Telstra submission in response to the Department of Infrastructure, Transport, Regional Development, Communications and the Arts discussion paper on Funding of universal telecommunications services

May 2024

Executive Summary

The Universal Service Obligation (USO) has for decades ensured that all Australians can be connected regardless of who they are or where they live and work. To ensure it remains relevant into the future, the USO should be reformed to take advantage of the new technologies that have recently become available. This means removing the requirement for Telstra to use the outdated copper network to deliver USO telephone services in much of regional and remote Australia. Customers in those areas could then be migrated over time to a newer wireless or satellite technology that is more reliable and more capable.[1]

Current arrangements require ongoing investment in outdated, inefficient, expensive technology that is not capable of delivering the best possible service for customers. The telecommunications industry cannot subsidise inefficient networks and remain sustainable in the face of increasing competition from technology companies that are not subject to the same requirements. Conversely, reform to allow the use of the most efficient technologies would ultimately release Commonwealth funding that could be redirected to mobile resilience programs – a win-win for customers and all industry participants.

Distinct funding arrangements are appropriate for distinct obligations

The USO and the Statutory Infrastructure Provider (SIP) obligation are distinct obligations. The USO is a telephone retail service supply obligation borne by Telstra. The SIP is a broadband wholesale service connectivity obligation borne by NBN Co. As such, it is also appropriate that the USO and SIP have distinct funding arrangements. There is no rationale for combining the two funding mechanisms until and unless the two obligations are combined.

In the medium term the USO may be folded into the SIP obligation (once NBN Co can support telephony on satellite and commercial retail supply is evident), at which point USO funding will no longer be required. The Regional Broadband Scheme (RBS) would then be the only funding mechanism needed to cover the losses incurred in providing a broadband/telephone service guarantee, unless it has been replaced by Commonwealth funding or the guarantee itself is no longer needed.

Funding arrangements were set up appropriately, but should no longer be network-specific

The funding for Telstra's and NBN Co's loss-making services was determined by modelling that assumed long-term network investment. Telstra is required by its contractual Copper Continuity Obligation (CCO) to continue using the relatively inefficient copper network, and NBN Co invested in its Sky Muster geostationary satellites. Both these networks have now been effectively superseded by more efficient and effective fixed wireless and Low Earth Orbit (LEO) satellite networks.

The CCO should be removed, and changes to funding arrangements should be made to allow NBN Co to transition away from its Sky Muster satellites, so that customers are not subsidising a network they decreasingly use. If commercially provided services are not affordable by all, a direct consumer subsidy (e.g. a voucher scheme) would be the most efficient way to ensure universal access. The advent of LEO satellite-based infrastructure competition at all locations in Australia may eventually drive down prices to the point that a guarantee is no longer required.

[1] See Telstra's submission to the consultation on Better delivery of universal services.

Wholesale and retail services standards should be fully aligned

Telstra is required by the Customer Service Guarantee (CSG) and Payphones Determination to meet specified timeframes for the connection and assurance of USO telephone services and payphones, meet strict benchmarks against those timelines, and report to the regulator, government, and publicly on our performance against those obligations. Telstra has not failed to meet a CSG benchmark since 2012. Telstra supports the making of SIP Standards to ensure NBN Co is subject to the same level of accountability.

We acknowledge that some customers have an unsatisfactory experience even when the CSG and payphones benchmarks are met. These benchmarks could be increased through changes to regulation, but doing so would inevitably increase the cost of meeting them, and therefore the subsidies required to offset those costs. Any consideration of changes to regulated benchmarks must take into account the costs of those changes, how those additional costs should be funded, and by whom.

The funding bases for the TIL and RBS are appropriate

We consider the funding bases for both the broadband and telephone/payphone obligations are appropriately matched to their respective funding mechanisms. There is a good argument the RBS should be replaced with direct funding from the Commonwealth, but if it remains in place the funding base should be kept as it is and not extended to third party fixed wireless or any other nascent broadband access technology given that fixed broadband supply is almost entirely provided by NBN. Telstra is open to a discussion with Government about whether there is an appropriate means to extend the levy to other industry participants.

Telstra's universal service fixed network resilience arrangements are sufficient

Telstra is required by the Network Reliability Framework to remediate poor-performing parts of our fixed networks and report publicly on their performance. In addition, the CSG and payphone benchmarks require faults to be fixed within specified timeframes in a high proportion of cases. Our ability to continue meeting these regulated requirements requires ongoing investment in our fixed networks, especially as these networks age and become increasingly difficult to maintain.

Interested observers would be aware that Telstra's CSG timeframes can be suspended when natural disasters occur. In many of these cases the main driver of network outages is not damage to network equipment but the loss of mains power. While actions can be taken to increase the capacity of back-up batteries or allow for generators to be quickly connected to a site or exchange, these alternatives have hard limitations and cannot be considered replacements for mains power.

