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## **ACTIVITY PROGRESS REPORT**

### **PYBROADBAND**

**September 2004 to March 31<sup>st</sup> 2005**

# **PY Broadband Activity Progress Report**

## **Early indications of demand**

The aggregation process is well underway. Data has been collected from the communities and regional organizations. Survey forms have been distributed to government departments and agencies. Meetings to clarify plans and actions by the various government departments to implement broadband and aggregate the demand by all potential users have been organised.

There are already indications that there is strong demand for broadband among service providers on the APY Lands given individual organisations' plans and efforts to access it. Government departments have also expressed the need for broadband services on the Lands to improve their own delivery of services and improve channels of information and communication with Anangu.

As already proven across the nation, access to Broadband has lead to greater uptake of online services and information. Further, the majority of users are researching information, exploring search engines and using it for education and career purposes. It is reasonable to assume that this will be the same for Anangu, as outlined in 'Anangu Use of Technology' and there will be a rapid take-up of broadband when it is made available, affordable and user friendly with access to local support and training strategies.

## **Ongoing Issues**

Early indications from the surveys and meetings with the various potential users show that there are several issues requiring attention through the Demand Aggregation Broker Program. Some of these are:

- Lack of communication and coordination between organisations and departments regarding internet connection, both within the same communities and between communities on the Lands.
- The necessity for all organisations and departments to liase and communicate with PY Media regarding appropriate infrastructure systems for broadband connection that are inclusive of other users and not exclusive.
- The current individual, non-coordinated and silo mentality approach to broadband connection will lead to a forest of inappropriate and limited capacity systems

established in each community instead of the rationalised and coordinated proposal of PY Media under their CCIF submission.

- The current process of broadband connection will leave Anangu residents unable to access broadband internet at an affordable cost and hence the Aboriginal residents on their own Lands will be denied access to this form of communication and all the projected benefits in the future, whereas every visiting staff member will have access to such services.

## **INTRODUCTION**

John Tregenza of Kutjara Consultants was recruited as the Broker for the program and commenced work in the first week in February 2005.

### **Anangu Environment**

The Demand Aggregation Broker Program on the Anangu Pitjantjatjara Yangkuntjatjara Lands of north-west South Australia is unique for several reasons.

- It is the only program being implemented in Aboriginal communities established on Aboriginal freehold Land.
- It is the only Program being conducted by a community controlled Aboriginal media organisation.
- It is being conducted in communities that have significant health and social problems; at the same time delivery of many essential community services is problematic.
- It is being conducted in a population generally classified as living in absolute poverty with an unemployment figure of around 85% (excluding CDEP).
- It is being conducted in one of the most remote and isolated places in the country.

There is a relatively small population of around 3000 Anangu residents living in 6 – 7 large communities of between 250 and 450 people with the balance living in about 10 – 15 homelands of various sizes. There are a total of nearly 350 Anangu residential houses spread across a land area roughly the size of Victoria and none of these Aboriginal households currently has privately funded computers and internet connection.

In addition, all the Anangu communities have resident non-Anangu members of staff and their families. These people not only work for the various local and regional Aboriginal organisations, but are also employed by government departments in such areas as education and police. There are several hundred non-Anangu members of staff on the Lands and their private and after-hours work access to and use of broadband internet services will be relevant to the Brokerage Program.

### **Anangu Use of Technology**

Thirty years ago no Anangu person living on the Lands now known as the APY Lands lived in a house, very few had a motor vehicle and no one had an electrical appliance. Now, although house-population density is still too high, all Anangu have access to, and use, western style residential housing and these houses have many electrical appliances and telecommunications systems. Items that are functional and serve a useful purpose are highly valued and well maintained.

Anangu are quick to adopt and adapt technology if it supports Anangu activities and way of life. Communication and travel are two essential Anangu activities. All developments in communications which are Anangu 'friendly' and relatively inexpensive are quickly supported. The rapid and widespread use of the UHF radio network recently established across the Lands by PY Media is evidence of this capacity to incorporate useful technology into Anangu life and activities.

