Funding of universal telecommunications services

(incorporating public consultation for s102ZFA Review of RBS legislation)

Discussion Paper

April 2024

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April 2024 / INFRASTRUCTURE

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Director—Creative Services
Communication Branch
Department of Infrastructure, Transport, Regional Development, Communications and the Arts
GPO Box 594
Canberra ACT 2601
Australia

Email: publishing@infrastructure.gov.au
Website: www.infrastructure.gov.au

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Introduction

The Government is seeking stakeholder input on future arrangements for funding non-commercial telecommunications services.

On 27 October 2023, the Minister for Communications, the Hon Michelle Rowland MP, announced a consultation process to consider options for *Better delivery of universal services*. As part of this, the Minister also indicated that the Government would consider and seek stakeholder views on delivering sustainable long-term funding of non-commercial telecommunications services, particularly in regional and remote areas.

The existing funding mechanisms for telecommunications services are designed to ensure that non-commercial baseline telecommunications services are available to people in Australia and that public interest services that would not otherwise be provided by commercial carriers (such as the National Relay Service and emergency calls) are supported on an ongoing basis. Similar to the consideration of future universal service delivery, any future funding arrangements would be intended to ensure ongoing financial support of the required quality of service for all people in Australia that would not otherwise be provided on a commercial basis.

The starting position for consultation is the continued operation of current arrangements where the Government and the telecommunications industry provide ongoing contributions to non-commercial and public interest telecommunications services. However, given changes to technology and the telecommunications market in recent years, there may be opportunities to adjust current arrangements. This discussion paper is designed to seek views on who should be providing support, how support for non-commercial services and public interest services should best be approached, as well as testing whether key assumptions underpinning the design and operation of existing mechanisms remain appropriate.

Regional Broadband Scheme Review

The National Broadband Network (NBN) was designed to provide high speed broadband to premises across Australia. Providing affordable broadband services to all parts of Australia is expensive. NBN Co Limited (NBN Co), which is required to offer services across Australia, has to date delivered around 8 per cent of these services via fixed wireless and geostationary satellite networks that are net loss making in the long-term.

The RBS was set up by the *Telecommunications* (*Regional Broadband Scheme*) Charge Act 2020 (Charge Act). The arrangements for administration of the RBS are under Part 3 of the *Telecommunications* (*Consumer Protection and Service Standards*) Act 1999 (TCPSS Act). The RBS supports the anticipated long-term net losses of NBN Co's non-commercial fixed wireless and satellite networks. These net losses were initially to be funded through an internal cross subsidy from profitable fixed-line NBN services to the loss-making fixed wireless and satellite networks. The RBS was designed to make this subsidy transparent and spread it across all NBN-comparable fixed-line networks.

Under section 102ZFA of Part 3 of the TCPSS Act, the Minister must cause to be conducted a review of the operation of the RBS legislation (and related matters) in the first four years of operation (i.e. by 26 May 2024) or as soon as practicable thereafter. The review will be conducted by the Department, which will prepare a draft report for consideration by the Minister for Communications. The final report will be tabled in Parliament.

This discussion paper addresses the requirement for public consultation as part of the policy review of the operation of the RBS legislation (as required by section 102ZFA (2) of the TCPSS Act), whilst also canvassing the effectiveness of funding arrangements more broadly. The complete requirements for the policy review are set out in **Appendix A**.

A future approach to funding non-commercial universal telecommunications services

The Government is currently considering options to modernise delivery of universal telecommunications services. A range of funding mechanisms currently contribute to the funding of these services, including an \$100 million annual contribution from Government, the RBS (broadband) and the Telecommunications Industry Levy (TIL), which supports voice service provision and other public interest telecommunications services such as payphones, 000 and the National Relay Service.

A number of issues have been raised by stakeholders regarding the operation of the RBS and the TIL, including the operation of two, different but related industry-based telecommunications funding mechanisms. The current review therefore provides an opportunity to consider the effectiveness of funding arrangements more broadly, including the merits of maintaining two different funding mechanisms.

Historically, certain telecommunications services have received support based on the expectation that they would not be commercial. In the case of the NBN for example, the NBN fixed wireless and geostationary satellite networks were anticipated to be net loss making as a whole over the long- term. With current and potential future changes to the technologies being used to deliver services outside the NBN fixed-line footprint, all or parts of the networks offering services in these locations may now be or become commercial. This discussion paper provides an opportunity for stakeholders to provide views on how commerciality can best be assessed.

Consultation process

Similar to the consultation paper on *Better delivery of universal services*, Table 1 sets out the key steps in the process of considering a modern universal service framework with expected timeframes. The current discussion paper is highlighted in red.

Table 1: Key steps in considering a modern universal service framework

Key step	Timeframe	Lead/responsibility
Initial consultation on key elements of a modern universal service framework	October 2023 - March 2024	Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA)
Regional Telecommunications Review (RTR) – provide advice and input to support Government consideration of universal services	Throughout 2024	Independent Committee established by the Government
Consultation on funding arrangements that underpin delivery of universal services, incorporating the statutory review of the Regional Broadband Scheme	April-May 2024	DITRDCA
Technical trials of alternative technologies	During 2024	DITRDCA
Summary report on stakeholder feedback from two consultations	July 2024	DITRDCA

Specific input on the issues raised in this paper is sought by 5pm, **Tuesday 14 May 2024**. The Department is also interested in meeting stakeholders throughout the process to better understand their views. Please reach out if you would like to arrange a time to talk to the Department about the process, or provide your views. Submissions or requests to meet with the department can be emailed to usb@infrastructure.gov.au.