Commonwealth savings from reform of the USO could be redirected to mobile resilience

We have heard the calls from some stakeholders that Australia needs a "mobile USO". We think it is widely recognised that applying a fixed-like USO to mobiles is unworkable, because a terrestrial mobile network that provides coverage anywhere anyone wants it is not commercially possible or responsible. That said, given the importance of mobile connectivity to Australians today, we understand the calls for some sort of framework to measure and assess mobile performance.

We also acknowledge that in recommending changes to the USO, and as customers transition off legacy technologies that were the subject of universal funding, there are valid concerns about the levels of customer support and network reliability of the technology alternatives. We are open to

conversations on what performance measures would be appropriate to provide customers and stakeholders with confidence in mobile networks. Any performance measures should encourage efficient investment in and use of infrastructure, recognise that service levels that cannot be provided economically will need to be funded, and be both technology and provider agnostic.

If the current USO requirements are scaled back (for example, via removal of the CCO, shrinking of the USO footprint, or removal of the USO altogether) the corresponding portion of the Commonwealth's contribution to USO funding could be redirected to operator-agnostic mobile resilience programs. This could be a way for modernisation of the universal service regime to deliver additional benefits to regional and remote customers without trying to shoehorn mobile service delivery into a universal service framework in which it does not belong.

Funding of universal telecommunications services

The telephone and broadband universal service obligations have the common purpose of ensuring Australian residents have equitable access to telecommunications connectivity, but they are otherwise distinct:

- one is for telephone connectivity, the other is for broadband;
- one is a retail supply obligation, the other is a wholesale connection obligation; and
- the obligations are borne by different entities (Telstra and NBN Co).

The obligations overlap only in that the wholesale broadband service must be able to support a telephone service (except where the broadband service is delivered using satellite technology). In practice, Telstra's Copper Continuity Obligation (CCO) limits the use of NBN fixed wireless connections for delivery of the telephone Universal Service Obligation (USO), because it requires Telstra to keep using the copper network in most cases. Until NBN offers a satellite service that can be used for telephony, and Telstra's CCO is removed, the two obligations are likely to remain distinct.[2]

Distinct funding arrangements are appropriate for distinct obligations

Under current settings there is no reason to combine the two different funding arrangements given the obligations they fund are distinct. If settings change materially as an outcome of the USO review, any changes to funding arrangements should follow – not lead – that change in settings. In the medium term the USO and Statutory Infrastructure Provider (SIP) obligations may be combined into a single, more efficient obligation at the wholesale level. In the meantime there need be no concerns about Telstra and NBN Co cross-funding each other's obligations.

The broadband USO is funded via the Regional Broadband Scheme (RBS), which was established relatively recently with the purpose of making explicit and transparent the cross-subsidy inherent in NBN Co's national pricing approach. It also ensures that network operators competing directly with NBN Co in profitable areas contribute to this cross-subsidy in proportion to their presence in the market, so that NBN Co's ability to continue cross-subsidising loss-making services is not undermined.[3] This is quite different from the USO funding arrangements, as set out below.

The telephone USO is funded by a combination of Commonwealth funding and industry funding collected from all carriers in proportion to their eligible revenue via the Telecommunications Industry Levy (TIL). The TIL also helps fund other public interest telecommunications services including the Triple Zero service, which will need to be funded into the future. The Triple Zero service should be funded out of consolidated revenue rather than the TIL. There is no rationale for funding it out of the RBS which pays for a wholesale connection obligation, not a retail service delivery obligation.

The payphone USO is a separate obligation with no pathway to being folded into the broadband obligation (NBN Co does not offer a payphone connectivity service and Telstra has for some time been migrating payphones from copper to 4G connections), so distinct funding of the payphone obligation is likely to remain necessary for so long as the payphone obligation exists. Given the NBN plays no part in payphone connectivity, there is no rationale for funding it out of the RBS.

[2] See Telstra's submission to the consultation on Better delivery of universal services.
[3] Explanatory Memorandum to the Telecommunications (Regional Broadband Scheme) Charge Bill 2019.

There may come a point when the telephone and broadband obligations can be merged into a single connectivity obligation at the wholesale level (once NBN can support telephony on satellite and commercial retail supply is evident). If/when that time comes, the distinct telephone connectivity USO will no longer be needed, and the current arrangements for the delivery – and funding – of the telephone USO could be removed. There would then be a single funding mechanism needed for both telephone and broadband connectivity.

Subsidies should no longer be network-specific

The commerciality of universal services should be determined by whether the most efficient (least cost) services provided by the universal service obligation holder are loss-making. As services become more efficient over time, the net cost of providing those services – and the amount of the subsidy required to support them – should also decline. Once there are technologies that provide an equivalent service (including price equivalence) in the same locations on a purely commercial basis, the obligation is no longer required and should be removed.

The straightforward formula above is complicated by the specific arrangements that currently apply to the USO and the SIP. In the case of the USO, Telstra is required by contract to continue using the relatively inefficient copper network to deliver telephone services outside the NBN fixed footprint. In the case of the SIP, NBN Co has invested in geostationary satellites that have now been effectively superseded by more efficient and effective LEO satellite networks.

