



SUBMISSION BY IMPARJA TELEVISION

A Roadmap for First Nations Digital Inclusion

19 July, 2024

Executive Summary

- Imparja Television is a key stakeholder in both the delivery of services to remote and regional markets in Australia and is the only commercial broadcaster based and operational within remote Australia. We service some of the most remote areas in Australia and have a comprehensive understanding of the key considerations in delivering services within this region.
- The delivery of direct to home satellite TV has failed remote First Nations people and is not a viable approach for the provision of television services in First Nations communities. Consideration should be given to re-establishing low power terrestrial retransmission in larger First Nations communities. Some existing Remote Indigenous Broadcasting Services infrastructure and facilities may help make this an easier proposition.
- Remote Indigenous Broadcasting Services infrastructure in First Nations communities is continuing to fall into disrepair, with no funding source or provision for repairs and maintenance. This is leaving First Nations people with no access to these essential services.
- Congestion and latency issues affecting mobile network capacity, are being exacerbated by the failure of direct to home satellite television reception and the shortcoming in maintenance of the local radio services.
- First Nations people have become heavily reliant on mobile data to stream entertainment and access information, which leads to the inherent problem of the affordability of pre-paid mobile phone plans and the increasing demand of which they are being used.
- Concerns remain regarding reliance on the 3G network which is slated to close at the end of August.

Introduction

Imparja Television is an Aboriginal owned, independent and not for profit commercial television broadcaster. Based in Alice Springs, Imparja commenced services in 1988.

Imparja now operates 28 retransmission sites within the Remote Central and Eastern Australian (RCEA) licence area.

Our broadcast area is over 3.6 million square kilometres. Spanning six states and territories with

some 200 remote Indigenous communities and 75,000 homes within the license area.

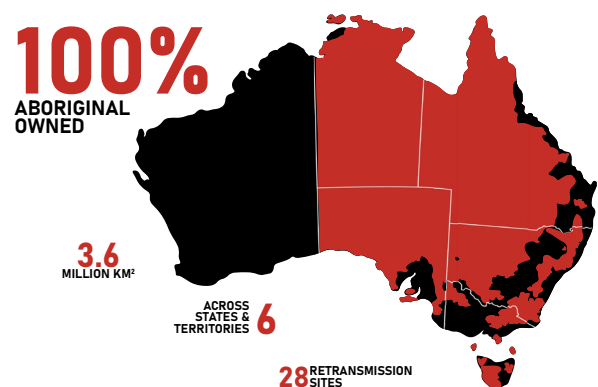
Our signal and the 14 First Nations radio services we provide capacity for are uplinked at the Optus Belrose satellite facility and are available on The Viewer Access Satellite Television service (VAST).

Discussion

Imparja Television welcomes the opportunity to contribute to the development of the First Nations Digital Inclusion Advisory Groups (FNDIAG) long-term road map.

Imparja continues to provide satellite delivery and on the ground technical support for Remote Indigenous Media Organisations (RIMO's).

We have informed and clear views on a number of issues that we believe currently affect digital inclusion for First Nations people and reaching the outcome of 'Target 17' of the **National Agreement On Closing The Gap**.



Direct To Home Satellite TV is failing First Nation Australians

As a member of the Department of Infrastructure, Transport, Regional Development, Communications and the Arts - Future of Broadcasting Working Group Imparja has led the call on the failure of the current direct to home model (DTH). We believe that DTH is not a viable approach for the provision of television services in First Nations communities.

We conservatively estimate that as few as one in five households in First Nations communities have access to free-to-air television.

Digital literacy is low and there has never been a proper educational program rolled out showing how the system works.

Community members are sometimes unaware of how to apply for VAST or reactivate their smart card or that the smart card is “married” to the set top box it comes with and cannot be used with another.

Communities and outstations that have no mobile or internet service, don't have any means of access to the re-hit process. Residents often receive power through a prepaid smart meter, which also exacerbates the problem. Once the credit runs out, they are disconnected. So, if signal is lost due to an unknown fault or because the decoder was not powered up, they go without service.

Multiple TV sets within the same household are unable to share a set top box. To watch or record more than one program simultaneously a household would have to pay for additional set top boxes and installation. Portability is restricted by the cabling of the installation, such as the connection to the satellite dish. Previously households were free to move their TV set outdoors.

Installations are often subject to vandalism and misalignment in strong winds. In most cases an 800mm or 1.2m dish has been standardised as part of the DTH installation kit. In Northern Australia during the wet season, this size is not reliable. Heavy rainfall attenuates the receive signal level, which can cause multiple or extended dropouts. VAST set top boxes are particularly vulnerable to damage in storms due to lightning and power surges. Energy supply in these communities can also be dirty and unreliable.

