EASTERN AUSTRALIA SATELLITE BROADCASTERS PTY LTD
ACN 68 142 743 557
Level 2, 257 Clarendon Street, South Melbourne VIC 3205

SUBMISSION TO THE REVIEW OF THE VIEWER ACCESS SATELLITE TELEVISION SERVICE

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By email: VASTreview@communications.gov.au

1. BACKGROUND

1.1 EASB

Eastern Australia Satellite Broadcasters Pty Ltd (**EASB**) welcomes the opportunity to comment on the Department's Consultation Paper, *Review of the Viewer Access Satellite Television (VAST) service*.

EASB is a joint venture company, in which each of Imparja Television Pty Ltd (**Imparja**) and Regional Television Pty Ltd (**RTV**) owns 50%. RTV is a wholly owned subsidiary of Southern Cross Media Group Limited, which is listed on ASX and is commonly known as Southern Cross Austereo (**SCA**).

EASB holds the Eastern VAST licence issued in May 2010 under section 40 of the *Broadcasting Services Act 1992* (Cth) (**BSA**). The licence permits satellite delivery of commercial television services in Tasmania and all Australian mainland states and territories except Western Australia.

EASB has entered into a contract with Optus under which Optus provides satellite services to enable delivery by EASB of commercial television services in the Eastern VAST licence area.

1.2 Eastern VAST licence area

The Eastern VAST licence area overlaps all terrestrial commercial television licence areas (excluding Western Australia) including the Remote Central & Eastern (**RCE**) licence area. The Eastern VAST service fulfils two purposes:

- primary delivery of commercial and national television services to residents or travellers in the RCE licence area
- provision of a "safety net" service to non-RCE viewers who reside in "black spot" areas and cannot receive their local terrestrial television services.

The current numbers of households receiving the VAST service are summarised in the table below.

	Households	Set top boxes
RCE licence area	99,935	122,276
Remote WA licence area	38,793	54,657
Terrestrial black spots (safety net)	71,145	89,801

Viewers resident in the RCE licence area have automatic access to VAST while travellers and viewers in other "safety net" areas have a conditional right of access dependent on their inability to receive local terrestrial television. This "Conditional Access Scheme" (**CAS**) is

administered and funded by the commercial television industry through a free-to air television industry joint venture known as RBA Holdings Pty Ltd (**RBAH**).

This submission relates principally to operation of the Eastern VAST service.

1.3 VAST programming in the Eastern VAST area

FTA commercial television channels

Each of the EASB joint venture partners (Imparja and RTV) holds a commercial television service licence issued under section 38C of the BSA for the RCE licence area for satellite and terrestrial services. Coinciding with the commencement of VAST, a third licence was issued in 2010 under section 38B for satellite and terrestrial services in the RCE licence area to Central Digital Television Pty Ltd (**CDT**). CDT is also a joint venture in which each of Imparja and RTV owns 50%.

When VAST commenced in 2010, Imparja (Nine Network) and RTV (Seven Network) and CDT (Ten Network) had program supply agreements with metropolitan television networks. Those affiliations remain in place today.

Before the commencement of VAST in 2010, Imparja and RTV delivered only the primary channel of their metropolitan network partner into the RCE licence area. (CDT commenced broadcasting at the same time as VAST commenced.) It was not commercially viable for those commercial broadcasters to deliver the multichannels available in metropolitan and regional areas because of high costs of satellite delivery and a relatively small and geographically dispersed population.

Under the VAST scheme, the Commonwealth has provided funding to enable delivery of the full suite of commercial programming (as at 2010) to VAST viewers. Each of Imparja, RTV and CDT entered into a program supply agreement with EASB to enable EASB to deliver the following programs by satellite through VAST.

RCE licence holder	Metro network affiliation	Programs delivered by EASB
Imparja	Nine	9, Go, Gem (HD)
RTV	Seven	7, 7Two, 7mate (HD)
CDT	Ten	10, Eleven, One (HD)

This ensured that remote viewers had equal access to commercial television services as well as ensuring comparable services were available to “safety net” viewers in black spot areas.

Since 2010, the metropolitan networks have created additional channels. Without additional funding, it remains uneconomic for Imparja, RTV and CDT to make these additional channels available in the RCE licence area. As a result, these additional channels are not available to viewers in the RCE licence area, either through the commercial broadcasters or through VAST.