If Telstra were to be released from its obligation to continue using the copper network, the cost to Telstra of providing USO telephone services would reduce because Telstra could take advantage of more efficient technologies to provide an equivalent service (e.g. 4G Fixed Wireless and LEO Satellite Voice). Telstra would continue to incur losses that would need ongoing funding to offset, but its losses and the requisite funding would reduce. There are no major barriers to doing this given that Telstra's LEO Satellite Voice product is now in market.[4]

NBN Co's Sky Muster satellites present a different problem. When Sky Muster was being planned, LEO satellite broadband was unheard of. We recognise that NBN Co was required to invest billions in its Sky Muster satellites when there were no more efficient technologies, and consequently uses the RBS to recover that investment. However, as 97 per cent of the RBS is recovered from NBN Co itself, the Sky Muster investment places upwards pressure on retail prices and in time will make NBN Co less competitive in its fixed line footprint.[5]

As there are now more efficient technologies in the satellite footprint, the Government should consider redirecting funding from NBN Co's Sky Muster satellites to these alternatives. That approach would help to ensure that NBN broadband services remain affordable for end users, and in turn that NBN Co can continue to compete effectively with alternative connectivity networks and technologies in its fixed line footprint. It would be a pity if the requirement to continue subsidising an outdated network leads to less competition in the rest of the country and less investment in more efficient networks.

Direct consumer subsidies may be more appropriate with the advent of LEO satellite networks

Turning to the future, the Government should consider whether the advent of LEO satellite connectivity services means it is no longer necessary for the Government to require investment in specific

[4] Telstra Satellite Voice – powered by Starlink
[5] nbnco-rbs-transparency-report-2023.coredownload.pdf

technologies for the delivery of loss-making services in high cost-to-serve areas (such as the copper network for voice, or Sky Muster satellites for broadband). If the challenge is that commercially provided services are not affordable by all, then a direct – and targeted – consumer subsidy may be more appropriate.

Voucher schemes (where a subsidy is paid directly to the end user, who then chooses the most appropriate service for their needs) are an alternative to technology-specific subsidy commitments that are more able to adapt to changes in technology and commerciality, because they do not require commitments to network providers. However, they are only effective where there are already competing service providers in a given area able to provide equivalent services on a commercial basis.

Current funding arrangements were set up appropriately, but should transition

The USO and SIP subsidies have both been calculated as an outcome of independent economic modelling exercises incorporating the best possible data available at the time they were done.

The $270m per annum that Telstra receives to offset its losses in providing telephone ($230m per annum) and payphone ($40m per annum) services is consistent with the analysis produced for this purpose by Castalia Strategic Advisers in June 2011.[6] That analysis demonstrated that Telstra stood to lose between $215 million and $262 million per annum on telephone services and between $35m and $48m per annum on payphone services over the 20 year life of the USO contract, in line with the payments we receive.

The modelling exercise assumed Telstra would continue using the copper network to deliver telephone services in regional areas, as is still the case. If that requirement were removed, the subsidy could be reduced. It could not be withdrawn altogether because the annual payment is to offset Telstra's losses in providing USO services, not solely for running and maintaining the copper network. Telstra incurs substantial costs to deliver the USO regardless of the technology used, not least because we are uniquely required to provide the Customer Service Guarantee (CSG) and Priority Assistance.

Moreover, if the telephone USO continues beyond the contract end date of 2032 (despite the possibility that it will by then be folded into the SIP obligation), it would be sensible to replace the current funding arrangements with a mechanism that is able to adjust to changes over time in the commerciality of subsidised services to ensure that losses and the funding of those losses track reasonably closely over time. For networks with a high proportion of fixed costs (such as the copper network), a decline in the number of loss-making services does not produce an equal decline in costs or overall losses.

The losses NBN Co is expected to make on services provided in its fixed wireless and satellite footprints were assessed by the ACCC in 2020 using the same modelling approach used by the Department of Communications when the SIP regime was being developed.[7] This assessment calculated the quantum of the RBS levy base component needed to recoup NBN Co's past losses (from 1 July 2009 to 30 June 2020) and future losses (from 1 July 2020 to 30 June 2040).

We understand the ACCC is required to re-run this model in 2025, and in doing so might conclude that NBN's projected future losses should be varied up or down given the changes since 2020 in the technology environment, which in turn would influence the quantum of the RBS levy.[8] In Telstra's view

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[6] Paul Patterson/Castalia Strategic Advisers, *Net Cost of Meeting the Standard Telephone Service and Payphone Universal Service Obligations,* June 2011. The quantum of annual payments to Telstra are exclusive of GST.
[7] ACCC report on modelling of the Regional Broadband Scheme Levy initial base component
[8] Part 13, Telecommunications (Regional Broadband Scheme) Charge Act 2020.

this is a sound approach to ensuring that the commerciality of subsidised services is taken into account in the funding regime. Given the substantial Government investment in NBN Co's fixed wireless network over recent years, we would expect NBN Co's losses to decline not increase.[9]

The Government should also consider whether continuing to fund NBN's Sky Muster network will deliver the right outcome for customers when there are better options available, as demonstrated by the steep decline in active Sky Muster services.[10] It might be that the best outcome is achieved by transitioning funding to a LEO satellite network that requires less subsidy.

