot of gov departments now expect you to have a fast internet connection, and the fact that a lot of gaming now has online downloads for updating or even purchasing popular games makes it difficult. A lot of games no longer come on disc and your required to use the internet to download them, which eats up your data, organisations seem to think that most people are on unlimited download, or at least high monthly downloads”

“Skymuster is (relatively) more reliable and less expensive than our 3G. However, the lack of access to data is the big ongoing problem. Why can't we have more than one connection ""per premise""? We are running 2 businesses and our personal requirements from our farm house on the one connection. Why aren't we allowed an extra connection per genuine business? This is unfair compared to cities. NEED MORE DATA!”

Respondents running a “business” (mentioned 68 times), are frustrated with shaping, data limits and installation limits, for example only having one port per household.

Table 146: Anecdotal comments from survey participant that include the word “Business”

“Was on the old ABG system of 3 GB a month on 524kb speed and then shaped to 64 kb speed. Was not eligible to go onto the ISS due to still being under the 3 year restriction with ABG (we were one of their last customers) and when I came out of this 3 year period couldn't access the ISS due to the new government restrictions as we had satellite internet. Could not run my business and had to put the expansion of that on hold for nearly 2 years so loss of income for 2 years. Trying to upgrade qualification via Open Colleges who changed their delivery system to make it more mobile friendly being more cloud based. Don't have mobile access so this became a problem as I had to do it via the slow internet. Couldn't load pages so what should have taken me a year to complete took two and really only could get on to do it when I had SkyMuster installed. Manage 7 websites for ICPA and this was able to be completed but work was very time consuming due to the very slow internet. it was possible but this took up most of my work day to do. Also produce a monthly e-publication and this needs to be uploaded to the website on a monthly basis. The size of the publication would be below 3 mb but this could take up to a day and numerous attempts to do via FileZilla (now it takes 5 minutes) I am extremely happy with SkyMuster and can be very patient with the teething problems which I have had only a minimal impact. I can now run my business, however I have not gone to full on cloud accounting yet as I am hesitant and may need to up my data if I do. I currently don't use all my 15 gb a month but am close and I believe I have room to move within the fair use policy so will up my monthly data when the need arises. I have now just finished my Cert IV just within the allocated time frame allowed without money penalty. I have no trouble with the websites I manage and the e-publication now. I don't use Netflix so am unsure whether the system would work with this. I haven't needed to Skype with my kids as I can ring free on my home landline to them overseas for \$15/month which is cheaper then paying for extra data and possibly having hassles with the internet”

“We run a world wide business from our property and if this the internet if the future we have been promised it is very poor. The speed is slow with frequent outages. Today Skymuster has been off line for certain webpages and there is no listed time for correction. This is a nation wide outage they are saying. We gave slow speeds or off line at least once a month and often more frequently. This is not good enough”

“When operating Sky Muster is a significant improvement on internet service allowing faster downloading of business documents and communication with clients. It also opens up the possibility of using video, for education and entertainment and conferencing/webinar for business. Many more possibilities”

Question 27: Do you have any images or further information that would assist the BIRRR Team in ensuring your voice is heard when it comes to bush connectivity?

Approximately 20 respondents sent in images or further information. The images have been used throughout this report where appropriate and some of the other information has been used to provide a case study for example in Figure 33 (the situation) Figure 34 (the supporting data). The BIRRR team has used the other uploaded files to assist where required.

The case study (Figure 33 and Figure 34) highlights connectivity problems with Sky Muster. The participant provided an outline of the problem and recorded the observed data for the case study manually over different times for a period of time, which means it is highly probable that a significant number of events and outages were missed (as noted by the participant). The participant observed some events during off-peak data periods for example at 4:00am. These outages may affect off-peak data usage, which is significant for those who are trying to use off-peak data.

SA, Connected since May 16, SkyMesh

This is the worst internet connection we've ever had. Dropouts happen daily. In December 2016, we had at least 33 outages, some lasting a few minutes, many lasting up to an hour and some lasting for 2-3 hours. And there were probably many other outages when we weren't trying to use it. In short, it's awful, and we feel we're being ripped off every day. We live in a 'black spot' where there's very poor mobile coverage, so our only backup option is to go somewhere else and use free Wi-Fi on a tablet.

Sky Muster has made a significant difference to our connectivity - it made it much worse than [it] was with the interim satellite. We can't depend on it at all, and we can't get enough peak data at a reasonable price. We're scared to turn the modem off in case it takes hours to re-establish a connection (which was happening a while ago when we turned it off each night to save electricity). We hate it. If we had any other option, we'd dump Sky Muster immediately. Started keeping track of dropouts and outages in August - record attached in next question [displayed in this report in Figure 34.