Additional local news channels

Imparja, RTV and CDT carry news services relevant to the RCE licence area in their standard programming on the VAST service. While suitable for viewers in the RCE licence area, these news services do not incorporate local news content of interest to all VAST viewers in the widely spread black spot areas.

To address this concern, EASB delivers additional news content on dedicated news channels accessible by all VAST viewers. This news content is a compilation of regional commercial television broadcasters' local news bulletins, collected each day as they go to air in regional areas and then transmitted in repeating loops to create a "near video on demand" experience. These services are designed to deliver material of local interest for regional terrestrial black spot VAST viewers.

1.4 Conditional Access Scheme

Access to VAST services is controlled by a Conditional Access (**CA**) scheme administered by the regional FTA television industry. The CA scheme is designed to ensure that each licensee's service is restricted to the licensee's licence area.

The CA scheme relies on proprietary smart card technology that is integrated into a set top box (**STB**) that viewers of the VAST service need to connect to their television receiver. This requirement differentiates VAST STBs from other FTA television STBs available on the open market.

1.5 Funding of VAST services

Funding for delivery of FTA commercial television services in the RCE licence area is provided in part by the Commonwealth and in part by the FTA television industry. Commonwealth funding for the VAST service, which is provided to EASB under a 10-year funding deed, covers:

- one-off capital expenditure for the studio equipment required to deliver the additional services
- annual operating costs for studio staff and maintenance, as well as satellite delivery costs, associated with delivering the additional services

Imparja, RTV and CDT continue to fund:

- program supply costs from the metropolitan FTA television networks
- satellite and all other costs associated with delivering the programs that were being delivered in the RCE licence area before commencement of the VAST service (the primary channels of the Nine, Seven and Ten Networks).

The metropolitan and regional FTA television industry funds the CA Scheme.

2. QUESTIONS

2.1 In what ways is the VAST service appropriate for delivery of television in areas without reliable terrestrial coverage?

Satellite technology was chosen for the purposes of VAST as, and remains, the most practical and cost-effective method to deliver FTA commercial television services to the RCE licence area, which is among the most remote and wide spread communities in the world. Satellite technology also remains appropriate for delivering FTA commercial television services to viewers in terrestrial black spots. EASB is not aware of any location where VAST has not been able to deliver a reliable and effective alternative to terrestrial services.

Government funding of the VAST service, together with the FTA television industry's funding and administration of the CAS, have ensured that viewers in remote and terrestrial black spot areas have free access to largely the same suite of FTA commercial television services as are available to viewers in metropolitan and more densely populated regional areas.

2.2 **Are the current range of television and radio services offered appropriate?**

As noted above, the range of commercial services available through VAST has been the same since 2010. Additional services that have become available to metropolitan and regional viewers since 2010 are not available through VAST. It remains uneconomic for commercial television broadcasters to make these additional services available to viewers in the RCE licence area.

Feedback received by EASB from viewers of VAST services is that they would like to have access to high definition (**HD**) versions of existing primary channels and to multichannel programs that have been launched by the metropolitan FTA networks since commencement of the VAST service in 2010.

Upgrading programs to HD or adding additional channels would require additional funding for satellite bandwidth, as well as for program and playout costs. The relatively low and stagnant revenue available from advertising in the RCE licence area means that none of EASB and its constituent joint venture partners is in a position to provide the necessary funding.

EASB supports an extension of government funding to allow an expansion of services on the VAST platform to enable delivery of all current multichannel services provided by metropolitan FTA television networks. This should be given priority ahead of upgrading programs to HD.

Options available to fund these improvements to VAST channels could be considered in the context of a review of the current funding arrangements between the Department and EASB.

2.3 **To what extent are VAST set-top boxes meeting the needs of viewers?**

Deployment of the CA scheme in the VAST STBs requires a closed and managed receiver ecosystem to ensure reliable reception and this adds some complexity to the issue of STB and television receiver availability.

During the design of the VAST system, EASB worked closely with the Department, Optus and STB manufacturers to ensure that the need for a proprietary CA system did not significantly impede viewers' access to a range of suitable STBs at acceptable price points.

Currently there are three STB manufacturers offering a range of Optus-certified STBs and integrated television receivers for the VAST market with functionality ranging from simple receivers through to personal video recorders (**PVR**), integrated television receivers and devices designed for mobile battery-powered operation.