Background

Current telecommunications levies

Telecommunications Industry Levy (TIL)

Australia has had arrangements in place to fund universal telecommunications services for a number of decades. The Universal Service Obligation (USO) levy, introduced in 1991 was part of these arrangements but was then combined with the National Relay Service levy in 2012 to create the <u>Telecommunications Industry Levy</u>. The TIL supports public interest telecommunications services and currently funds USO payments (alongside some direct Budget funding from Government), the National Relay Service and the Emergency Call Service. This funding mechanism also has the ability to support other public policy telecommunications outcomes.

The USO ensures that fixed standard telephone services (STS) and payphones are accessible to all people in Australia regardless of where they reside or carry on business. The fundamental USO requirement is set out in the TCPSS Act. Telstra is the designated universal service provider and has a statutory obligation to provide access to STS and payphones on reasonable request nationally on an equitable basis. These regulated retail obligations are supported by a contract between Telstra and the Commonwealth, the Telstra Universal Service Obligation Performance Agreement (TUSOPA), that commenced on 1 July 2012¹ and expires on 30 June 2032. Under the TUSOPA, Telstra is paid \$230 million per annum for the supply of STS, \$40 million per annum for the supply of payphone services and \$20 million per annum for the delivery of the Emergency Call Service. The contract also contains the copper continuity obligation, which requires Telstra to maintain copper services to supply voice services outside the fixed-line footprint of the NBN that were in operation on 1 July 2012.

The TIL arrangements require carriers with annual eligible revenue of at least \$25 million to contribute towards the cost of the USO and other contracts and grants² entered into under the TCPSS Act. Each year, the Department determines the Overall Levy Target Amount (OLTA) that needs to be collected from such carriers. This is based on the actual expenditure on public interest telecommunications services delivered by contracts and grants in the previous financial year, plus associated administrative costs, less an annual Government appropriation of \$100 million. Contributions of individual carriers with eligible revenue of at least \$25 million is then determined by the Australian Communications and Media Authority (ACMA), based on an assessment of their relative share of overall industry eligible revenue for the previous financial year. For example, this means Telstra currently contributes around 50 per cent of TIL funds.

Issues raised regarding the operation of the TIL include concerns from stakeholders that there is inadequate transparency and accountability in expenditure of funding received by contract and grant recipients. Specific issues have also been raised about who should and should not be required to contribute (i.e. which entities meet the definition of a carrier with eligible revenue) and what revenue streams should be included in eligible revenue.

The Government would like to leverage feedback and learnings from the operation of the TIL in considering the effectiveness of funding arrangements for regional telecommunications services.

¹ The agreement was originally called the Telecommunications Universal Service Management Agency (TUSMA) Agreement. The TUSMA was a separate agency that was established from 1 July 2012, but ceased operations from 1 July 2015 as its functions and staff transferred to what is now the Department of Infrastructure, Transport, Regional Development, Communications and the Arts.

² More detail on relevant contracts and grants funded under TIL arrangements is available on the <u>Department's website</u>.

Regional Broadband Scheme (RBS)

The National Broadband Network rollout was initially designed to fund construction of the non-commercial fixed wireless and geostationary satellite network through an internal cross-subsidy. The Bureau of Communications, Arts and Regional Research (BCARR) undertook a study to consider options for funding of NBN Co's non-commercial services.³ The RBS was developed based on BCARR's report with the aim of making funding for these non-commercial services transparent and sustainable.

The legislation establishing the RBS was passed by Parliament in May 2020 and the scheme commenced on 1 January 2021. Under the RBS, carriers (including NBN Co) that have active local access lines that provide a high-speed superfast broadband service (of at least 25/5 megabit per second (Mbps)) are required to pay a monthly charge for each premises connected to their telecommunications network. There are some transitional concessions under the scheme during the first five years of the scheme, as well as exemptions for small networks. There is also an offset arrangement for NBN Co's charge liability. In effect, this means NBN Co's fixed-line network and other relevant high-speed fixed-line broadband services provided by other carriers, contribute financially towards meeting the costs of providing NBN Co's fixed wireless and satellite services, with NBN Co contributing around 95 per cent of RBS funds. The ACCC has an ongoing role in assessing the amount of charge required to cover NBN Co's net losses.

The RBS supports NBN Co's role as the default Statutory Infrastructure Provider (SIP) as part of the <u>SIP regime</u>, set out in the *Telecommunications Act 1997* (Tel Act). NBN Co is the default SIP nationally and provides broadband infrastructure to premises across Australia using a combination of fixed-line, fixed wireless and satellite technology. Other carriers can become SIPs in specific areas, generally either through contracting to service an area such as a new development or an area being redeveloped, or through Ministerial designation.

All SIPs have obligations to connect premises to their networks and supply wholesale services that allow retail providers to provide broadband services with peak download and upload speeds of at least 25/5 Mbps.

On fixed-line and fixed wireless networks, wholesale services supplied by SIPs must be able to support retail voice services. This reflects that these technologies are able to support baseline voice services such as those delivered under the USO, although USO voice services are not currently offered over NBN fixed wireless. USO voice services are not currently available over NBN fixed wireless technology due to the service standards offered via NBN Co's contractual arrangements with retailers not meeting USO requirements. NBN Co is currently delivering voice services over its fixed wireless service and these services perform well.

The requirement to provide USO services does not apply to satellite broadband services supplied by SIPs. While it is the case that NBN Co's Sky Muster satellites, and other geostationary satellites available in Australia, can support voice calling, and may be used for this purpose by some customers, they have broadly not been seen as a suitable primary platform for USO voice services. This has reflected that there are inherent technical limitations, such as higher latency (delay), for services supported over geostationary satellites, which can impact the quality and customer experience of voice calls. Future delivery of voice services and the requirements of a modern universal services framework are being considered through the consultation on Better delivery of universal services.

