

DCITA Discussion paper:

Digital conversion of self-help television re-transmission sites.

A submission by Michael Read, Technical Representative:

Buxton Progress Association - Self-Help Television Service Sub-committee.

(1) Background to the Buxton Self Help Service:

The Buxton self-help transmitter service was established under the Television Blackspots Program in 2002.

It is understood to be the first regional service to be deployed in Victoria.

Buxton is located between Marysville and Alexandra. It is only 100km from Melbourne, but separated from it by the Great Dividing Range. Prior to the Blackspots program, most Buxton residents were unable to receive acceptable free-to air television from any source, including VHF from Melbourne and UHF from Alexandra or Marysville.

The self-help service is administered by the Buxton Progress Association Inc (BPA), an (incorporated) voluntary local association, formed to promote local community development generally, and currently managing a number of local facilities and services, including several recreational amenities, and the restoration of the community hall. It is funded entirely from the local community, and has traditionally operated on a very small budget.

(2) History and issues surrounding the operation of the self-help service since 2002.

The service was provided as a turnkey package under the black-spot grants program, and installed by a regional television and antenna installer in 2002. My understanding is that equipment was specified and packaged up by a transmitter equipment vendor, ready to install. Some of the history and background has now been obscured by time.

The equipment operated with minimal service for approx 5 years from installation. Some level of maintenance was packaged into the project (and considerably more provided by installer goodwill), and initial ACMA licensing was paid for a 5 year term.

This had an unfortunate NEGATIVE impact, in that ongoing management requirements and operating costs were not clearly visible to the BPA (and locals generally) during that 5 year period. As a result, there was minimal attention given to the need for budgeting or regular fundraising, both to support the service, and to allow for future maintenance and upgrade planning.

Over time, the fact became lost to the local community that the television they received was anything other than the "free to air" services - as enjoyed by "everyone else".

In 2006, a major storm hit the area, which badly damaged the transmitter antenna, resulting in total broadcast failure. The local BPA volunteers had very little idea of what to do to effect repair, had no technical resources to call on at the time, and were even unsure if they could pay for the required repairs.

Other locals were outraged that such an "inconvenience" could occur, and the issue made headline stories in Melbourne newspapers - and at least one current affairs program reported: "Town's TV cold turkey".

It took some days to get the service back on the air, and it subsequently became necessary to make an emergency call for donations to pay the costs involved. Once again, a significant amount of the real cost of the repair was absorbed by goodwill from equipment vendors, volunteers, and the support of local businesses and tradesmen.

One POSITIVE from all this, was that it started to become obvious to the local community that the service required responsible management, technical supervision, and secure funding. As a result of the situation, a number of concerned locals became involved, (including myself - as a weekend local with a communications engineering background). A new sub-committee was formed within the BPA, in March of this year, with the intended purpose of developing a management plan for the service, and investigating options for secure ongoing funding.

(3) Moving forward:

The sub-committee has faced a number of challenges, the most concerning of which is a reluctance from some of the local community to fund the service, as many locals believe they have a "right to free to air television", and have steadfastly refused to offer donations, or support, on that basis.

The sub-committee has raised the profile of the situation by a community information/awareness campaign, including meetings, fundraising activities, and articles in local newspapers.

We are currently developing a detailed questionnaire to be circulated to all residents, in an effort to establish clearly what audience base we actually have, and their willingness to support us. This we feel, will give us the justification we need to canvass various fundraising options, including volunteer subscriptions, or a council-rates based levy.

The shire council has also been "reserved" in its support, whilst it HAS assisted us with ratepayer mail-outs (to address Privacy issues), it is also clearly being careful to ensure

that it does not have to contribute to the funding in any way, despite the high tourism profile of the area.

So, for the purposes of the submission, I would certainly like to highlight the fact that in our case at least, we have (to date) struggled to raise sufficient funds just to cover the minimal operating requirements of the service, and (currently) have no contingency for faults or failures, and any enforced move to digital technology.