Wholesale and retail service standards should be fully aligned

The obligation holders of both the USO and the SIP must continue to provide universal services according to a set of parameters and benchmarks and provide reporting publicly and to regulators and Government on their performance in meeting those standards. However, the standards that apply to the USO are more robust and clearer than those that apply currently to NBN Co and other SIPs. Telstra supports the making of SIP standards as provided for in legislation to bring accountability for the SIP obligation up the level of the USO.[11]

Telstra is required to report to Government on the number of CSG-eligible telephone services in market and on our performance in meeting the CSG timeframes for connecting services, fixing faults, and keeping appointments with customers.[12] We are also required to publish detailed information on our CSG and related performance metrics in regional, rural, and remote areas.[13] Telstra has not failed to meet a CSG benchmark since 2012.

Telstra faces similar requirements in relation to the operation of payphones. We must follow detailed rules on when and where payphones are to be installed or removed, and we must fix payphone faults within specific timeframes and meet those timeframes to a benchmark level.[14] We provide regular reporting to the ACMA on our performance against these requirements. Telstra has never failed to meet a payphones performance benchmark.

We acknowledge that some customers have an unsatisfactory experience even when the CSG and payphones benchmarks are met. These benchmarks could be increased through changes to regulation, but doing so would inevitably increase the cost of meeting them, and therefore the subsidies required to offset those costs. Any consideration of changes to regulated benchmarks must take into account the costs of those changes, how those additional costs should be funded, and by whom.

The funding bases for the TIL and RBS are appropriate

We consider the funding bases for both the broadband and telephone/payphone obligations are appropriately matched to their respective funding mechanisms. Given how little the RBS achieves in practice (see answer to **Question 21** below), there is a good argument that it should be replaced with

[9] The Commonwealth has invested an additional $480 million in NBN Co's fixed wireless network. See https://minister.infrastructure.gov.au/rowland/media-release/albanese-governments-first-nbn-fixed-wireless-upgrades-now-complete.
[10] Active Sky Muster customers have declined from 108,468 in 2022 to 92,708 in 2023. See NBN Co's RBS transparency report 2023.
[11] Division 4, Part 19 of the Telecommunications Act 1997.
[12] Telecommunications (Customer Service Guarantee) Record-Keeping Rules 2023.
[13] https://www.telstra.com.au/consumer-advice/customer-service/regional-service-performance
[14] Telecommunications (Payphones) Determination 2022.

direct Commonwealth funding, in which case the funding base question would no longer be relevant. For so long as the RBS continues, the current funding base is appropriate.

If the funding burden is not shifted to the Commonwealth, the funding base for non-commercial broadband should not be extended to third party fixed wireless or any other nascent broadband access technology at this time. If commercial fixed wireless broadband market penetration grows to the point that it materially undermines the SIP's ability to cross-subsidise loss-making services, it could be considered for inclusion in the RBS scheme. However, that point has not yet been reached and may never be reached.

As of December 2023 there were 11,289,406 premises in the NBN fixed line footprint that were ready to connect.[15] Collating publicly available information provided by Telstra, Optus and TPG, there are currently around 515,000 (non-NBN) fixed wireless broadband services in operation (in all footprints, but we assume most are offered in the NBN fixed line footprint).[16] On this basis competitive fixed wireless broadband has less than a 5 per cent share of the addressable broadband market in NBN's profitable fixed line footprint. Telstra submits that this is insufficient market share to warrant inclusion of fixed wireless broadband services in the RBS charge base at this time.

We expect that in future the currently distinct broadband and telephone obligations will be combined into a single obligation at the wholesale level (once the SIP can support telephony over satellite broadband and retail supply is evident). In that regard, consideration of the appropriateness of the funding base for universal services should focus on the RBS, which we expect to be the enduring funding mechanism for universal services unless the Government decides that subsidies should be funded out of consolidated revenue as a means of ensuring services remain affordable.

For the reasons set out in this submission, Telstra remains strongly opposed to mobile and other wireless services being included in the RBS funding base. We understand that other contributors to this consultation may be recommending to Government that it consider broadening the levy funding base to operators who provide services over the infrastructure subsidised by the TIL and RBS. Telstra is open to a discussion with Government about whether there is an appropriate means to extend the levy to other industry participants.

Telstra's universal service fixed network resilience arrangements are sufficient

The discussion paper asks whether additional or enhanced network resilience requirements are needed, and if so whether these should be funded through universal service mechanisms or imposed on all networks. We consider the question of mobile network resilience further below, but for Telstra's fixed networks used to deliver USO telephone services, we consider network resilience arrangements to be sufficient.