The RBS charge amounts for the first eligible financial year were set out in the legislation at \$7.09 for the base component (an amount designed to cover NBN Co's long-term net losses) with variable amounts of \$0.01 or less set for the administrative cost component during the first five years of the scheme. The administrative cost component is designed to cover the cost incurred in administering the scheme. The charge is CPI indexed with the 2022-23 base component determined at \$7.97320 per premises with an active superfast fixed-line service each month. Carriers are required to report the number of chargeable premises for the previous

³ NBN non-commercial services funding options—final report (March 2016) | Department of Infrastructure, Transport, Regional Development, Communications and the Arts

financial year to the ACMA by 31 October of each year, with the ACMA then providing assessments to carriers by 31 December and funds are due to the ACMA by 28 February the following year. Funds paid by carriers are then transferred to the RBS Special Account administered by the Department.

Under section 80 of the TCPSS Act, the Secretary of the Department is able to disburse base component funds from the RBS Special Account to eligible funding recipients through a contract or grant. The Department currently pays funds to NBN Co as the only eligible funding recipient through a contract. Eligible funding recipients are able to offset their RBS contributions against RBS funding entitlement for the year. The Minister for Communications is able, via legislative instrument, to determine one or more other (non NBN Co) carriers as eligible funding recipients. The Secretary of the Department also has certain powers and functions in relation to contracts or grants to RBS eligible funding recipients in relation to fixed wireless broadband and satellite broadband.

The ACCC is responsible for providing advice to the Minister at least once every five years on the base component of the RBS. This includes advice on the monthly per line charge for active services such that the amounts collected by the Commonwealth can cover the net losses of NBN Co's fixed wireless and satellite broadband services. The ACCC is required to also provide advice on the appropriate administrative cost component at the same time. Within the legislation creating the RBS, the ACCC was required to provide a one-off report to update costings in relation to the amount required to cover NBN Co's net losses in operating its fixed wireless and satellite networks. For this costing, the ACCC was required to use the same model and methodology used by BCARR in its 2016 report. The ACCC's report was published in October 2020.⁴

Issues raised regarding the operation of the RBS include whether the charge based needs to be broadened from its current focus on charging fixed-line services given changes in the telecommunications market in recent years.

The Government would like to leverage feedback and learnings from the operation of the RBS both as part of the RBS review but also in considering the effectiveness of long-term funding mechanisms for regional telecommunications services more broadly.

Other telecommunications funding

Besides the two telecommunications levies, there are other significant investments and other funding flows in the telecommunications space.

The Government has invested over \$30 billion in NBN Co to fund the initial rollout and some upgrades. And the Government also loaned the company \$19.5 billion to complete the initial rollout with the current loan value sitting at \$5.5 billion.

Budget funding is also provided to support and improve telecommunications services. This includes a \$100 million annual contribution towards USO/public interest services and programs currently underway such as the Better Connectivity Plan for Regional and Rural Australia (Better Connectivity Plan) providing \$656 million aimed at improving mobile and broadband connectivity and resilience in rural and regional Australia and \$480 million to improve NBN fixed wireless and satellite services. Two rounds of grants for the Mobile Black Spot Program and Round 3 of the Regional Connectivity Program have very recently been completed, with the On Farm Connectivity Program currently underway. Other current programs include funding aimed at improving telecommunications resilience and direct funding of telecommunications service provision in remote First Nations communities by the National Indigenous Australian Agency, the Department of Social Services and the Department of Infrastructure, Transport, Regional Development, Communications and the Arts. Government budget funded programs in the recent past have provided over \$600 million to

⁴ Regional Broadband Scheme Levy report | ACCC

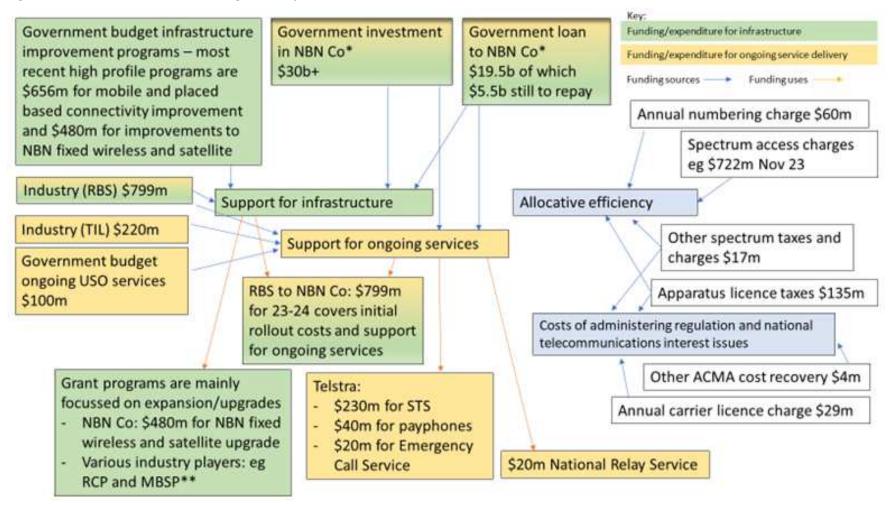
⁵ First Nations Digital Inclusion Plan (2023-26) | National Indigenous Australians Agency (niaa.gov.au)

programs such as rounds 1-5 of the Mobile Black Spot Program, rounds 1 and 2 of the Regional Connectivity Program and the Peri-urban Mobile Program among others.