Access to technical support is challenging due to the remoteness of location. The availability of technicians and the travel costs involved mean that problems with the dish, LNB and other installation issues are left unresolved.

Imparja continues to argue for a reconsideration as to whether terrestrial TV re-transmission would better suited to larger First Nation population centres where only satellite DTH television is currently available.

Some existing Remote Indigenous Broadcasting Services infrastructure and facilities may help make this an easier proposition. We note that the Department is currently undertaking a project as part of the Remote and regional television transmission and reception audit to ascertain the state of broadcasting infrastructure and equipment in First Nations communities.

We are mindful of smaller communities and outstations that may still continue to rely on DTH into the future, and that this would require specific funding to ensure that the current systemic problems are addressed and a more sustainable and longer-term arrangement is made.

Restoring TV services to the large percentage of First Nations households in areas where DTH reception has failed will require government funding for both capital and on-going repair into the future.



Family viewing television in Yuendumu, 1987
© Central Australian Aboriginal Media Association

Radio Infrastructure - Provision for Repairs & Maintenance

Remote Indigenous Broadcasting Services (RIBS) infrastructure in First Nations communities has not been upgraded since the roll out of the IRRR (Indigenous Remote Radio Replacement) programme approx. 2007-2009. There has been no provision for repairs and maintenance of these services since. These facilities are continuing to fall into various states of disrepair and are considerably worse off now, then they were fifteen years ago.

This has led to a reduction in services, where once you would have found a suite of self-help ABC services in operation, sites are now solely operating the local RIMO's service.

ABC radio is recognised as the national emergency broadcaster, currently there is no access for residents of these communities to real time disaster information.

Unfortunately, similar scenarios also played out in relation to the government's public health messaging during the COVID-19 pandemic and the recent voice to parliament referendum.

The inability to access these essential services and their messaging platform raises fundamental issues for closing the gap and digital inclusion of First Nations people.

Currently there is no funding source for repairs and maintenance.

RIMO's are having to apply to the Community Broadcasting Foundation (CBF) during funding rounds in hope of being successfully awarded a one-off grant, which they can then use to fund technical site visits.

Imparja would urge the FNDIAG to call for the establishment of an on-going repairs and maintenance programme for RIBS infrastructure on First Nations communities.

Imparja has previously explored opportunities to support RIMO's in remote communities by approaching government agencies regarding such a programme without traction.

This programme could also function as an enabler for 'Targets 7 and 8' by developing a coordinated career path where youth are engaged in apprenticeships and employment. The skills learnt are in short supply and are highly transferable to other telecommunications or radio comms related field work in remote and regional Australia.



Ali Curungs RIBS room from 2009 (L) & 2021 (R)

Mobile Services - Network Congestion, Latency & Affordability

The FNDIAG's initial report has provided sound advice on what can be done to improve telecommunications infrastructure and offers alternatives for providing reliable internet and phone reception in remote communities.

Imparja is also of the opinion that congestion and latency issues affecting mobile network capacity, are being exacerbated by the failure of DTH satellite television reception and the shortcoming in maintenance of the local radio services.

First Nations people have become heavily reliant on mobile data to stream entertainment and access information.

As highlighted by the FNDIAG and ADM+S / RMIT University's Mapping the digital gap project, there is an inherent problem with the affordability of pre-paid mobile phone plans and the increasing demand of which they are being used.

In addition to this, there is virtually no effective WiFi access in most remote communities. The services that are in place have little coverage, limited bandwidth, data caps and have unrealistic restrictions on access.

While coverage does continue to improve in First Nations communities, concerns remain.

There may still be a heavy reliance on the 3G network which is slated to close at the end of August and First Nations communities may have a low awareness of its consequence.

This will affect more than just the mobile services, First Nations customers and service providers that have not upgraded EFTPOS terminals, routers, medical alarms and other monitoring devices will also lose service.

Clayton Paech

RF Manager, Imparja Television

Case Study

Introduction

Imparja Television (IMP) is an Aboriginal-owned independent Australian television station servicing over 3,600,000 km (1,400,000 sq mi), across six states and territories. It has been operating since 1988.

Outback Internet is a private company specialist in remote communications installations and maintenance, and been operating since 2010.

There are over 60 remote Remote Aboriginal Communities in the Northern Territory. None of them have a commercially installed and maintained broadcast television transmitter.

This means that the majority of people living in these communities have no access to free-to-air television broadcasting.

www.imparja.com

www.outbackinternet.com.au



Background

For the last 18 months, Imparja Television and Outback Internet, both based in Alice Springs/NT, have been researching ways to provide a low-cost digital television retransmission system for self-help installations in remote areas. The aim is to offer an affordable broadcast solution allowing residents in small remote communities to receive a full suite of digital television and radio stations.