Telstra is required by the Network Reliability Framework (which applies only to Telstra) to report publicly and often on the performance of our fixed networks (Level 1), remediate the worst-performing parts of our fixed networks (Level 2), remediate repeat faults at an individual customer level (Level 3),

[15] NBN Co weekly progress report.
[16] See Singtel Business Update For The Third Quarter and Nine Months Ended 31 December 2023; Singtel management discussion and analysis of financial condition, results of operations and cash flows for the half year ended 30 September 2023; Telstra Half year 2024 results; TPG Telecom Limited Results for Full Year Ended 31 December 2023 – Investor Presentation.

and report to the ACMA on our performance in discharging these obligations.[17] This remains appropriate so long as Telstra bears the telephone USO and our consequent losses are funded via the USO contract.

The CSG and payphone benchmarks also drive investment in Telstra's fixed network resilience because they require faults to be fixed within specified timeframes, and for these timeframes to be met in a high proportion of cases, with performance against these requirements regularly reported to the regulator and publicly. Our ability to continue meeting these regulated requirements requires ongoing investment in our fixed networks, especially as these networks age and become increasingly difficult to maintain.

Interested observers would be aware that Telstra's CSG timeframes can be suspended when natural disasters occur. In many of these cases the main driver of network outages is not damage to network equipment but the loss of mains power. While actions can be taken to increase the capacity of back-up batteries or allow for generators to be quickly connected to a site or exchange, these alternatives have hard limitations and cannot be considered replacements for mains power.

If the Government were to impose additional fixed network resilience requirements on Telstra in the context of the telephone USO, Telstra would require additional funding to cover the cost of meeting those additional requirements. We do not believe that kind of investment would be worthwhile given that the copper network has reached end of life and there are now better, more efficient alternative technologies available for the delivery of USO telephone and emergency connectivity.[18]

Commonwealth savings from reform of the USO could be redirected to mobile resilience

We have heard the calls from some stakeholders that Australia needs a "mobile USO". We think it is widely recognised that applying a fixed-like USO to mobiles is unworkable, because a terrestrial mobile network that provides coverage anywhere anyone wants it is not commercially possible or responsible. That said, given the importance of mobile connectivity to Australians today, we understand the calls for some sort of framework to measure and assess mobile performance.

We also acknowledge that in recommending changes to the USO, and as customers transition off legacy technologies that were the subject of universal funding, there are valid concerns about the levels of customer support and network reliability of the technology alternatives. We are open to conversations on what performance measures would be appropriate to provide customers and stakeholders with confidence in mobile networks. Any performance measures should encourage efficient investment in and use of infrastructure, recognise that service levels that cannot be provided economically will need to be funded, and be both technology- and provider-agnostic.

Accepting that mobile services cannot be universal services, there is no reason to impose additional mobile network resilience requirements on a single provider (e.g. the USO provider for the remaining footprint). If Government considers that mobile network resilience requirements are needed on their own merits due to the social and economic importance of reliable mobile coverage, that should apply to all mobile networks equally, and any public funding to help pay for increased mobile network resilience should be equally available to all mobile network operators.

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[17] https://www.acma.gov.au/reliability-telstras-network. Level 1 reporting is here: https://www.telstra.com.au/consumer-advice/customer-service/network-reliability.
[18] For example, Apple now offers emergency SMS on iPhone 14 and subsequent models.

If the current USO requirements are scaled back (for example, via removal of the CCO, shrinking of the USO footprint, or removal of the USO altogether) the corresponding portion of the Commonwealth's contribution to USO funding could be redirected to operator-agnostic mobile resilience programs.[19] This could be a way for modernisation of the universal service regime to deliver additional benefits to regional and remote customers without trying to shoehorn mobile service delivery into a universal service framework in which it does not belong.

Telstra has demonstrated its capability and willingness to continue investing in mobile

Telstra is the biggest supporter of the Mobile Black Spot Program (MBSP) to increase and improve coverage, and the Regional Connectivity Program (RCP) to deliver 'place-based' infrastructure projects to improve digital connectivity across regional Australia.

Once all rounds including Round 7 of the MBSP are completed, Telstra will have invested more than $300 million and built around 1,000 new sites to improve coverage for regional areas around the country – more than two thirds of the 1,399 sites co-funded by the Government under the MBSP since 2015. As part of our contribution to the MBSP, we have also deployed more than 200 small cells for regional community connectivity at Telstra's sole expense.

Across the three announced rounds of the RCP, once completed, Telstra will have invested around $68 million and will have delivered more than 150 projects to improve regional connectivity.

[19] Examples of such programs include the STAND program and the Mobile Network Hardening Program.

Responses to questions in the discussion paper

1. **What characteristics would ensure adequate certainty to providers delivering funded services?**

Refer to **Commerciality of subsidised services may need to be assessed for a defined period** above. When a service guarantee requires network and/or product investment that would not be made commercially, the obligation holder must be entitled to subsidy payments over a defined period, which in turn defines the amount of the subsidy. It is not feasible to require non-commercial investment to be made without a clearly defined pathway for the recovery of that investment.

