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Audio description and Australian Television

A position paper

Audio Description and Australian Television: a position paper

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Table of Contents

List of Figures and Tables

Preface

This report is based on the findings of two research projects undertaken in the Department of Internet Studies and the Critical Disability Research Network at Curtin University Australia between 2013 and 2017.

The first, *Disability and digital TV: Access, representation and reception*, ran between 2013 and 2018 and was funded by the Australian Research Council (ARC). This project aimed to provide a comprehensive and critical study of the way Australians with disability access and watch digital forms of television. The project took an accessibility and usability approach to digital television through an interrogation of body–technology relationships. A usability analysis of the range of web capable devices that can be used to access digital television was undertaken to discover whether they are more or less enabling for people with vision, hearing and mobility impairments.

The second research project, *Accessing video on demand: A study of disability and streaming television*, was funded by the Australian Communications Consumer Action Network (ACCAN) and took place in 2015. The 12-month project sought to research the emergence of video on demand (VOD) services in Australia, specifically to:

- Identify what Australian consumers with disabilities want from VOD and investigate how they currently use it.
- Determine which accessibility features would most benefit this group.
- Evaluate VOD in Australia against existing legislation and W3C recommendations.
- Compare access features on current and emerging Australian VOD with international offerings, e.g. Netflix in the US and Amazon Prime in the UK.

While these projects took a cross-disability approach to television accessibility for people with disability, some participants specifically identified as having a vision impairment – 13 were interviewed and a further 64 participated in online surveys. This report reflects on both the unique observations of this group and considers the other potential audiences and users of audio description (AD).

Acknowledgements

Executive Summary

Audio description (AD) – also referred to as video description, video programming or descriptive video – is a track of narration included between the lines of dialogue which describes important visual elements of a television show, movie or performance. It is an essential feature in order to make television accessible to audiences who are blind or vision impaired. As the human rights of people with disability become more prioritised and expanding technologies allow an individualisation of the experience of television, AD is becoming increasingly available across the world. For example, from its rudimentary beginnings in Spain in the 1940s, to date AD is available through terrestrial broadcast television in the UK, US, Canada, New Zealand, Ireland, Germany, Spain, Italy, Poland, France, Portugal, the Czech Republic, Korea, Thailand, Austria, Switzerland, Belgium and a number of other European countries. However, it is not available on Australian broadcast television, despite the federally funded agency Screen Australia having created a back catalogue of AD content. Screen Australia is the key funding body for the Australian film industry and according to several policy documents requires funded dramas to create an AD track. While producers may create these tracks, there is no mechanism to broadcast them on television. The Australian government and broadcast industry have stated that they believe it to be too technically complicated and financially prohibitive to offer here.

This report outlines an AD position paper based on 5 years of research with Australian audiences with disability conducted by researchers in the Department of Internet Studies and the Critical Disability Research Network at Curtin University Australia. The report focuses in particular on the views of Australians with blindness and vision impairments who have taken part in these projects.

The report is divided into three sections. Part 1 considers the broader context of the role of television in facilitating social inclusion, including the idea that television access is a fundamental human right.

Part 2 considers the ways AD can be delivered, and begins with a brief history of AD, from its beginnings in the middle part of last century to the modern and innovative formats available today. The Big Access Media (BAM) app is presented as an immediate solution, and we argue the industry, especially the public

broadcaster, the Australian Broadcasting Corporation (ABC), utilise this app to immediately offer AD content to Australians. It will consider how standards, guidelines and legislation have shaped the AD industry worldwide and offer some common guidelines regarding principles, objectivity and voicing. The provision of AD in Australia is also discussed, specifically in relation to a similar accessibility issue – the provision of closed captions. The section concludes by providing case studies on two aspects of Australian media – the two ABC AD trials and the efforts of Screen Australia to increase AD content in this country.

While the insights of blind and visually impaired audience members who require AD are featured throughout the report, Part 3 moves on to discuss these observations in more detail. This focuses on feedback from people regarding their access to television which had been carried out in two earlier research projects – this included 13 interview participants with vision impairment and a further 64 who participated in online surveys. Common themes that emerged included:

- The importance of the public broadcaster.
- Television being a social activity.
- The feeling of exclusion – television is considered integral for inclusion.
- Issues surrounding cost – the "economics of disability".
- Contradictory approaches to technology – some were willing to try new technology, others preferred older technology and were unwilling to upgrade.
- The frustration that Australian content is audio described when exported overseas or released on DVD but is not available on local broadcast television.
- Frustration with watching non-AD television content once AD has been experienced.