Rather than needing an expensive and problematic VAST dish and receiver, residents will be able to simply use a standard UHF antenna connected directly to their television.

Several brands and models of broadcast equipment were purchased and tested in order to find a system that was both compliant with Australian broadcast standards as well as affordable for small communities.

Case Study - Atitjere

Atitjere (Harts Range) is a community in Akityarre Ward of the Central Desert Region in the Northern Territory of Australia, located 240km North East of Alice Springs.

The 2016 Australian census reports that Atitjere had a population of 224 of which 173 (77.9%) identified as "Aboriginal and/or Torres Strait Islander people."

Before the digital changeover of television services in Australia, Atitjere had an equipment room, and tower and transmitters installed under the BRACS programme. They were able to receive ABC and Imparja television channels as an analogue service.

When Australia changed to digital standards in 2012, the old analogue transmitters were turned off, and VAST Satellite dishes were installed. These have mostly failed, so the residents at Atitjere have not had access to broadcast television for 12 years. The township also lacks any access to affordable internet services.



Testing a New System

After discussions with senior staff at Central Desert Council, Atitjere was nominated as a good site to install a new digital television transmission system.

While in a remote location, it's close proximity to Alice Springs as well as access via sealed road has made this a relatively easy site to get to, with a travel time from Alice Springs of under three hours one-way.

Imparja Television and Outback Internet worked together to provide a test model for Central Desert Council that included the decoder, transmitter, new antenna and remedial works at the site, at a very affordable price due to new technology now being available. The quote included remote management capabilities, and an uninterruptible power supply

Also quoted was the price to supply and install a UHF television antenna for each Aboriginal resident's house including internal cabling, and to tune in any existing television sets. Many residents already owned a modern television but were only using it in conjunction with a DVD players or gaming console.

The new digital retransmission system was commissioned and has been operating since June 2024. From a community that has had absolutely no television broadcasting for 12 years - no news, no weather, no entertainment, no football - so community members needed to travel to Alice Springs to access this - Forty houses now have access to 20 Television stations including ABC, SBS, 7, 9 and 10 programming. ICTV has also been included as the 20th Television Station.

The community also has access to 20 radio stations via their television - 14 Remote Indigenous Radio Stations (RIBS), 4 ABC channels and 2 SBS channels.

While installing the UHF antennae in community housing we only found four VAST satellite receivers. Of those four, only one was operational. So now instead on one house having access to television, all houses do.

Summary

This is a huge improvement for residents of the community, bringing them up to the same level as metropolitan people.

The new installation at Atitjere (Harts Range) shows that there is an affordable solution available.

Out of sixty five remote Aboriginal communities in the NT, one now has access to free-to-air television for all residents.

Imparja and Outback Internet would wish to secure funding to assist the other communities wherever possible.

Imparja is also able to design and install Public WiFi systems to complement broadcast television. These would use Low Earth Orbit internet backhaul, to be able to provide unlimited and reliable internet to all residents.

We believe to be effective, the system has to be free to use for community members, as they cannot afford the high costs associated with mobile phone towers.

With the combination of free-to-air television, and free WiFi, people living in remote communities will not be disadvantaged compared to those living in large regional towns and cities.



Community Feedback

Maisie said she is pleased with the tv antennas because now they can watch TV clearly. It did not work before but now they can gather and watch their favourite shows.

Veronica said that other participants at aged care said that it comes through very clearly and they enjoyed it so much to watch TV.

Veronica and Maisie would highly recommend the installation services which is very professional and helpful for their community enjoyment to other communities too.



Maisie Rodgers (L) and Veronica Edwards (R)

Veronica Edwards - Atitjere Aged Care Coordinator &
Maisie Rodgers - Elder/Leader at Atitjere and client at Aged Care

"Works well, enjoy it, I would recommend it."

- Natalie Petrick (Local Community Safety Program Officer)

"Works well and has good channels to choose from."

- Peppi Drover (local community worker) -

"I am very happy with it. My family spent time together watching our TV now than before."

- Joanne Peckham (Aged Care Officer)

"As seen from the feedback from community members at Harts Range / Atitjere, they are so grateful for the installation of TV antennas by Imparja. Now they can sit together as family with their children and young people and watch programs together which they are unable to before.

Our Community Services teams from Youths Sport and Recreation, Community Safety Programs, Aged Care Services and Council Services are grateful for this community initiative as local members now feels a sense of belonging and connection to other communities in Australia and the world through their TV screens. They are happy and feel they are no longer being left out of digital and TV communication.

Our Community Services at Central Desert is happy to support more rollout of this services by Imparja to our other Central Desert Regional Council communities."

- Haloti Kailahi - Director, Community Services, Central Desert Regional Council