Industry also contributes to telecommunications delivery through payments that support efficient use of public resources such as spectrum access charges and Australian phone numbers (Annual Numbering Charge) and charges related to cost recovery for administration of telecommunications regulation including the annual carrier licence charge (ACLC) on each carrier licence and fees for specific services charged by the ACMA.

The diagram on the next page demonstrates the extensive funding supporting delivery of telecommunications services on a universal basis, and the complexity of current funding flows from and to industry to ensure delivery of non-commercial services. While the RBS and TIL collectively collected around \$957.1 million from industry in 2021-22, the majority of these funds are contributed by NBN Co and Telstra who in turn receive funding to support their delivery of baseline broadband and voice/public interest telecommunications services respectively. While figures relating to levies, charges and cost recovery arrangements may vary from year to year, net contributions provided by carriers not otherwise receiving funding under the RBS and TIL for 2021-22 was \$133 million (\$23 million for the RBS and \$110 million for the TIL).

Figure 1: Telecommunications Funding Landscape



^{*}The Government's equity investment and loan were not provided for ongoing service delivery but were required to cover build costs and support for service delivery (operational costs) ahead of NBN Co becoming cash flow positive and so were needed to support provision of services for a period.

Source: ACMA Annual Report 2022-2023 and DITRDCA PBS 2023-2024.

^{**}Later rounds of MBSP have allowed applicants to seek operational costs related to delivering ongoing services.

Telecommunications levies and universal services funding across the world

Over 100 countries have had telecommunications levies in place that are designed to support the universal provision of particular telecommunications services within that country. They are often referred to as a Universal Service Fund (USF) or Universal Access and Service Fund (USAF). While most of these funds are aimed at providing services in all locations, particularly ensuring coverage in rural and regional areas, some also focus on inclusion including for low-income individuals, those with a disability etc. Features of a selection of Universal Services Funds from around the world are set out in **Appendix B**.

Other approaches to funding universal services including charging an overall regulatory fee, contributions from international financial mechanisms such as the World Bank and licensing fees. In some cases, contributions are made directly from the government budget. There can also be a mix of funding approaches used such as both a levy and direct government budget funding.⁸⁹

Where levies are used the most commonly used contribution mechanisms involve either a percentage of the telecom operators' gross or net annual revenue, gross profits or taxable income. The telecom operators required to contribute may include only certain types of operators (such as fixed-line) or all operators and occasionally other elements of the telecommunications industry. Other mechanisms for collecting levy contributions have included payments based on the level of telecommunications activity such as traffic volume or call minutes (that is, a transaction-based levy) and 'pay or play' mechanisms where operators either respond to tenders to provide specified universal services or pay a percentage contribution instead. A direct consumer charge to support the rollout of broadband was proposed in the UK but never implemented.

Past studies have found that the operation of these levies has not always been effective in improving the reach of telecommunications services. ¹³¹⁴¹⁵ Design issues with some USFs include slow disbursement of funds and misalignment between funds objectives and implementation. ¹⁶¹⁷¹⁸¹⁹ India and Brazil are notable examples where government has been unable to facilitate use of a substantial proportion of funds raised, with Indian telecommunications operators repeatedly requesting a reduction in the levy due to poor utilisation of funds. ²⁰²¹²² Other issues have included affordability of services to local populations once infrastructure has been rolled out and whether the funding mechanism dictates the type of technology to be used or whether providers are given flexibility to use the most appropriate technology available. ²³

Funds that have been highlighted as successful in achieving universal services goals (in particular expanding the reach of broadband) are those that are most transparent and efficient and that link specific deliverables to

⁶ Financing universal access to digital technologies and services - ITU Hub

⁷ Universal Access and Service Funds.pdf (unescap.org)

⁸ Universal Access and Service Funds.pdf (unescap.org)

⁹ Universal service funds and digital inclusion for all (itu.int)

¹⁰ Universal Access and Service Funds.pdf (unescap.org)

¹¹ Universal service funds and digital inclusion for all (itu.int)

¹² Universal service funds in Africa (gsma.com)

¹³ <u>USAF-Report-English.pdf</u> (a4ai.org)

¹⁴ Universal Access and Service Funds.pdf (unescap.org)

¹⁵ USF Report v2 (gsma.com)

¹⁶ Financing universal access to digital technologies and services - ITU Hub

¹⁷ Universal Access and Service Funds.pdf (unescap.org)

¹⁸ USAF-Report-English.pdf (a4ai.org)

¹⁹ Universal service funds in Africa (gsma.com)

²⁰ After 20 years,50% of Universal Service Obligation Fund remains unutilized (factly.in)

²¹ Telcos seek reduction in USOF contribution, license fee – Business Today

²² Budget 2023: Telcos want licence fee cut, input-tax credit refund - The Economic Times (indiatimes.com)

²³ Universal Access and Service Funds.pdf (unescap.org)

the amount of funds raised through USF levies, with the United States, Canada and Pakistan highlighted as success stories.²⁴²⁵²⁶ Legal and regulatory frameworks also need to be clear and flexible to enable adjustments to rapidly changing technology.²⁷

Australia's practice of using levies to support provision of services in regional and remote areas is therefore broadly consistent with approaches taken elsewhere although there are lessons from the implementation of levies across the world that are useful for consideration of funding arrangements here.

Regional Broadband Scheme review background

Policy context

The Charge Act imposes a charge on active superfast broadband services provided over a local access line. Work by the Bureau of Communication Research (now Bureau of Communication, Arts and Regional Research) in 2015-16 argued that NBN-equivalent services at that time were fixed-line superfast broadband services and that the RBS charges should be levied on NBN-equivalent services. However, BCARR's report noted that over time market trends related to the introduction of 4G and 5G fixed wireless services could change substitutability of services and that this should be reviewed and reassessed. Stakeholders also argued for regular review of the policy basis for the charge base during consultation on the legislation. A policy review of the RBS was accordingly included in the legislation.