EASB considers that the range of options available for VAST viewers is adequate.

2.4 **To what extent do the regional commercial news arrangements on VAST meet the needs of viewers?**

EASB considers that the regional commercial news services (described above) are meeting the original goal of satisfying the needs of VAST viewers in terrestrial blackspots, but would welcome further discussion on possible alternative delivery options.

EASB also acknowledges that under current funding arrangements, it is not possible for the regional commercial television broadcasters to deliver the additional local news services that have been introduced since VAST commenced.

2.5 **Specifically, how could the current VAST service be improved?**

The provision of commercial television services in remote Australia continues to be commercially challenging for broadcasters.

Serving a relatively small population spread across a large area of Australia comes at a high cost relative to terrestrial markets. Each time a program is added to a broadcaster's suite of services, there is an increase in satellite annual operating costs for delivery. These costs scale up in a linear fashion and are also impacted by the format of the service – satellite delivery is approximately twice as expensive for HD channels compared to SD channels.

The lack of concentrated population centres and the inability to deliver localised programming significantly limits broadcasters' revenue opportunities from local businesses and from national advertisers wanting to target specific audiences. For these reasons, when allocating their television advertising spend, advertisers place a significantly lower value on reaching remote viewers compared to regional or metropolitan viewers.

The combination of high operating costs and limited revenue opportunities significantly limits the ability of EASB to provide additional services without financial assistance.

Subject to funding being available to meet additional operating costs, EASB considers the most significant improvements that could be made to the VAST platform are in the delivery of additional programming including:

- adding channels such as 9Life and 7Flix introduced by networks after VAST launched
- upgrading primary channels to HD to match terrestrial services
- splitting existing services into more granular state-based feeds, which would allow more targeted programming and time zone conformance. This would be particularly helpful for coverage of various football codes.

Changes in the media landscape—2010 to now

2.6 **How has the increasing availability of online television content changed the way viewers access and consume content in areas unable to receive terrestrial FTA television transmission?**

Over recent years there has been an increase in the number of subscription video on demand services (**SVOD**) and over the top (**OTT**) internet-based services consumed by Australian viewers. Fundamental to viewer's ability to access these services is availability of

a reliable high speed internet connection with an appropriate data download cap to allow sufficient data access without unreasonable additional costs or speed restrictions.

The majority of VAST viewers live in remote areas where internet is provided by NBN Sky Muster satellite or NBN fixed wireless services rather than fibre or copper cable. In a recent appearance at the Australian Parliamentary Joint Standing Committee on the National Broadband Network in June 2018, NBN Co CEO Bill Morrow made the following comments in relation to the performance of NBN fixed wireless services:

> "Mr Morrow said there were many causes of congestion including higher-than-expected take-up of the fixed wireless service and increased data consumption, but the main cause is concurrency. This is where multiple users are on the network at the same time, usually streaming video."[1]

EASB believes there is a strong correlation between a viewer's need to access VAST services and the likelihood of poor availability of other communications services, such as mobile phone services and NBN or other high speed internet services. For this reason it is unlikely that online delivery of concurrent primary television services will be a reality in the near future in VAST reception areas.

Changes in technology and distribution networks

2.7 **To what extent should future delivery models allow flexibility to utilise new technology to provide access to terrestrial television services?**

EASB believes that over time there will be an increase in the number of options for some VAST viewers to gain access to currently unavailable local terrestrial television services. These options will affect a relatively small number of current VAST black spot viewers as they get improved online access.

However, simply having access to high speed internet services does not guarantee access to a suite of FTA television services comparable to the VAST channel offering. Existing terrestrial broadcasters will also need to make all services available for online distribution and this is not without cost and program rights issues for those broadcasters. The affected VAST viewers would also be faced with a decision to replace the current free reception VAST model with a subscription internet service.

EASB notes that of the current 209,873 VAST households, 138,728 are in remote areas where VAST is the primary service and blackspot access is not relevant.

Technical standards

EASB is aware that terrestrial broadcasters are currently evaluating the use of more efficient broadcast standards such as DVB-T2 and improved compression standards such as MPEG-4 and HEVC to deliver more services and or higher quality services in available spectrum.

