19th July 2024

Digital Inclusion Section

Communications Infrastructure Division

Department of Infrastructure, Transport, Regional Development, Communications and the Arts

GPO Box 594

Canberra ACT 2601

Dear First Nations Digital Inclusion Advisory Group,

First Nations Digital Inclusion Roadmap

Thank you for the opportunity for OneWiFi &Infrastructure (OneWiFi) to make this submission in relation to The First Nations Digital Inclusion Roadmap discussion paper. It is a privilege to have the opportunity to provide input into plans for closing the gap to facilitate digital inclusion, building on initiatives OneWiFi has completed in recent years.

OneWiFi is Australia's leading Mobile Active Neutral Host solutions provider and a licensed telecommunications carrier. We are an advocate of all levels of telecommunications infrastructure sharing to deliver the greatest outcome for all consumers and communities, not just for a single Mobile Network Operator's (MNO) customer base. In particular, our Mobile Active Neutral Host solution is based on full infrastructure and network sharing principles, which is capable of supporting multiple MNOs at the lowest marginal cost for all industry participants.

The current choice of none or one when it comes to mobile services in First Nations Communities is unacceptable for what should be a competitive market. Prepaid mobile service options are expensive due to lack of competition and choice in First Nation Communities.

OneWiFi notes from the Report of the First Nations Digital Inclusion Advisory Group that the Universal Service Obligation (USO) does not include mobile service and whilst First Nations people have a preference for mobile service, they are disproportionately affected by this exclusion from the USO. This situation needs to be taken into account in the current review of the USO. On page 16 of the report it is noted that the lack of competition in rural and remote areas can have an impact on the experience of First Nations consumers, in terms of service quality, reliability and affordability. This problem can optimally be addressed with active infrastructure sharing. We note, the Advisory Group is advocating for a portion of Regional Connectivity Program (RCP) and blackspot funding should be tied to benefiting First Nations communities in partnership with Telcos experienced in delivering projects in similar communities (page 20).

The Emergence of Mobile Active Neutral Host

There is an urgent need to drive multi-carrier outcomes at national level via Mobile Active Neutral Host and active infrastructure sharing to address higher cost-to-serve in these markets. Doing so, will lower barriers to entry and in turn increase competition and consumer choice, which leads to improved mobile service affordability.

For too long mobile carriers have 'cherry picked' regional, rural and remote geographical markets to their advantage. We believe Mobile Active Neutral Hosting is the solution that can prevent this from occurring. To that end, we believe Mobile Active Neutral Hosting should be a national level initiative that can offer targeted localised connectivity on an equitable basis for all, and at a fraction of the

cost vs. individual mobile carrier solutions.

OneWiFi is delivering Mobile Active Neutral Host solutions for First Nation Communities via RCP3 / MBSP R7 (Mobile Black Spot Program Round 7) – the first of its kind in Australia. 5 of the 25 Mobile Active Neutral Host sites are funded jointly by the Commonwealth and the States under the program will be specifically for First Nation Communities.

Commonwealth and States need to continue to provide targeted programs and funding at both levels to drive national and placed-based connectivity outcomes, especially using Mobile Active Neutral Host model, which drives multi-carrier outcomes from inception, thereby facilitating achieving greater service coverage for the pool of money.

From an affordability perspective, LEOSat does not represent an equivalent service to fixed broadband, fixed wireless services or mobile, as a retail internet service, but can be leveraged as a cost effective backhaul on an aggregated basis. Until such time that LEOSat services can match the retail price of NBN and other fixed broadband services, it cannot be considered for the Universal Services regime. In late 2023, the FCC (US) did not award Starlink $886m in subsidy as Starlink could not “demonstrate that it could deliver the promised service” and that giving the subsidy to it wouldn’t be “the best use of limited Universal Service Fund dollars.”It should also be noted that LEOSat direct to mobile handset is not an equivalent service in terms of service quality and does not cater for all uses cases.

The most prominent issue impacting telecommunications users in regional Australia is the lack of access to satisfactory telecommunication services, especially adequate mobile coverage. It is typically not commercially viable for MNOs to deploy and operate mobile infrastructure in regional areas, with low population density, without sizable Government support. This is also true along transport corridors, where there is no fixed population to service.

Past black spot and regional connectivity programs have traditionally focused on delivering basic mobile coverage only, and unintentionally funding single carrier networks. To date, these programs have attempted to facilitate passive co-location, with limited success (less than 10% of funded towers are actually shared), due to misalignment incentive and outcomes, and cost to build for the subsequent participants. The consequence of this is fuelling further disparity in regional market shares, creating economic inefficiencies and inturn dead-weight losses, by duplicating unnecessary and underutilised telecommunication infrastructure, and creating higher barrier to entry for other MNOs to offer expanded services to regional areas.

Hence, for regional Australian consumers and communities, it is a dire situation of either a ‘choice of none’ or a ‘choice of one’ in terms of mobile services at price premium, that some of these communities are unable to afford. The higher cost to serve due to inefficiencies of legacy telecommunication infrastructure network models and associated economics impacting consumer affordability (e.g. recent increase in mobile pricing across all 3 MNOs), contributing to inflation and rise in living cost. First Nations Australians face significant limitations in accessing reliable, robust and resilience telecommunications services. This is due to the limited market-based efficiencies associated with extending high-cost telecommunications infrastructure into remote, sparsely populated areas that offer low revenue opportunities to commercial operators.

The inefficiencies of traditional regional telecommunication models also run counter to the current sustainability drivers, lack of consideration for visual aesthetics and environmental impact.