The Charge Act also provides for the ACCC to have a regular review responsibility associated with the amounts charged under the RBS, by requiring the ACCC to provide advice to the Minister on the RBS base and administrative cost components at least every 5 years.

The Charge Act operates in tandem with Part 3 of the TCPSS Act. Part 3 of the TCPSS Act outlines the operational aspects of the RBS, and covers, among other things:

- the types of premises caught by the RBS charge
- the types of premises exempt from the RBS charge
- the administrative arrangements for assessing and paying the charge, including yearly reporting requirements for carriers
- penalties for avoiding the RBS charge (and anti-avoidance measures)
- the Special Account into which funds from the RBS charge are credited and debited
- the arrangements for paying NBN Co (and other eligible funding recipients) for its fixed wireless and satellite networks through contract or grant
- an offset mechanism to allow eligible funding recipients to offset their charge liability against money owed to them under the Scheme
- information gathering and disclosure powers for the ACCC and the ACMA
- information reporting obligations for carriers, the ACMA and the Secretary

Part 3 of the TCPSS Act also contains the requirement for a policy review of the RBS legislation.

The requirements of the review are set out in section 102ZFA in Part 3 of the TCPSS Act which is reproduced in **Appendix A**. In summary the review must consider the operation of the RBS legislation and whether the RBS legislation should be amended. The review must include public consultation and the Minister is able to seek

²⁴ Financing universal access to digital technologies and services - ITU Hub

²⁵ 2017, Universal Access and Service Funds.pdf (unescap.org)

²⁶ 2021, <u>USAF-Report-English.pdf</u> (a4ai.org)

²⁷ 2013, <u>Universal service funds and digital inclusion for all (itu.int)</u>

specific information from the ACMA and ACCC to facilitate the review. A review report must be prepared and the completed report must be tabled in Parliament.

The Explanatory Memorandum to the Bills establishing the RBS²⁸ noted that one of the objectives of the policy review would be to consider if the charge base of the Scheme is still applicable in the telecommunications market in Australia at the time the review occurs.

Opportunity to consider long-term funding arrangements more broadly

With technology changing service delivery, should overall funding arrangements change too?

The consultation on *Better delivery of universal services* sought stakeholder views on characteristics for a modern universal service framework, noting that consumer preferences are changing and new technologies could be used to support delivery of services. The ongoing rapid development of technologies provides the opportunity to consider alternative delivery systems for providing universal services both now and in the future.

In parallel, the Government is seeking input from stakeholders on the effectiveness of current funding arrangements that support delivery of these non-commercial universal telecommunications services and other public interest telecommunications services.

Key principles and characteristics of a sustainable long-term funding model

As a starting point for considering the suitability of any revised funding arrangements, it is important to be clear about the principles that should guide the design of those arrangements.

Potential key principles and characteristics critical to underpinning future arrangements are set out below with specific questions on particular issues within some sections and a set of overall questions at the end.

Sustainability

Telecommunications services have been recognised as a key enabling technology for Australia's economy, to support business activities, as well as facilitating social connectivity and entertainment. Australia's significant landmass, with its concentrated populations in cities and bigger towns but also large areas of low population density, mean that the delivery of services has been profitable in more built up areas, but not profitable in other locations. The high per capita cost of telecommunications deployment outside large urban areas has required financial support to ensure that Telstra and NBN Co can provide voice and broadband services on an ongoing basis to areas where this would otherwise not have been commercially viable. Any funding arrangement will need to be tied to a charge base that is able to provide the necessary funding over time and will not be rapidly eroded by changing consumer preferences and the emergence of new technologies. A sustainable funding model would also ensure ongoing value for money for the contributions being made.

²⁸ <u>Telecommunications Legislation Amendment (Competition and Consumer) Bill 2019 – Parliament of Australia (aph.gov.au) Telecommunications (Regional Broadband Scheme) Charge Bill 2019 – Parliament of Australia (aph.gov.au) </u>

Transparency

Any funding arrangements should provide an appropriate level of transparency with respect to what net losses or costs are being funded, with clarity around both the type of services that will receive support and verification of actual net losses/costs. With respect to actual net losses/costs, these would preferably be independently verified, including that the methodology used to calculate net losses is accurate and can be relied on. The processes around provision of funding and the use of that funding should include appropriate mechanisms for verification that funds have been used for the intended purpose. Similarly, there should ideally be a high degree of transparency of how the overall net losses/costs are distributed between individual contributors.

Certainty

Even with improved efficiencies in deployment of infrastructure, there are likely to be relatively high costs of providing equipment to remote or otherwise difficult to access premises over the long-term, and similarly, potentially higher costs of attending premises to undertake any necessary repairs or troubleshooting. Carriers providing services in these locations must have adequate certainty about funding in order to invest in and maintain baseline services with the required characteristics and quality.

Questions:

- 1. What characteristics would ensure adequate certainty to providers delivering funded services?
- 2. What characteristics would provide adequate certainty to those parties from whom funds would be collected?

Flexibility

Given the advent of new technologies, any funding arrangements should be able to adapt to changes in both the location and type of services requiring support. There is no set border for where commerciality begins or ends. At present for example, on an urban fringe where a city is expanding and services have previously been provided by NBN fixed wireless or satellite services, the creation of a broadscale new suburban development is expected to enable premises in the area to then access fixed-line services. Under the current RBS arrangements, such a development would change the area from one receiving funding support for services (via the RBS) to one contributing towards non-commercial services.