Figure 33: Case Study – Sky Muster outage situation as recorded by a survey participant

<p>June/ July/ August</p>	<ul style="list-style-type: none"> • Out for 2.5 days in June or July • Out for 2.5 days August 18-20 • Out August 30 - noticed at about 5:00am - back on at about 8:30am
<ul style="list-style-type: none"> • Out Sept 2 - noted at about 4:30pm - modem light flashing white - no connection. Came back in about 15 minutes. Went off again, flashing white light, after a couple of minutes - on again after about 10 minutes • Out Sept 23 - noticed at about 7:00am - called Skymesh, message said they're 'aware of a problem' - came on at 8:45am 	<p>September</p>
<p>October</p>	<ul style="list-style-type: none"> • Out Oct 12 (white flashing light) - noticed at 3:00am - called Skymesh at 9:00am, message said they're 'aware of a problem'. Came on around noon. • Out 29 Oct - noticed at 8:00pm, still out 8:45am next morning. Rang skymesh - while waiting, recording suggested turning everything off and on again - did that. Modem took about 10 mins to get to blue light. Still no connection. called again 8:55am, on hold til 9:10am. Advised to detach modem and connect it again - didn't help. Jason ran 'tests' on the line and said it's an ongoing NBN maintenance issue, and we should have a connection by the end of the day. • Connected at 10:55am 30th Oct
<ul style="list-style-type: none"> • Out 15 Nov for about 15 mins • Out 16 Nov - noticed at 2:45pm, on at 3:15 	<p>November</p>
<p>December</p>	<ul style="list-style-type: none"> • Out Dec 4th - started at 9:15am - White light - back on in about 10 minutes • Out Dec 14th - noticed about 4am, came on about 7:45am • Out Dec 15th - noticed about 4am, was on by 8am - don't know when came on • Out Dec 16th - as above • Out Dec 17th intermittently - noticed at 7:30am, very slow, sometimes working, or not • Out Dec 19th - noticed at about 4:30am - white pulsing light. Came on at 8:15am. Out intermittently through the day • Out Dec 20 - noticed at about 3:45pm - white pulsing light - on at about 4pm. Out again, noticed at 4:50pm • Out Dec 22 - noticed at about 1:30pm - blue light. Still off at 3pm. On at 3:15 • Out on Dec 23 - noticed at 2:45pm - blue light. Back at 3pm • Out Dec 25 - noticed at 12:55pm - blue light. Back at 1:10pm. Out again at 1:15pm. Back by 2:20pm. Out again at 2:25pm. Back by 3:45pm. Out again at 3:55pm. Back by 4:15pm • Out Dec 27 - 8:55am - white pulsing light. Back at 9:05am. Out again at 10:40am - white pulsing light. Back at 10:45am. Out again at 1:25pm - blue light. Back at 1:30pm, but slow. Out again at 1:34pm - blue light. Back at 1:35pm. Out again at 4:08pm - white pulsing light • Out Dec 28 - noticed at around 2:30am - on and off intermittently, mostly off. On at 7:15am. Out again at 2:05pm - blue light. On again a few minutes later, then off again. Back on by 3:40pm • Out Dec 29 - 1:45pm - blue light. Still out at 2:55. Back at 3:10pm. Out again at 3:25pm. Back by 3:35pm. Out again at 4:10pm • Out Dec 30 - white light when turned on at about 4:15 am. Still off at 5:15am. On sometime before 7:00am. Out again at 7:05am - blue light. Back at 7:20am. Out again at 7:55am. Back by 8:20am. Out again at 2:05pm. Back on by 2:25pm • Out Dec 31 - at 1:10pm - blue light. Back at 2:25pm. Out again at 2:30pm. Back at 2:45pm. Out again at 2:50pm. Back at 4:20pm. Out again at 4:30pm. Back on at 6:00. At 7:30pm, with nobody using it, an email arrived saying all the rest (about 1 Gb) of our monthly data had gone. Where???? • At least 33 outages in December 2016
<ul style="list-style-type: none"> • Out Jan 1 at 2:25pm - blue light. Back by 2:45 	<p>January</p>

Figure 34: Case Study - Sky Muster outage, supporting data as recorded by a survey participant

Question 28: Do you think the #datadrought is over?

When asked if the respondents thought the data drought was over, nearly 90% said no, nearly 10% were unsure and 1% thought that it was over.