2. **What characteristics would provide adequate certainty to those parties from whom funds would be collected?**

As per the answer to **Question 1** above, the key to certainty of outcomes is to set a defined period over which loss-making services are to be provided, and consequently the amount of the subsidy required. That in turn should deliver reasonable certainty to entities which contribute to funding as well as to the obligation holder. The total amount collected by the TIL does vary somewhat from year to year, but is reasonably stable because the dominant components (Standard Telephone Service (STS) and payphone funding) are unindexed fixed annual payments for the contract period of 20 years.

3. **How can the funding arrangements best support provision of non-commercial services but also support flexibility in adapting to market changes and the types of services supported?**

A distinction can be made between service guarantees that require non-commercial network investment, and service guarantees that require only non-commercial service levels or product pricing. The former is inherently less flexible than the latter because network investment must be made for a defined period to ensure the investment can be recouped. The advent of LEO satellite connectivity at commercial prices suggests the latter may be more available to policymakers in the future than it has been in the past.

4. **How should arrangements ensure affordable services will be available across Australia but not crowd out investment by commercial operations?**

For locations where services are already offered but are priced substantially above the price for equivalent services in competitive areas, the best way to avoid crowding out commercial investment is to provide a subsidy direct to the consumer and let the consumer choose which service best meets their needs (i.e. a voucher scheme). That type of subsidy should not dampen the incentives of commercial providers to compete on price and service quality and continue to invest in their networks and services.

For locations where services are not already offered, the more practical option is to enter an arrangement with a network provider to invest in network coverage of that area under a fixed term contract, where the duration of the contract is as short as possible while allowing the network operator to make and then recoup their investment. That would allow more efficient technologies to replace the subsidised network sooner, and therefore do less to discourage alternative providers from investing in new technology and coverage.

Given that Starlink and other LEO satellite services offer latency that is consistent with the requirements of a universal service, the latter approach should no longer be necessary given that LEOs can cover almost all coverage gaps beyond existing networks.

5. **What are the characteristics of services that should be receiving subsidies? How should these be determined on an ongoing basis?**

Services should only be subsidised in areas where they would otherwise not be provided at all or would only be provided at prices that are substantially above the price for the corresponding service in competitive areas. Only baseline services should be subsidised, to allow for commercially driven competition to operate at the premium service level. Ideally subsidies would be provider-agnostic to encourage competition and price reductions over time, which in turn should eventually render subsidies unnecessary. However, in areas where there are only one or two providers, subsidies may need to be provider-specific until more providers enter the market. See also answer to **Question 4**.

6. **Is it appropriate to still consider entire networks when determining funding support or should the evaluation of commerciality occur at a more granular level?**

See answers to **Questions 4** and **5** above.

7. **There is ongoing interest in network resilience particularly in relation to service availability after natural disasters. Is this something that should be supported through funding for non-commercial services or should all network providers be equally required to provide a specified level of resilience in their own networks?**

See **Telstra's universal service fixed network resilience arrangements are sufficient** and **Commonwealth savings from reform of the USO could be redirected to mobile resilience** above.

Our common goal should always be to encourage competition in the market for subsidised connectivity services because that is the only way services can be improved over time without increasing subsidies. We want as many operators as possible competing to provide services at any given location. Imposing enhanced network resilience requirements on only one network, and then subsidising the cost of those enhancements, will make it difficult for other network providers to compete, and should be avoided whenever possible.

Moreover, network resilience is not the same thing as service resilience, and it is service resilience that matters for customers. Today there are many mitigants of network failure including failover modems (within mobile coverage), mobile services, and Direct To Handset (DTH) LEO satellite connectivity which is currently focussed on emergency communications but we expect will expand to more general communications over the next few years. Any policy looking at service uptime for customers in natural disasters should focus on services, not networks.

It should also be recognised that, in the context of natural disasters, what may be seen as a telecommunications network failure is often, at root, a power network failure. Telecommunications network providers, with support of Government, already invest considerably in power backup facilities to mitigate the effects of power network failures, but there is a limit to how much telecommunications

network providers can efficiently do on their own to maintain power supply especially for longer-term power network outages.[20]

8. **Which elements of the telecommunications industry should be contributing to non-commercial services? This can include commentary on those entities that should be considered part of the telecommunications industry.**

For the reasons set out in this submission, Telstra remains strongly opposed to mobile and other wireless services being included in the RBS funding base. We understand that other contributors to this consultation may be recommending to Government that it consider broadening the levy funding base to operators who provide services over the infrastructure subsidised by the TIL and RBS. Telstra is open to a discussion with Government about whether there is an appropriate means to extend the levy to other industry participants.