The section concludes by also considering the potential benefits of AD to other audiences, including the elderly, people with intellectual disabilities and people whose first language is not English.

The following recommendations are therefore proposed:

- AD be made available on Australian free-to-air television either via terrestrial broadcast, catch-up portals or a dedicated app.
- Any imported programming with an AD track created for international audiences must be licensed with the AD track for distribution in Australia.

- Further research is conducted to establish the mainstream benefits of AD and talking electronic programing guides (EPGs). The ways people consume media is constantly changing – if these formats and technologies can be embraced by the mainstream, disability inclusion will improve.
- Regulation and standards introduced in the 1990s be brought up to date with the 21st century digital and online television environment:
  - The Broadcasting Services Act (BSA) 1992 should immediately be expanded to encompass television screened online;
  - Australian standards should be introduced to ensure set-top boxes can receive and display AD;
  - The BSA should be expanded to include AD.
- The government needs to support people with disability to acquire digital literacy skills. Low income members of this group should also be supported financially to get online.
- Innovation and competition in the business sector must be encouraged, for example to develop more apps to facilitate AD.
- Screen Australia policy should be expanded to television drama in more explicit terms.
- The public broadcasters should be supported to provide AD.
- Australian licensing laws be relaxed to allow pubic broadcasters to continue airing shows on their catch-up portals with AD tracks even when they have moved to commercial or subscription channels.
- Further audience research into the feasibility of synthetic voice systems be conducted to discover whether this is an acceptable interim or long-term solution to the provision of AD.

Introduction

We have very little audio described content available in Australia. We don't have the population of blind people nor the political will by politicians to force providers to provide for us. Also the copy-right issues mean that much of the content available in other parts of the world is not available to Australians. We have a gutless government which won't take on the big corporations or take on the multi-nationals in charge of the content. Also the multi-nationals pay lip service to providing audio described content to Australians. It is not much different to the silly DVD region systems that mean that Australians miss out so much and are charged a premium as compared to the US or UK for the same content – interview participant in the research project *Accessing video on demand (*Ellis, Kent, Locke, & Merchant, 2016).

AD – also referred to as video description, video programming or descriptive video – is an access feature for audiences who are blind or vision impaired. It is a track of narration which describes important visual elements of a television show, movie or performance included between the lines of dialogue. AD is broadly recognised as an essential feature to make television accessible to audiences who are blind or vision impaired (Utray, de Castro, Moreno, & Ruiz-Mezcua, 2012); however, it is increasingly being recognised as benefitting other disability groups (Garman, 2011) as well as a more mainstream audience (cited in Mancuso, 2015). Nevertheless, to date it is not available on Australian broadcast television.

However, in 2017 the Department of Communications and the Arts (2017a) convened an AD working group to discuss issues related to AD, including available technologies and platforms, the benefits of AD to users, and the challenges of implementing new AD services. According to their website, the Department of Communication and the Arts (2017b) "foster an environment in which *all Australians* benefit from access to diverse communications services and artistic and cultural experiences" by providing advice about communications technology and the industry to the Australian government.

The Department's Corporate Plan lists three strategic priorities to put consumers at "the front and centre" of all of the Department's activities, namely consumer

experience, advancing the sector, and content and culture (Department of Communication and the Arts, 2017c). These priorities focus on facilitating consumer access and fostering a sustainable industry while encouraging growth and innovation. Further, the Department's Corporate Plan aligns with the "broader Government agenda of encouraging productivity, growth and innovation, including supporting the links between innovation, arts and creativity". We call on the Department to apply this frame to the provision of AD in this country to foreground the position of consumers, both those with disability and those without, to create a more sustainable, innovative, and global Australian television industry.

AD is currently only available in a subscription capacity on Australian television via subscription video on demand (Netflix, iTunes), pay TV (Foxtel offerings via the Big Access Media Describe app), and DVDs for purchase. With almost 60 per cent of Australians with blindness or vision impairments experiencing long term unemployment (Vision Australia, 2012), many cannot afford so called luxury purchases including the internet connection required to access these paid forms of television. In addition, with the majority of this population being over the age of 65, digital literacy can also be a significant barrier.