OneWiFi has been pioneering a Mobile Active Neutral Host model in regional Australia, where a fully shared and integrated infrastructure asset enables multi-carrier outcomes from inception. Under this model, multiple MNOs can provide mobile service from the same network and infrastructure with

minimal duplication (i.e. inefficiencies) to substantially improve the economics for each MNO and significantly reduce the cost of providing the service. Essentially, mobile services from multiple MNOs are delivered by the same mobile base station, using one transmission link, powered by one electricity supply circuit, and located on a single telecommunication tower and associated shelters, all the costs of which are shared by all participants and accordingly reducing the cost to serve. In a similar way any investment in power system resilience can be shared by all participants, under the Active Sharing model the power drawn by the equipment is as though there is only one participant.

Under a Mobile Active Neutral Host model, any Government funding contribution is efficiently utilised to deliver adequate mobile coverage, multi-carrier and competitive outcomes for regional communities. The same quantum of taxpayer's funding can be used for achieving wider coverage and/or greater network resilience to more sites. For consumers, it is the true enablement of 'choice' via the opportunity to access affordable mobile services from a selection of service providers. Based on the stated benefits, we believe Governments and regional communities should no longer accept an inferior outcome from inefficient legacy industry models.

Mobile Active Neutral Host is not merely a concept but is now an affordable reality for regional Australia. The model was initiated through the NSW Government's Mobile Active Sharing Program in 2022, with two multi-carrier Mobile Active Neutral Host pilot sites being ready-for-service in Wilcannia and Brewarrina in regional NSW. In addition, under the recently concluded Mobile Black Spot Program Round 7 (MBSP R7) administered by the Commonwealth, OneWiFi will further build out 25 Mobile Active Neutral Host sites across regional NSW and Queensland to deliver multi-carrier mobile coverage to regional and remote communities. The model has been welcomed by other states and will lead to wider adoption across Australia in the near term.

Therefore, while recognising that expanding geographical coverage for mobile carriers is a commercial decision, where Governments are asked to fund such expansions, Governments should only fund expansions that are based on active sharing multi-carrier outcomes (i.e. solutions hosted by neutral parties that service all carriers) that benefit all industry participants on an equitable basis.

Cost Effective Place-Based Community Wi-Fi

Community Wi-Fi is well positioned as a place-based solution in conjunction with Mobile Active Neutral Host and LEOSat, especially for very remote communities:

- Lowest cost through internet backhaul aggregation vs. purchase of individual services for consumers
- Can use LEOSat as internet backhaul and to aggregate demand to share bandwidth cost
- Standard solutions which can be replicated, procured and provisioned in an affordable manner
- Community-based Wi-Fi solutions can be extended at incremental cost to provide in-building coverage and connectivity through wireless point-to-point and meshing
- Ability to control time of day access community-wide and individual access based on content type and allowance
- Free or prepaid services can be offered on Community Wi-Fi services
- Affordable placed-based solution as the cost of infrastructure is low and there are no associated spectrum costs

- Wi-Fi calling is enabled for mobile services and also other communication apps such as Whatsapp and Skype (subject to bandwidth and latency)
- Potential to store (cache) and provide access to digital literacy training content locally through walled garden to local media player without incurring internet data cost
- Network security and privacy can be managed in the local network
- Easy to maintain and support by local technicians with basic level of digital literacy
- Easy for support to be offered remotely by First Nation digital hub with escalation to relevant service providers

An important advantage of ubiquitous standard WiFi is the availability in most consumer equipment of the necessary connectivity modems. OneWiFi would strongly endorse the extensive rollout of mesh WiFi in communities as a significant enabler of digital inclusion in all communities suffering a lack of digital inclusion. Typically delivered without charge ubiquitous WiFi best addresses the affordability and accessibility challenges for digital inclusion

Complement Viewer Access Satellite Services

We understand that there are currently challenges around Viewer Access Satellite TV (VAST) services, which consequentially create a burden for telecommunications in First Nation Communities. We believe there is an opportunity for the VAST service to be simplified, by reducing the number of reception equipment and smart card devices – there are opportunities to work with the VAST service provider and ACMA to explore aggregation and localised rebroadcasting leveraging common infrastructure that can be shared with Mobile Active Neutral Host and Community Wi-Fi solutions.

Accelerate Timeline and Amplify Impact of First Nations Digital Inclusion Initiatives

OneWiFi considers that the important features of the Roadmap for Digital Inclusion should include:

- A universal service obligation which addresses the needs of first nations peoples including a mobile service in remote locations where alternative to fixed services are not available, alternatives could include affordable LEO DTD
- Affordable connectivity in all remote first nations communities without digital connectivity through managed standardised WiFi, as the Advisory Group is aware the scale of this undertaking is substantial (670 locations (including in building coverage) to address the needs of all communities which are not addressed by affordable access to mobile network coverage)
- Governments to make it clear to the mobile carriers that Governments will only fund neutrally hosted active sharing multi-carrier infrastructure
- Ensuring that access to suitable radio frequency spectrum is provided through ACMA planning in all locations to enable service by MNOs when feasible (this can only be enabled through Active Neutral Hosting technologies and models)
- Services supported in WiFi communities need to be comparable with those provided in those with mobile network coverage to avoid the impression of two classes of community
- Review of the Universal Services Framework
- Digital skills development and mentoring
- Skills support through a tech hub
- Access to affordable user equipment

OneWiFi would welcome the opportunity to provide additional information on our submission and how it can improve digital inclusion.

Yours faithfully,

Mevan Jayatilleke
Managing Director
ONEWIFI & INFRASTRUCTURE