9. **Should funding for non-commercial services provided to individuals be collected from different contributors than should provide funding for other types of public interest services such as Emergency Calls?**

There is no reason to fund telecommunications universal service delivery differently from other public interest telecommunications services such as Emergency Calls. Both are considered to be critical telecommunications services that must be available to all Australian residents.

10. **Are there any particular competition issues that need to be considered? How can the design of funding arrangements promote competition and contestability?**

Where funding of non-commercial services is necessary, competition is best preserved by a funding mechanism that allows the consumer to make a choice about which provider they acquire their service from (i.e. a voucher scheme). That funding model is only viable where there is competing supply (albeit at prices that require a subsidy to be affordable), but the good news is that LEO satellite networks promise competing supply across all of Australia for the first time.

In areas without competing supply, the most viable option is to fund a single provider over a defined period to enable that provider to make and recoup the investment necessary to provide the service, even though this funding model does less to promote competition and new market entry. In theory competition can still be harnessed by inviting tenders for the funded obligation. When the USO was put out to tender in 2001 there were no applicants, but a similar tender run now perhaps has a higher likelihood of success because there are now competing LEO satellite providers in market.[21]

See also answers to **Questions 2–5**.

11. **Should there be any threshold on the requirement to make contributions and if so what kind of methodology would be suitable for determining the threshold?**

[20] See Communications Day, *Telstra InfraCo CEO urges collaboration on 'energy resilience'*, 1 May 2024.
[21] See for example ACCC, Submission in response to the DBCDE Discussion Paper: Implementation of Universal Service Policy for transition to the National Broadband Network environment, November 2010, p. 6.

It seems reasonable that a threshold should apply to the requirement to contribute to universal service funding for the reasons set out in the discussion paper. If changes are made to the current funding arrangements following this review, the quantum of each threshold should be reconsidered in that context, and in the context of any efficiencies driven into the arrangements for the collection of funds that mean it is less administratively burdensome for the ACMA and smaller providers. For so long as industry provides some or all of the funding, ideally all providers within the relevant market should make a proportionate contribution.

12. Are there any characteristics that would provide additional efficiency or ease of administration for the contributors and the administrators of universal service funding?

Liability reporting required by the RBS is complex and subject to a range of interpretations and uncertainties.[22] In contrast, the TIL liability is relatively easy to calculate. However, the relevant parties (liable carriers/nominated carrier declaration (NCD) holders, NBN Co, and the ACMA) have by now ironed out the uncertainties inherent in the RBS model and set up their systems and processes to calculate and report their liability accordingly. Telstra argued for a less complex arrangement as it was being developed, but the cost of setting up the administrative arrangements to comply with the current form of the RBS is now sunk. There is little to be gained from tweaking the current arrangements.

See also **Distinct funding arrangements are appropriate for distinct obligations** above, and our answer to **Question 18**.

13. Do you agree with the positions set out above with respect to key principles and characteristics of future funding arrangements?

Sustainability – Telstra agrees that the funding charge base should be designed to ensure it is sustainable over time. In practice this is likely to mean that funds continue to be collected from a combination of telecommunications customers (via industry) and taxpayers (via Government). Telstra is open to a discussion about whether there is an appropriate means to extend the levy to other industry participants.

Transparency – Telstra supports transparency of funding arrangements, recognising that fixed term contracts that require network investment must be based on net cost forecasts, albeit with mechanisms allowing for the adjustment of payments in the event that costs are substantially different from forecast, and noting that risk also requires a return.

Certainty – Telstra agrees that certainty of funding is critical for any universal service provider contracted to deliver services that require substantial investment before they can be delivered. Any contracts for funding of universal service obligations must deliver certainty of funding. See also answers to **Questions 1** and **2**.

Flexibility – Telstra agrees that flexibility is important, particularly in relation to the technologies used to deliver universal services. Telstra has argued strongly elsewhere that the USO should be technology-neutral in contract (just as it is at law) to enable the use of newer technologies and networks for the delivery of services currently required to be supplied over our aging copper network.[23]

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[22] See Part 3 of Telstra's submission on the Telecommunications Reform Package
[23] See Telstra's submission to the consultation on Better delivery of universal services

Consumers – Telstra agrees that universal service arrangements should be capable of responding to changes in consumer preferences and needs over time, ideally without requiring new or additional arrangements that increase complexity. It is also important that the market be as free as possible to deliver what consumers want. Not every aspect of service provision need necessarily be regulated.

Double recovery – Telstra agrees that there should be no 'double recovery' of losses, but only to the extent that 'double recovery' is explicitly defined in the terms of the relevant funding agreements. The principle alone should not allow a unilateral determination by Government that double recovery has occurred.

Competition – Telstra agrees that competition should be supported through the design of universal service funding arrangements wherever possible while still meeting the universal service policy objective. The advent of LEO satellite networks is likely to remove one of the key barriers to preserving competition in universal service delivery, being the requirement for existing competitive supply.

14. Are there any principles or characteristics that should be added to the above list?

A core principle not explicitly acknowledged in the discussion paper is that funding arrangements should enable the obligation owner to recover their net costs, including a return on the investment risk and the cost of capital.