Television's Role in Social Inclusion

As Lauren Henley from Blind Citizens Australia (BCA) explains, access to television is integral to social inclusion in Australian society:

> *You might think that missing out on television is no great loss, but it's about more than watching the latest episode of* Days of our lives. *Like the rest of my friends and family, I want to have choice about what I watch and have the ability to be informed about what is going on in the world. I lost many things when I lost my sight, but one of the things that I lost was social inclusion* (Henley, 2012).

Television has a social function of offering communities shared access to major events, news and popular culture. Inaccessibility to television is therefore a significant form of social exclusion. This is a denial of basic human rights. However, because television is a visual medium, there is a pervasive cultural assumption that people who are blind or vision impaired do not engage with television and therefore do not require any assisted access (Cronin & King, 1998; Social_Darianism, 2015) – this contrasts greatly with popular acceptance of the need for closed captioning for Deaf and hard of hearing audiences. In spite of this, several surveys since the 1960s show that people with vision impairment do in fact watch television and appreciate the social nature of television viewing (American Foundation for the Blind, 1997; Cronin & King, 1998; Ellis, 2014a). For example, a US study of AD during the 1980s cites a viewer with vision impairment's description of the experience of watching television with AD:

> *…. [It was] very emotional. I found myself pacing the floor in tearful disbelief. It was like somebody had opened a door into a new world, in which I was able to see with my ears what most people see with their eyes* (Cronin & King, 1998).

For people who are blind or vision impaired, gaining full access to television programming – therefore permitting this social inclusion – requires AD on both drama and documentary programming, audio navigation of interactive services such as the EPG, and access to graphical user interfaces for people with residual vision (Utray et al., 2012). While historically these affordances have been

technologically challenging, the introduction of digital forms of television now offers an opportunity to make these features more available. As a result, in 2012, a trial of AD was carried out on the ABC, the Australian public broadcaster. Australians who participated in this trial reported similar experiences to those documented above (ACCAN, 2016):

> *I found the audio description fantastic, giving me the opportunity to watch TV with my partner without her having to explain what was happening on screen in those parts where either silence or only a music backing track was being played. Prior to the audio description my partner had to constantly explain various parts of what was happening, reducing her viewing pleasure and mine, so I tended not to watch much TV leaving my partner to her own TV watching.*

However, despite this positive feedback and clearly stated increase in social inclusion that AD content offers, Australian broadcast television still features only very limited AD content. Advocates are looking to changes this, citing access to television via AD as a basic human right. Two key human rights documents support this – the United Nations (UN) Universal Declaration of Human Rights (UN, 1948) and the UN Convention on the Rights of Persons with Disability (UNCRPD) (UN, 2006a&b).

Article 19 of the Universal Declaration of Human Rights (UN, 1948) establishes the right to freedom of expression:

> *Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas **through any media** and regardless of frontiers* – Article 19.

Further, the media in general and television in particular have a key role in realising articles 22 and 27 (Ellis & Goggin, 2015; UN, 1948):

> *Everyone, as a member of society… is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality* – Article 22.

*(1) Everyone has **the right freely to participate in the cultural life of the community**, to enjoy the arts and to share in scientific advancement and its benefits* – Article 22.

Article 21 of the UNCRPD (UN, 2006a&b) extends the 1948 Declaration's focus on the right to freedom of expression and participation specifically to people with disabilities:

States Parties shall take all appropriate measures to ensure that persons with disabilities can exercise the right to freedom of expression and opinion, including the freedom to seek, receive and impart information and ideas on an equal basis with others and through all forms of communication of their choice … including by:

a) *Providing information intended for the general public to persons with disabilities in accessible formats and technologies appropriate to different kinds of disabilities in a timely manner and without additional cost …*

b) *Accepting and facilitating the use of sign languages, Braille, augmentative and alternative communication, and all other accessible means, modes and formats of communication of their choice by persons with disabilities in official interactions;*

c) *Urging private entities that provide services to the general public, including through the Internet, to provide information and services in accessible and usable formats for persons with disabilities;*

d) ***Encouraging the mass media, including providers of information through the Internet, to make their services accessible to persons with disabilities;***

e) *Recognizing and promoting the use of sign languages* – Article 21.