Currently Anangu community members have access to computers only in public offices or as school children. Anangu use community offices to access limited internet services, mainly internet banking. Other internet access is limited to the education facilities and/or availability in the work place for those in employment and able to access the relevant computers.

However, there is great interest among Anangu regarding computers and the possibilities of internet access. When computer and communication technology develops relatively inexpensive voice-over and image-transmission systems accessible via broadband connection, the past patterns would indicate there will be a great increase in the demand by Anangu for these systems and a high demand to access an internet broadband communications networks.

It is important that appropriate infrastructure is developed on the Lands to meet this future demand. PY Media has incorporated this understanding of the situation on the Lands in its CCIF Submission before the Commonwealth Government department of DCITA.

## **REPORT AGAINST MILESTONES AND ACTIVITIES**

Comments on the activities relating to each of the Milestones from the Work-plan are discussed in detail below:

### *1 Induction and backgrounding of Demand Aggregation Broker.*

The current Demand Aggregation Broker did not commence the Program until the beginning of February 2005. There was a period of intensive briefing of the Broker by PY Media in relation to the Broadband Demand Aggregation Brokers program, the PY Media CCIF submission and general developments in the area of internet access and the roll out of broadband and other services across the region. These briefings took place in Adelaide, in the PY Media office in Alice Springs and at various locations on the Lands.

- 2. Travel to the APY Lands to educate community members and service providers and demonstrate the benefits of Broadband to mobilise enthusiasm for the technology in communities.*

A large part of the Broker's time during this stage of the Program has been spent travelling across the Lands to visit the Anangu residents and local organisations in the communities. The Broker has spent over five weeks and travelled over five thousand (5000) kilometres on four separate trips to the Pitjantjatjara/Yankuntjatjara Lands to achieve the outcomes under this heading and those under 4. below.

As a result of this travel all of the larger communities have received between two and four visits and all the smaller communities and homelands at least one visit in relation to the Broadband Aggregation Program. The larger communities visited were Iwantja (Indulkana), Mimili, Fregon, Pukatja (Ernabella), Amata, Pipalyatjara, Watarru, Kaynpi and Kalka, and the larger homelands included Nyapari, Rocket Bore, Turkey Bore, Watinuma, Yunyarinyi, Umuwa, and Mulga Bore.

All sessions in the communities involved meeting with the Council Chairperson and other Councillors, as well as discussions and information sessions with interested community members wherever appropriate. In addition the Demand Aggregation Broker held meetings in all places with community office workers including all the Municipal Services Officers (MSOs), who are the equivalent of local government CEOs in rural towns, and in many communities with other relevant staff and potential broadband users.

The level of understanding of the issues surrounding internet broadband is varied across the Lands but is generally very poor. Much of the Broker's time was spent explaining broadband and educating internet users about the potential for broadband, and on subsequent visits, giving assistance to complete the surveys sent out by the Broker.

During the first week in March the Broker organised for a visit to the region by the SA State Demand Aggregation Broker, Mr. Trevor May, and the State Communications Manager from DeFEEST, Mr. Peter Triantifalou, and accompanied them during their visit to the Lands. The aim of the trip was to orientate the SA government officers to the region and to familiarise them with some of the issues faced by PY Media in the delivery of communication services to their members in general, and in relation to broadband internet access in particular.

- 3. Develop media campaign utilising Radio 5NPY, Channel 31 and waru.org web site to educate and raise awareness of the benefits of Broadband. This will also encourage widespread participation in the demand aggregation process utilising on line surveys and media and IT community workshops.*

There is widespread Anangu participation in the demand aggregation process. The Anangu Coordinator of PY Media (AND Anangu Liaison Officer) has been actively involved in developing media messages for broadcast over both radio and community television explaining broadband and its advantages. She has produced several radio public service announcements in Pitjantjatjara language which are played regularly on the public radio network through Radio 5NPY. These productions have required extensive consultations with member communities, senior Anangu, and the Executive of PY Media including the Chairperson.