15. Are there are other issues or considerations the Government should take account of in considering the effectiveness of funding arrangements for universal telecommunications services?

None that we are aware of.

16. Are there any particular funding models you think the Government should consider?

See answers to **Questions 1–5** above.

17. Based on current market conditions, which participants in the telecommunications industry should be contributing towards the net losses of NBN Co's non-commercial fixed wireless and satellite services?

The current scope of the RBS remains appropriate. The funding base for broadband (the RBS) should not be extended to third party fixed wireless or any other nascent broadband access technology at this time. If commercial fixed wireless broadband market penetration grows to the point that it materially undermines the SIP's ability to cross-subsidise loss-making services, it should be considered for inclusion in the RBS scheme. However, that point has not yet been reached and may never be reached.

As of December 2023 there were 11,289,406 premises in the NBN fixed line footprint that were ready to connect.[24] Using publicly available information provided by Telstra, Optus and TPG, there are currently around 515,000 (non-NBN) fixed wireless broadband services in operation (in all footprints, but we

[24] NBN Co weekly progress report.

assume most are offered in the NBN Fixed line footprint).[25] On this basis competitive fixed wireless broadband has less than a 5 per cent share of the addressable broadband market in NBN's profitable fixed line footprint. Telstra submits that this is insufficient market share to warrant inclusion of fixed wireless broadband services in the RBS charge base at this time.

See also **The funding bases for the TIL and RBS are appropriate**.

18. What is the most appropriate charge base unit for the RBS?

It is complicated to work out RBS liability using "chargeable premises" as the charge base. However, the relevant parties (liable carriers/NCD holders, NBN Co, and the ACMA) have by now ironed out the uncertainties resulting from the use of "chargeable premises" as the charge base and set up their systems and processes to calculate and report their liability accordingly. Telstra argued for a less complex arrangement as it was being developed, but the cost of setting up the administrative arrangements to comply with the current form of the RBS is now sunk. There is little to be gained from tweaking the current arrangements.

See also answer to **Question 12**.

19. Is the 2,000 chargeable premises per month concession appropriate for small networks? Is there a case for variation of this exemption, for example by aligning it with the current 12,000 premises exemption from the structural separation requirements in Part 8 of the Tel Act?

See answer to **Question 11**.

20. The transitional concessions were put in place to support carriers as the RBS began operation. Are there any lessons or observations related to the transitional concessions that the Government should consider?

Telstra does not have views on the detail of these concessions but supports the concept as a means of assisting smaller providers to continue operating sustainably as the scheme was introduced.

21. Are there any lessons or observations related to the transparency or administration arrangements for the RBS that the Government should consider?

The design of the RBS funding arrangements lends itself to a likelihood of direct pass-through of costs to broadband users – with carriers currently required to pay $7.97 per month (over 10% of the average monthly household payment for broadband in Australia) for each residential or business premises on their network supplied with a designated broadband service.[26]

According to figures released by the ACMA, the total RBS charge paid by carriers in FY22/23 was $25.3 million, while charge offset certificates issued to NBN Co totalled $777.6 million.[27] The latest RBS

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[25] See Singtel Business Update For The Third Quarter and Nine Months Ended 31 December 2023; Singtel management discussion and analysis of financial condition, results of operations and cash flows for the half year ended 30 September 2023; Telstra Half year 2024 results; TPG Telecom Limited Results for Full Year Ended 31 December 2023 – Investor Presentation.

[26] What Is The Average Internet Bill Per Month? | Canstar Blue

[27] Regional Broadband Scheme charge assessments | ACMA

transparency report from NBN Co, which covered FY 2023, noted that since the RBS was enacted in 2021 the telco has paid approximately 96.8% of the levy.[28]

In the NBN FY23 report, total fixed wireless gross revenue was $207 million and satellite total gross revenue was $90 million. Direct opex alone for satellite exceeded gross revenue at $97 million, with capex costs adding another $60 million. For fixed wireless opex was $129 million and capex $307 million, with some of this covered by grant funding from the federal government.

In total, in FY23, around 490,000 customers benefited from NBN Co's Nominal Funding Entitlement under the RBS of $737 million – around 397,000 fixed wireless customers and just under 93,000 satellite customers – around half the number of reported commercially funded and provided Starlink LEO satellite customers in Australia as at March 2024.[29]

See also answer to **Question 12**.

22. Stakeholders are invited to provide views on the following matters [the various legislation that gives effect to the RBS].

See answer to **Questions 12** (and **21**).

23. Are there any lessons or observations from the operation and administration of the TIL that would be useful for the Government to understand in considering long-term funding arrangements?

None that we are aware of.

[28] nbnco-rbs-transparency-report-2023.coredownload.pdf
[29] nbnco-rbs-transparency-report-2023.coredownload.pdf; Starlink reports 200k Australian users | Advanced Television (advanced-television.com)