With the technology in telecommunications continuing to develop, flexibility in a funding model would also need to encompass technology neutrality with respect to collection of funds but also the types of technology that can be subsidised in order to meet service quality requirements. It is recognised that there is a potential tension between the objective of enabling flexibility to reflect the availability of more efficient technologies and the certainty required for providers to commit to investing in the infrastructure required to deliver services in otherwise non-commercial areas.

In addition, the need to closely tie funding to be collected ahead of knowing what costs will be can make collection mechanisms and administration of funds unwieldy.

Question:

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?

Services that should be subsidised

At present RBS funding is directed towards supporting NBN Co's fixed wireless and satellite networks that were anticipated to be net loss making overall. The decision to roll out fixed wireless or satellite technology for the NBN was dependent on decision making by NBN Co for the technology suitable for each location in Australia at the time the rollout occurred. Due to changes in technology over the past decade, a rollout that commenced now would likely have a different fixed wireless and satellite footprint than the one initially rolled out by NBN Co. Therefore, the 'boundary' between commercial and non-commercial broadband services will continue to change over time.

This is most clearly illustrated by the take-up of Low Earth Orbit satellite (LEOSat) services by consumers and businesses. Starlink, a LEOSat network currently available in Australia, is provided commercially, and while its service characteristics and the support provided are different from the NBN satellite service, many consumers and businesses have shown themselves willing to pay the higher monthly cost of services currently available because it serves their needs. Many of the premises that have taken up unsubsidised Starlink services will be in areas served by NBN Co's non-commercial fixed wireless and satellite service where the networks are funded by the RBS in order to offer affordable services and coverage all over Australia. However, Starlink services currently offered in Australia are not subject to the same wholesale or retail service standards NBN Co and Telstra are required to provide when providing universal voice or broadband services.

Further to this, Commonwealth, state, territory and local government funding programs and co-investment are moving some premises that were initially in the NBN fixed wireless or satellite footprint into fixed-line areas that then become part of the chargeable premises funding base for the RBS (for premises with active services). Investments have also been made in remote First Nations communities providing, in some cases, bespoke solutions including free or subsidised wi-fi hot spots or community-wide wi-fi with satellite backhaul, representing a different and potentially more appropriate delivery model for these communities.

At present Commonwealth, state and territory programs tend to focus on providing funding for upgrading services. The RBS is designed to cover the net losses from the costs associated with NBN Co rolling out its fixed wireless and satellite networks as well as ongoing costs and the TIL supports ongoing costs. It may be worth considering the balance of support across funding mechanisms between funding designed to improve service quality (i.e. funding of infrastructure) and funding designed to support the ongoing costs of service delivery.

Questions:

- 4. How should arrangements ensure affordable services will be available across Australia but not crowd out investment by commercial operations?
- 5. What are the characteristics of services that should be receiving subsidies? How should these be determined on an ongoing basis?
- 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?
- 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?

Consumers

The current telecommunications funding mechanisms not only provide support for access to baseline services, the aim of support is to also ensure these services are both generally affordable and appropriately supported with respect to connection and fault repair. While a key principle of any future funding model will be flexibility, a long-term funding model would need to be able to adequately adapt to changing consumer needs and preferences over time.

Contributors to funding

There are various options for the source of funding for non-commercial telecommunications services in regional areas. At present broadband services provided by NBN Co (which can also be used to support voice in fixed-line and fixed wireless areas) have been supported by Government investment in NBN Co, a Government loan to NBN Co (currently being paid back), Government guarantees, and the RBS. Upgrades to these broadband services have been supported by Budget funding (the NBN Fixed Wireless and Satellite Upgrade and funding through the Regional Connectivity Program) as well as co-investment funding with states, territories and local government. Funding for the USO is supported by ongoing Budget funding of \$100 million annually and the TIL. Upgrades to voice and mobile services in regional areas have also been supported by Budget funding.

Given the existing support includes industry contributions via the TIL and RBS funding mechanisms, industry levy contributions are expected to be a feature of future arrangements.

Regional stakeholders and their representatives have argued for a dedicated pool of funding to ensure that non-commercial telecommunications services can continue to be funded over time and that they are maintained and fit for purpose. The First Nations Digital Inclusion Advisory Group recommended in its initial report that the Government earmark funding in existing programs for First Nations connectivity, as well as consider a specific allocation to address connectivity needs in the 670 remote First Nations homelands currently without any kind of mobile coverage.

Questions:

- 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.
- 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?

Defining the charge base

The charge base defines the units against which a levy is charged. In the case of the TIL, the charge is levied on eligible revenue (so carriers pay in proportion to total eligible revenue, subject to the individual carrier exceeding the threshold of at least \$25 million in eligible revenue). In the case of the RBS, the charge is levied on a premises basis where a premises has an active superfast broadband service provided over a local access line.

Ideally any charge base should be relatively easy to determine and verify, and straightforward for industry and administrators to use in implementing the levy or charge.

No double recovery

The Government as well as states, territories and local government and other organisations are co-investing in improvements to telecommunications across Australia. Any carriers receiving funding for the provision of non-commercial services should not also be receiving funds to cover the same costs from another source. For example, a government grant to improve services should not be paid for by both a grant and any levy funding for voice and/or broadband services. Any separate funding received by a provider outside of long-term funding for universal services would need to be netted out of the assessment of net losses/costs to be covered by universal services funding arrangements.

Competition issues

Depending on the funding arrangements chosen, it will be important to understand the impacts on competition and consider the risks of distortionary impacts on the market.