(4) Digital Upgrades:

The subcommittee has recently been investigating digital upgrade requirements as part of the development of an appropriate budget and operational plan for the service, but at this time has yet to secure detailed costs for a full digital upgrade, thought to be in excess of \$50,000. It is foreseeable that without a well supported and secure local funding model being achieved shortly, there is simply no way the Buxton Service can be upgraded to digital in the next 3-5 years without Federal Grant assistance.

*** COMMENT: the comparative benefits of multiplexed or multiple transmitters:**

We are not currently in a position to compare the cost of such alternatives at this time. One issue of concern to the BPA, is the reluctance of locals to financially support the services offered, even though they clearly use it. Whilst this is a personal view, it seems to me that the ability to control access to the service via some coded access scheme offers a clear advantage to funding alternatives, where voluntary financial support is reluctant or limited.

*** COMMENT: Direct to Home (DTH) receivers, vs local regional transmitter:**

The key issue here is content.

Rural communities rely on local news and weather content, particularly farmers. It is imperative that any proposed use of DTH as a distribution medium includes local network content - remote area programming content is simply unacceptable.

For smaller communities, the DTH option may provide a valid alternative, but only where DTH decoders are funded or subsidized against the cost saving of running an area repeater, and the content is locally derived.

Buxton's retransmission services are fed from free to air services at Yarck, from a site known as the "Alexandra Area" repeater. Even from the elevated position of our self-help repeater, the received feed quality is poor, and signals vary with weather. In analog terms, this means that we sometimes re-transmit a marginally noisy signal.

The Yarck repeater has not yet commenced digital broadcasting (from either national or commercial services), and we are thus unable to determine whether the commencement of those services (said to be this year) are going to benefit us in terms of potential improved signal quality - assuming digital receiving equipment can be purchased and integrated with the analog transmitters. There is also some risk that the off-air digital transmissions may appear below the signal threshold, and are totally unusable to us. Therefore alternative (satellite) feed sources may be required, when analog transmission ceases.

Buxton is significantly disadvantaged by being just outside the Melbourne aggregation area, and thus forced to broadcast Shepparton area services, whilst nearby Marysville (only 14km away) is INSIDE the Melbourne aggregation area, despite being on "our side" of the ranges, and only a stone's throw away. It is ALREADY enjoying digital transmissions with Melbourne content. Buxton could GREATLY benefit from retransmitting the stronger Marysville Services (digital OR analog) if aggregation rules allowed it.

*** COMMENT: Timing of Digital Conversion:**

Unless digital upgrade funding paths and technical solutions are clear and funded, it is imperative that analog services remain operative, both in terms of local black-spot transmissions themselves, and the terrestrial feed paths from existing free to air services that support them.

(5) Summary:

The BPA welcomes plans to facilitate the upgrade to digital transmissions via federal funding to self-help services. There is simply no way that local regional communities will raise sufficient funds by donation to support these upgrades by any other means.

Of greater threat to terrestrial self-help re-transmission services, is the mandated "switch-off" of analog broadcasts from adjacent free to air services, where they are used to provide feed-sources for many of these self-help re-transmission sites, including ours. Digital transmission appears to provide additional benefits in terms of increased spectrum and power efficiencies, potential viewer access control, and greatly improved picture quality, particularly noticeable in heavily wooded and mountainous areas, such as ours.

Significant time must be allowed, between the commencement of free to air digital broadcasting, and the mandated conversion of self-help sites and their analog feed sources, in order to allow a detailed understanding of the coverage and signal quality changes affecting both the existing free to air coverage areas, and the black-spots themselves.

Local content is the key in regional areas, where farmers rely heavily on local news and weather. The current DTH services fail miserably in that regard, due to national programming, and limited network sources.

Of concern to many black-spot services is the lack of technical support available to guide planning. Even with my industry background, I have had a difficult time establishing knowledgeable vendor contacts, and identifying industry and technology directions. This is one area where DCITA or ACMA may be able to further assist in the future. The BPA Television Sub-Committee welcomes the initiatives of DCITA, and would be happy to further discuss the issues raised at any time.

Sincerely,



Michael G Read.

Technical Representative.

Buxton Progress Association - Self-Help Television Service Sub-committee.

PO BOX 13
Buxton VIC 3711

Direct Contact:
0448 971984

e-mail michael_read@bigpond.com