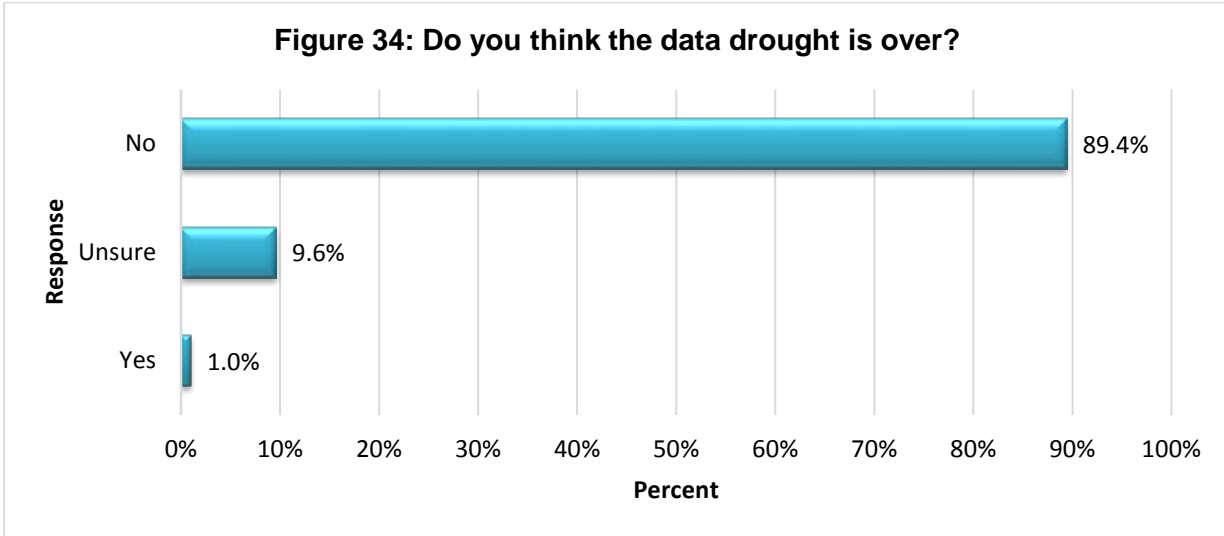


Figure 35: Do you think the data drought is over?

Question 29: If you are not connected to Sky Muster and unsure of your internet options and would like a BIRRR member to be in touch please type your email below.

Fifty-six respondents requested to help from BIRRR volunteers to be connected to Sky Muster.



BIRRR
BETTER INTERNET FOR RURAL, REGIONAL & REMOTE AUSTRALIA

ABOUT WELCOME BIRRR RELEASES BIRRR STORIES MEDIA TIPS & TROUBLESHOOTING Mobile Broadband Fixed Wireless Satellite nbn CONTACT

Sky Muster Long Term Satellite Service LTSS

Full explanation of satellite internet services historically and currently (compiled by BIRRR* 20/10/15)

- NBN Interim satellite service (ISS) was designed to be used by those who could **NOT** get any other type of broadband connection, installations were between 2011 – 2013 to approximately 40,000 Australian residences.
- The new NBN Satellite **Sky Muster** became available from April 2016 as part of the Long Term Satellite Service (LTSS). It is expected to service between 200,000 – 400,000 residences. It will be available to residents who can not access NBN Fixed or Fixed Wireless technologies.

Sky Muster Facts:

- nbn™ Long Term Satellite
- Long Term Satellite (Sky Muster)
- What are Sky Muster Service Providers
- Sky Muster™ nbn™ Long Term Satellite
- How to Find Sky Muster in your area

Getting Connected to Sky Muster:

- How to get a NBN connection ?
- Preparing for Sky Muster™ compiled by John Kitchener for BIRRR
- Sky Muster Service Providers
- Sky Muster Satellite Modem – Power Consumption compiled by John Kitchener for BIRRR

Routers & Telephony:

- Sky Muster Routers (compiled by John Kitchener for BIRRR 6/5/16)
- Alternate Voice Telephony (compiled by BIRRR 7/1/16)
- VOIP on Sky Muster (compiled by John Kitchener for BIRRR 2/6/16)

Education Services on SKY MUSTER:

- nbn™ Education Port for Distance Education Students (updated 2/6/16)
- Education Services over Sky Muster End User Guide

New South Wales:

Topics

- Aerials
- Antennas
- apple
- BIRRR
- Cloud Services
- Data Saving
- education
- Hardware – Modems
- Hardware – Modems, Antennas,
- Aerials
- Hardware – Routers
- health
- ISS – Interim Satellite Service
- Malware
- Mobile Broadband
- NBN
- NBN Fixed Wireless
- NBN SkyMuster Satellite
- RSPs – Retail Service Providers
- Satellite
- Solar Power



Conclusion

Equity of internet services are essential for RRR consumers, irrespective of where they choose to work and live. The contribution to the Australian economy made by RRR residents and businesses far outweighs the current infrastructure expenditure on telecommunications for these regions. For example, each person in the Quilpie Shire Queensland, contributes \$250,000 to the economy, compared to Brisbane's contribution of \$70,000 per person (Central Western Queensland Remote Area Planning and Development Board, RAPAD, 2016).

To ensure RRR productivity and growth and to keep people living in RRR areas, voice and broadband services must be accessible, affordable, reliable and equitable*. Essential services in RRR areas are already lacking, mental and physical health services, education, business productivity, tourism, economic growth and innovation would all benefit from improved telecommunications.

The BIRRR Sky Muster Survey aimed to establish the state of Sky Muster for people in rural, regional and remote areas of Australia and although mandated to deliver a minimum speed requirement to every Australian. nbn™ does not guarantee and has no accountability or responsibility to deliver reliable, affordable and equitable services, which is clearly evident in the responses to this survey.

**Whilst RRR Australia requires equitable access to Internet services, we understand the logistics of the locations involved, and are not asking for unlimited data, simply equitable Internet services.*

References

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