A video explaining the internet, broadband and the potential benefits of access to the world wide web has been scripted by PY Media staff in consultation with the Broker and is ready for production. The Anangu Coordinator has also been involved in scripting a preliminary video to be broadcast across the Lands on ICTV talking about the project.

In addition, during this stage of the Demand Aggregation Brokers Program the broker has used radio broadcasts over Radio 5NPY to inform the community members on the Lands about the program in general and pending meetings as well as using air-time to raise other issues relating to the internet and broadband in particular.

One of the main issues for PY Media and the Demand Aggregation Broker in this process is the balance between raising the interest in broadband connection in the community in an environment where the ability to access to such a service is limited by the technological infrastructure available and the kind of broadband options being currently offered by ISPs in the region.

4. *Conduct regional meetings and travel to communities to assess demand across the APY Lands and to determine the commitment and needs of potential buyers of Broadband connections which will include community members, organisations, government agencies and commercial enterprises.*

In addition to the activities outlined in #1 above in relation to community education and awareness raising, the Broker has had a series of meetings about broadband issues with government departments and agencies working on the Lands and with the regional Anangu organisations. These discussions have concentrated on assessing the kinds of internet services currently being used by these organisations and trying to project their future needs to assess the capacity of organisations and departments to coordinate their implementation of broadband services with the programs and proposals being developed by PY Media for all users on the Lands.

Meetings have been held with the Director, General Manager and Communications Coordinator of Nganampa Health Council; the Chairperson, Director and full Executive of the Anangu Pitjantjatjara/Yangkuntjatjara Land Council; members of staff of the NPY Women's Council; Executive Members and staff of AP Services Land Management Unit; the Coordinator and staff as well as a full meeting of the SA government's Aboriginal Lands Task Force; staff members of FaCS as members of the AP Lands COAG trial and

coordinators of the regional transaction centres now known as PYku; representatives of the SA Education Department including the Head of Aboriginal Education Services and the technical officer on the Lands; and staff from a range of departments and agencies involved in service and project delivery on the Lands. This process to assess demand and determine commitment of other agencies is ongoing and plans to continue have been made during this stage.

One of the issues in this area is that many of the government agencies are already planning and implementing some systems of broadband connection and doing so without any consultation with other users in the region. Communication between departments about these activities appears to be limited. It is important that unilaterally negotiated agreements with Internet Service Providers are coordinated at least to the extent that ensures the technological infrastructure that is developed is the most appropriate for all users of broadband on the Lands and not just what suits individual departments in the short term.

Again, the government should refer to the CCIF application from PY Media that is before DCITA.

5. *Develop a local demand aggregation strategy based on research, identification and analysis of best practice.*

One of the activities to develop a local demand aggregation strategy based on empirical data was the development of a survey questionnaire for all the communities and government departments to attempt to identify the level of current connection to the internet and the potential future needs.

Two questionnaires were developed and circulated to the appropriate respondents. The first was a Community Broadband Survey aimed at measuring the number of computer stations and internet connected services in the community administrative area as well as an assessment of projected future internet needs. The Survey was distributed to all the community Council offices in the first week in February. This survey also attempted to ascertain the level of potential Anangu demand for broadband services.

The second questionnaire was a survey form directed at government departments and agencies in an attempt to quantify the current internet status of all departments on the Lands and to get an indication of their future internet and specifically broadband internet demand.

The Community Broadband Survey forms have been completed and collected from the community offices by the Broker. The government survey forms were presented to representatives from the Departments at the Aboriginal Lands Task Force held on 19<sup>th</sup> March and are due for return by the end of April. The Broker has also arranged for future meetings with officers from some of the key users in the government sector to gain information about departmental internet and broadband infrastructure and systems plans.