Question:

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

Thresholds

The RBS and the TIL both include thresholds for contributions. For example, the current RBS exempts small networks with less than 2,000 chargeable premises and there is a threshold of \$25 million in eligible revenue before carriers are required to contribute to the TIL. These thresholds are designed to remove the administrative and cost burden of industry levies on small players and new industry entrants, as well as reducing the administrative costs for the ACMA in terms of support required for these parties to understand and comply with the two funding mechanisms where monies collected would be relatively small. Such thresholds would ideally minimise costs on smaller players and reduce collection costs for the party administering the arrangements, while not significantly reducing funds collected.

Question:

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?

Administrative characteristics of funding arrangements

Funding arrangements can have varying administrative characteristics. The design of these characteristics can either support or constrain key principles of funding arrangements and ease of administration. Consideration must be given to whether contributions are based on forecast or actual costs or another mechanism, how any necessary adjustments are made, how often contributions are collected, how often subsidies are provided to funding recipients, whether funding recipients are allowed to offset any contributions they are required to make, how to make subsidy arrangements efficient to administer while ensuring that funding contributors cannot unduly avoid or minimise contributions, review mechanisms for the funding arrangements (frequency and type of review) and any other matters, such as processes to deal with adjustments and refunds.

Question:

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

General questions on key principles and characteristics

The above key principles and characteristics would be used in considering the effectiveness of currently funding arrangements and consideration of any changes to current arrangements. The Productivity Commission's recent work on levies is also worth considering with respect to design of future funding arrangements.²⁹

- 13. Do you agree with the positions set out above with respect to key principles and characteristics of future funding arrangements?
- 14. Are there any principles or characteristics that should be added to the above list?
- 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?
- 16. Are there any particular funding models you think the Government should consider?

Regional Broadband Scheme review questions

While this consultation is considering the effectiveness of long-term funding arrangements more broadly, it is also designed to meet the specific public consultation requirement of the RBS review, as set out in the RBS Review background on pages 8-9. The issues highlighted below are those that have been flagged for consideration in the review, issues that have been raised by stakeholders during operation of the scheme and provision for general input. Any input provided here will be considered within the context of long-term funding arrangements but also in relation to opportunities to enhance the delivery of the RBS in its current form.

Substitutability (charge base)

In the 2016 paper on NBN Non-commercial services funding options (Final report)³⁰, BCARR considered services that were 'NBN equivalent' to be the most appropriate charge base for the levy. BCARR proposed at that time that the levy be imposed on 'operators of high-speed fixed-line broadband access networks capable of delivering download speeds of at least 25 megabits per second (Mbps)'. The RBS operates on this basis.

BCARR noted in its paper that an NBN equivalent funding approach raises a number of issues relating to the substitutability of mobile to fixed-line services, particularly into the future. BCARR noted that changes to the telecommunications market over time may increase the substitutability of mobile services (including the use of 4G and 5G services for home broadband).

Question:

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?

Charge base unit

'Chargeable premises' is the basis for assessing liability under the RBS. This is defined through reference to a carriage service provider supplying a broadband service over a local access line (either as owner or where a nominated carrier declaration is in place).

²⁹ Towards Levyathan? Industry levies in Australia - Productivity Commission (pc.gov.au)

³⁰ bcr nbn non-commercial services final report v2.pdf (infrastructure.gov.au), page

Some carriers have raised concerns about the use of chargeable premises as the basis for the charge, arguing that it is too complicated and not a term used otherwise in the industry.

Questions:

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

Exemptions

The RBS has two types of exemptions. The first is a general exemption for smaller carriers (or an associated group) with less than 2,000 active local access lines providing a high-speed superfast broadband service in a month (section 95, Part 3, TCPSS Act). Such carriers are not required to pay the charge for such premises in that month.

In addition to the exemption for small networks, there are transitional concessions applying for the first five eligible financial years of the RBS (section 20, *Telecommunications (Regional Broadband Scheme) Charge Act 2020*). There is a general concession of 25,000 premises per month for all carriers and a concession for 55,000 'recently connected greenfield premises' where a carrier has premises that fall within that definition. The definition of a 'recently connected greenfield premises' is quite specific and is set out in section 96B of Part 3 of the TCPSS Act.

Questions:

- 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?
- 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?

Transparency and administration

One of the goals of the RBS was to increase transparency with respect to the support being provided for non-commercial fixed wireless and satellite services. Now that the RBS has been operational for a couple of years, stakeholders have experience with the transparency and administrative arrangements for the RBS.

Questions:

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

General request for input

Section 102ZFA of Part 3 of the TCPSS Act is designed to review all of the enabling legislation related to the RBS. That is, it is designed to review Part 3 of the TCPSS Act, those elements of the TCPSS Act outside Part 3 related to the RBS, elements of the *Telecommunications Act 1997* related to the RBS and the *Telecommunications (Regional Broadband Scheme) Charge Act 2020*. The review requirements include consideration of whether any of this enabling legislation should be amended.

Questions:

- 22. Stakeholders are invited to provide views on the following matters:
- a) The operation of Part 3 of the TCPSS Act
- b) The operation of the remaining provisions of the TCPSS Act to the extent to which they relate to Part 3 of the TCPSS Act
- c) The operation of the Tel Act to the extent to which that Act relates to Part 3 of the TCPSS Act

- d) The operation of the Charge Act
- e) Whether Part 3 of the TCPSS Act should be amended
- f) Whether the remaining provisions of the TCPSS Act, to the extent to which they relate to Part 3 of the TCPSS Act, should be amended
- g) Whether the Tel Act, to the extent to which that Act relates to Part 3 of the TCPSS Act, should be amended
- h) Whether the Charge Act should be amended.

Insights from the Telecommunications Infrastructure Levy

Operation and administration of the TIL

While this consultation process does not constitute a formal review of the TIL, there may be insights from the operation of the TIL that could inform consideration of the effectiveness of long-term funding arrangements for telecommunications services.