The VAST platform is built on the DVB-S2 satellite transmission standard which is the satellite equivalent (in terms of efficiency and technology development) of the terrestrial DVB-T2 standard currently being trialed for future adoption by terrestrial broadcasters.

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1 https://www.nbnco.com.au/corporate-information/media-centre/media-statements/fact-check-online-gamers-fixed-wireless.html

VAST services are also exclusively delivered using high efficiency MPEG-4 encoding which has limited adoption in terrestrial services where less efficient MPEG-2 encoding dominates.

EASB continues to monitor technology developments that allow more efficient use of satellite capacity that will deliver lower costs and higher quality services. However, broadcasters also need to consider the significant public policy issues arising from such technological changes, including the need for viewers to replace their STBs and receivers and the associated transitional costs.

National Broadband Network and mobile

As noted above, there is a strong correlation between a viewer's need to access VAST services and the poor availability of other communications services such as mobile phone services and NBN or other high speed internet services.

There are challenges with delivery of broadcast-like, concurrent access television services over the internet to a large viewer base. There have been recent examples of large scale performance reductions or service failure when many viewers attempt to access the same content such as major sporting events. These delivery limitations do not exist in a broadcast delivery model such as VAST where performance and delivery costs are not affected by the number of concurrent viewers.

For these reasons, it is unlikely that online delivery of concurrent primary television services will be a reality in the near future in VAST reception areas.

Conditional Access

2.8 **How could the process for viewers to apply for and access VAST be improved? Does the process remain appropriate?**

EASB has worked extensively with terrestrial broadcasters, ACMA, the Department and equipment installers to ensure the CA scheme operates efficiently and effectively for all applicants.

Administration of the CA scheme is highly automated through the use of the Myswitch website originally developed by the Department for Digital Switch-over and now administered by ACMA. This essential tool continues to be the portal through which all non-traveller applications are processed and the success and efficiency of the CA scheme is highly dependent on its continued support by Government and the regional FTA television industry.

2.9 **What are the key reasons for maintaining the conditional access arrangements beyond 2020?**

By design, satellites are capable of delivering signals across a wide geographic area. In the case of the Optus satellites used for the VAST service, this includes all of Australia. This advantage of satellite technology is however at odds with the requirement of broadcasters to deliver their services within licence boundaries and only to those locations allowed by the terms of their contracts with program suppliers.

CA technology is the only effective tool available to restrict service availability to within licence areas and to fulfil programming rights obligations.

The current VAST CA scheme arrangements provide an effective and efficient mechanism for achieving the following

- automatic authorisation for reception of all ABC and SBS services
- authorisation for reception of FTA commercial television services in remote areas following confirmation of location
- authorisation for reception in known terrestrial blackspot areas following confirmation of location
- Authorisation of reception of FTA commercial television services in other terrestrial blackspot areas following review and agreement by affected terrestrial broadcasters
- temporary authorisation for mobile reception of FTA commercial television services by travellers.

EASB considers that the current CA scheme technology and authorisation processes are adequate and should continue into the foreseeable future.

Funding

2.10 **What are the main factors that would most influence industry investment in the delivery of FTA television services in areas unable to receive a reliable terrestrial transmission? Why?**

Commercial FTA television broadcasters have a long history of working proactively with government and communities to maximise reliable terrestrial coverage of their services. This collaborative approach is evidenced by the recent successes of the digital television rollout and the spectrum restack projects.

The industry takes a multi-tiered approach to ensuring maximum terrestrial coverage of services including significant investment in a world class transmission network, installation and operation of gap filler transmitters, joint industry ownership and operation of small cellular-like repeaters serving smaller communities and support of the VAST platform's use as the final safety net for individual viewers and small pockets of underserved viewers.

Investment decisions about how best to make their services available are made by broadcasters on a case-by-case basis, taking into account the required capital and operating costs, the available number of viewers and the revenue opportunities. The availability and long term security of spectrum are also factors affecting broadcasters' ability to provide terrestrial remedies to reception difficulties.

The relatively small number and isolation of the viewers in the RCE licence area and in terrestrial black spot areas are unlikely to support additional investment by terrestrial FTA television broadcasters in expanding terrestrial reception of their services in those areas.

EASB is of the view that the current mix of broadcaster investment in gap fillers and government assistance for the VAST platform strikes an appropriate commercial and technical balance of the available options.