The results from the Community Broadband Survey indicate a totally uncoordinated approach to broadband connection across the Lands. Currently any entity who decides they require broadband internet connection simply contact the ISP, in this case Telstra. The ISP then provides a discrete two-way satellite system and a contract package as a monthly broadband plan to each user. The most common package entered into provides broadband access at 256kbps down and 64kbps up, although very few systems when randomly checked in situ were operating at these speeds. The infrastructure costs for the dish and technical support is subsidised by the government through the HiBis Scheme and therefore is of no cost to the consumer, and the monthly basic charge for minimum usage is about \$70 per month. While this approach satisfies immediate demand for connection for the ‘anchor’ and wealthier users, the infrastructure is inappropriate for community users, does not account for expansion in demand for the current users, and will be out of the financial reach of any resident as soon as the HiBis Scheme is terminated within two years.

As a result of the lack of coordination between agencies and individuals connecting to broadband, these stand alone systems are being erected throughout each community on the roofs of every new internet user as they request connection. It should be noted that PY Media, via the CCIF application, have presented a coordinated alternative to this piecemeal approach. This proposal has advantages to all users, and in particular the PY Media proposal advocates a system of broadband internet connection that accommodates community members future demand for such services.

6. *Refine local demand aggregation business plans including financial and resource projection and ongoing submissions to government programs such as HiBIS, CCIF and SA BDF*

This activity of the Program is ongoing. As stated above PY Media has an application to the Commonwealth Government DCITA under the CCIF scheme. Further advances in this area will be shaped by the outcomes of discussions with government departments and the information provided by them as well as further aggregation of Anangu member demand and the future needs and plans of the regional Aboriginal organisations.

7. *Establish local governance arrangements such as a steering committee and project management structures to support the financial, logistical and legal development of a demand aggregation strategy.*

PY Media is governed by an Executive of Anangu elected from the member communities on both on the Anangu Pitjantjatjara Yangkuntjatjara Lands and the southern section of the NT. The Demand Aggregation Broker works under the direction of the Executive through a direct reporting process to senior staff of PY Media and via meetings with members of the Executive including the Chairperson, Director and Anangu Coordinator.

8. *Thoroughly research, identify and meet with appropriate possible Broadband Service providers across Australia, utilising aggregated demand and relevant government programs as a catalyst to attract the interest of competitive suppliers and discuss costs and possible trials on the APY Lands.*

Activities to achieve this outcome have commenced. The Demand Aggregation Broker attended the Second Demand Aggregation Brokers' Forum in Sydney on the 15<sup>th</sup> March. At the Forum the PY Media Broker made contact with other Brokers working across Australia to learn from their experience and established an ongoing relationship with other Brokers working in remote areas to address some of the unique issues created by these circumstances.

In Sydney the Broker also made contact with, and obtained details and information from, a number of Internet Service Providers who are delivering broadband internet services in remote and regional Australia. Some of the ISPs canvassed in Sydney include Esat, Bordernet, NewSat, Clear, GDI, Telstra, Ocean Broadband Limited, Wirefree, and Norlink Communications. Some of the discussions with ISPs involved investigating their intentions with regards to the proposed Broadband Infrastructure Trial at Umuwa.

PY Media has put in place the Infrastructure ready for a pilot trial at Umuwa and is in a position to conduct the trial in the near future. PY Media is continuing discussions with suitable ISPs to identify an appropriate partner in the conducting of a broadband trial at Umuwa. Some of the considerations in these discussions are that the preferred partner will:

- Provide initial technical discussion about their products.
- Participate in BBAP pilot trial to evaluate product and company performance.
- Provide modem equipment to work with the BMI in order to improve performance and lower cost of subscriber connections.
- Comply with WaruTech installation quality standards and practices.
- Provide an account manager for all CCIF connections.
- Offer opportunity to negotiate ongoing support agreement.
- Offer free installation of 2-way satellite equipment.
- In-kind contributions through flexibility for users to economise plans during periods of reduced usage.
- In-kind contributions through participation in technical discussions and pilot trial.
- In-kind assistance with information for PY Media documentation.