Question:

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?

Role of this consultation in relation to delivery of baseline universal telecommunications services

Next steps

The purpose of this paper is to gather stakeholder view on how current telecommunications funding arrangements are operating and opportunities for improvement. This includes seeking stakeholder views on effective arrangements for delivering sustainable, long-term funding of services in rural and remote areas and the delivery of public interest telecommunications services, as well as specific consideration of changes to the RBS

While consideration of funding arrangements is complementary to consideration of baseline universal telecommunications services, the Government will make decisions on long-term funding arrangements at the appropriate time. This could mean that decisions made in the near term could either involve no change, adaptation of existing funding arrangements and/or potentially set out a pathway for a transition to new arrangements.

Appendix A: Section 102ZFA, Part 3 of the TCPSS Act: Review of this Part

102ZFA Review of this Part etc.

- (1) The Minister must cause to be conducted a review of the following matters:
 - (a) the operation of this Part;
 - (b) the operation of the remaining provisions of this Act to the extent to which they relate to this Part;
 - (c) the operation of the *Telecommunications Act 1997* to the extent to which that Act relates to this Part:
 - (d) the operation of the Telecommunications (Regional Broadband Scheme) Charge Act 2020;
 - (e) whether this Part should be amended;
 - (f) whether the remaining provisions of this Act, to the extent to which they relate to this Part, should be amended;
 - (g) whether the *Telecommunications Act 1997*, to the extent to which that Act relates to this Part, should be amended;
 - (h) whether the *Telecommunications* (*Regional Broadband Scheme*) Charge Act 2020 should be amended.
- (2) A review under subsection (1) must make provision for public consultation.
- (3) A review under subsection (1) must be conducted:
 - (a) before the end of the period of 4 years after the commencement of this section; or
 - (b) as soon as practicable after the end of that 4-year period.

Direction to the ACMA

- (4) The Minister may give the ACMA a written direction requiring the ACMA to make available specified information for the purposes of facilitating the conduct of a review under subsection (1).
- (5) The ACMA must comply with a direction under subsection (4).

Direction to the ACCC

- (6) The Minister may give the ACCC a written direction requiring the ACCC to make available specified information for the purposes of facilitating the conduct of a review under subsection (1).
- (7) The ACCC must comply with a direction under subsection (6).

Report

- (8) The Minister must cause to be prepared a report of a review under subsection (1).
- (9) The Minister must cause copies of the report to be tabled in each House of the Parliament within 25 sittings days of that House after the completion of the preparation of the report.

Appendix B: International broadband subsidies and levies

Country – name of subsidy/levy	Charge base	Who contributes	Current contribution rate	What the funding is used for	Issues
USA – Universal Services Fund	Revenues (interstate and international end-user revenues)	Telecommunications carriers including wired and wireless companies, VoIP providers and cable companies that provide voice services.	34.6%	Four Universal Service programs providing support to connect high cost services in rural areas, low income consumers (including those on Tribal lands), schools and libraries and rural health care facilities.	Funding mechanism linked to dwindling landline revenues, hence large contribution rate required.
Canada – contribution collection mechanism	Revenues (Canadian telecommunications services revenue less specified deductions)	Telecommunications services providers (with eligible revenue above \$CAD 10 million)	0.46% (2023)	Subsidises residential telecommunications services in rural and remote parts of Canada. Currently supporting the Broadband Fund aimed at improving internet and mobile services, particularly in rural and remote areas.	Bell Canada asked for refund \$CAD148m collected by the end of 2022 that would not be able to be disbursed during 2023.
New Zealand – Telecommunications Development Levy	Revenue (from telecommunications services provided on their own or another providers network)	Qualifying telecommunications providers (with earnings above \$NZ 10 million)	Proportion of a CPI indexed fixed amount (\$NZ11.25 million in 2022-23)	Subsidises telecommunications infrastructure including the relay service for the deaf and hearing- impaired, broadband for rural areas, and	Changes to legislation in 2018 required the court to clarify those entities required to contribute (which now includes local broadcasters).

				improvements to the emergency services calls.	
India – Universal Services Obligation Fund	Adjusted Gross Revenue	Telecommunications operators (except pure valued added providers such as internet service providers, email providers etc)	5% of Adjusted Gross Revenue	Provide access to telecom services in a non-discriminatory manner to people in rural and remote areas at affordable and reasonable prices, thereby bridging the rural-urban digital divide.	Low utilisation of funds
United Kingdom – Universal Services fund not yet established	Not established	At present carriers required to cover cost where cost of connection is below the reasonable cost threshold (RCT) of £3,400, consumers pay costs above this level		Designed to ensure all consumers can access high quality telecommunications services including in regional and remote locations. Levy funding would be used to cover 'unfair burden' where this is demonstrated by provider – no claims yet raised so fund not yet established. USO arrangements including funding under review in late 2023.	Consumers required to pay cost of high-cost connections up-front, which may be unaffordable given likely four figure cost.
Pakistan – Universal Service Fund	Revenue (adjusted)	Telecommunications operators	Maximum 1.5% of gross revenue	Subsidising provision of telecommunications	While many projects have been initiated and

				services to unserved and under-served areas with a focus on education, health and other community institutions	completed, there is a build-up of unused funds.
Universalização dos Serviços de Telecomunicaçõ es	Various including Revenue (from provision of telecommunications services in the public and private regimes)	Telecommunications operators	For Revenue contribution – 1% of gross operating revenue	Initially for fixed telephone, amended in 2020 to allow support for connectivity projects more generally	Very little funding used in the 20 years from the time the fund was established in 2001, with large unused amounts accumulating over that period.