## **OTHER ISSUES**

### **IT Training**

One of the critical factors governing the current and future demand for broadband internet access is the level of knowledge and skills in the Anangu community about computers and their operation. Training and education in computer operation and use has been delivered by PY Media over the past two years under the PYCom Project. The PY Com training program involved two PY Media employees, one a young local Anangu graduate from high school, regularly visiting communities and conducting training sessions. These were popular and well attended, but the program was de-funded by DCITA at the end of 2004.

This Program ceased at the end of 2004 because funding for the new round of training programs from DCITA under the IT Training and Technical Support Program was awarded to Desart, an Aboriginal artists cooperative organisation based in Alice Springs and set up to represent artists in the southern Northern Territory and some parts of AP Lands.

Complaints about the lack of current computer training was an important issue raised by Anangu members and community employees during the Demand Aggregation Broker's visits. Desart has advised the Broker that Desart has the responsibility for delivering training across the Lands and will be delivering \$250,000 worth of training to the Pitjantjatjara Yangkuntjatjara residents under the new DCITA contract specifying the delivery of 10 hours of basic computer training to 1500 people over a two-year period. No details of this training program have been discussed with PY Media.

PY Media is currently negotiating with TAFE about delivering accredited IT training on the Lands and has put forward a proposal to the SA Government Aboriginal LandsTaskforce.

### **Telstra Infrastructure**

There appears to be a 'big picture' issue regarding the status and accessibility of the optic-fibre cable laid underground across the Lands from east to west by Telstra over 10 years ago when it was a wholly publicly owned utility. The Broker understands that Telstra claims that the cost of upgrading the connectors at each community the fibre-optic cable passes, in order to make the cable accessible to use for high speed communication purposes like that of broadband, is too expensive to justify. As a result all high-speed internet connection must use satellite technology, and Telstra is busy rolling out its version of this to all customers requesting broadband connection.

PY Media has attempted without success to discuss and negotiate this and other matters with Telstra, and as a result has quite rightly and responsibly developed a satellite system of its own to facilitate broadband access. This is contained in the CCIF proposal with DCITA.

Notwithstanding the decision made by PY Media to develop a satellite system for broadband communications and the position taken by Telstra with regards to access to the fibre-optic cable by other ISPs and service providers, in the case of the fibre-optic cable there appears to be a question regarding restricted access to publicly paid-for infrastructure. Telstra's claim that infrastructure costs, technical equipment and other associated expenses to make the connection to the fibre-optic cable possible effectively prevents any other ISP to use this technology and contradicts the government policy of creating a competitive market for the 'last mile' and 'last inch' in the broadband internet retail market.

Some of the questions that government departments might usefully resolve while the government still has a majority public ownership of Telstra are:

- How can a public utility justify the millions of dollars of public money spent on laying high-tech cable across the continent of Australia for the benefit of all citizens, and then later claim that the costs of making the same cable accessible to its citizens should be paid by someone else?
- How can the original cost of providing and rolling out the cable be justified if people in the remotest areas of Australia, for whom it was provided, are not able to access it?
- Is not the cost of providing suitable infrastructure at connection points to allow user access really the responsibility of the public utility that created the system?

#### **UPDATE SINCE ABOVE PROGRESS REPORT (July 2005)**

- PYMedia is advocating for Telstra to upgrade the telephone exchanges in each community to enable access to the existing fibre optic cable that runs through the APY Lands. This will enable ADSL capability within remote communities.
- Successful collaboration has occurred with Anangu organisations. Government agency collaboration is in progress
- Pilot server has been installed in Umuwa and monitoring has begun
- PYMedia is attempting to include ADSL service in trial, however Telstra has been prohibitive in progress
- PYBroadband Video is complete and currently being broadcast on ICTV
- Information gathering is still under way
- Business case is being developed.