The UNCRPD sets out the fundamental human rights of people with disability such as access to education, the community and media. Significantly, the UNCRPD recognises access to television as a human right in the same way access to appropriate health care is a human right. Article 30 focuses on "participation in cultural life, recreation, leisure and sport" (UN, 2006a&b), again referring back to the concerns of the 1948 Declaration:

> States Parties recognize the right of persons with disabilities to take part on an equal basis with others in cultural life, and shall take all appropriate measures to ensure that persons with disabilities:
>
> a) Enjoy access to cultural materials in accessible formats;
>
> b) **Enjoy access to television programmes**, films, theatre and other cultural activities, in accessible formats;
>
> c) Enjoy access to places for cultural performances or services, such as theatres, museums, cinemas, libraries and tourism services, and, as far as possible, enjoy access to monuments and sites of national cultural importance – Article 30.

A final document of note is Australia's National Disability Strategy 2010-2020 (Australian Government, 2011). This strategy was endorsed by the Council of Australian Governments in February 2011 and furthers the goals of the 1948 Universal Declaration and the 2006 UNCRPD to facilitate the inclusion of people with disability in Australian society. The strategy is described as "a coordinated plan across all levels of government to improve the lives of people with disability, their families and carers" (Australian Government, 2011). Within this strategy, access to television is again aligned with access to public spaces (Commonwealth of Australia, 2011, p. 30):

> Taking a universal design approach to programs, services and facilities is an effective way to remove barriers that exclude people with disability. Universal design allows everyone, to the greatest extent possible, and regardless of age or disability, to use buildings, transport, products and services without the need for specialised or adapted features. Some examples of universal design include:
>
> ▪ light switches that can be reached from standing and sitting positions and which feature large flat panels instead of small toggle switches
>
> ▪ a ramp that is incorporated into a building's main entrance
>
> ▪ captions on all visual material such as DVDs, **television programs** and videotapes.

However, this document focuses on the aforementioned more 'accepted' feature of captions rather than AD. The absence of a specific reference to AD can perhaps be explained because this strategy was written prior to the ABC's 2012 AD trial.

However, it was published after the Australian government released a discussion paper regarding access to electronic media which included both of these assistive technologies (Australian Government, 2008) and after their latest report on the matter in 2010 (Department of Broadband Communications and the Digital Economy, 2010). In that report, a total of 22 recommendations were made by the review – grouped into captioning, AD, UNCRPD and social inclusion – thus suggesting that in 2010 the Australian government did recognise the human rights implications of access to television for people with disabilities, including those with vision impairment.

The lack of perceived focus on the provision of AD from a governmental perspective perhaps stems from the pervasive attitude which exists within the Australian television industry that AD is not the responsibility of commercial providers, yet as a signatory to the UNCRPD, it is the government's responsibility to compel the media to include people with disability.

While the UNCRPD imposes obligations on signatory governments, these can only be met if the private sector cooperates. According to Article 4 of the UNCRPD, State parties must "take all appropriate measures" to eliminate disability discrimination. Along with specific mentions of access to media and communications (Articles 4, 9, 21 and 30) and television specifically (Article 30), Article 9, Accessibility, addresses the dual responsibility of governments and business (UN, 2006a):

> *2. States Parties shall also take appropriate measures:*
> a) *To develop, promulgate and monitor the implementation of minimum standards and guidelines for the accessibility of facilities and services open or provided to the public;*
> b) *To ensure that private entities that offer facilities and services which are open or provided to the public take into account all aspects of accessibility for persons with disabilities.*

This is supported by documentation released by the Australian Attorney General, which says the government has a responsibility to compel and train businesses regarding their obligations under the UNCRPD (Attorney General's Department, n.d.):

Countries are also to take appropriate steps to set standards and guidelines for access to facilities and services that are open to the public, to make sure that private businesses that provide facilities or services to the public take into account access for people with disability, and to provide training for people involved with access for people with disability.

Despite their resistance to providing AD, the commercial broadcast industry, via their industry body Free TV Australia, make overt claims that they include all Australians, including those with disability, as well as "delivering social outcomes" on their website. Free TV Australia has developed a Commercial Television Industry Code of Practice to ensure "Australia's modern digital media landscape upholds community standards and ensures appropriate viewer safeguards" (Free TV, 2010). While this code includes notes around representing disability on television, it does not address television accessibility for people with disabilities. For people with disability, access to media is as important as the way disability is represented in the media – both have a material impact on the social position of this group (Ellis & Goggin, 2015).

The provision of AD is a fundamental human right and, as such, the delivery, format and, specifically, the legislation behind it needs to be carefully considered, particularly from an Australian perspective where such content is clearly lacking. With AD only being available via subscription channels, people with vision impairments are being denied their human rights.
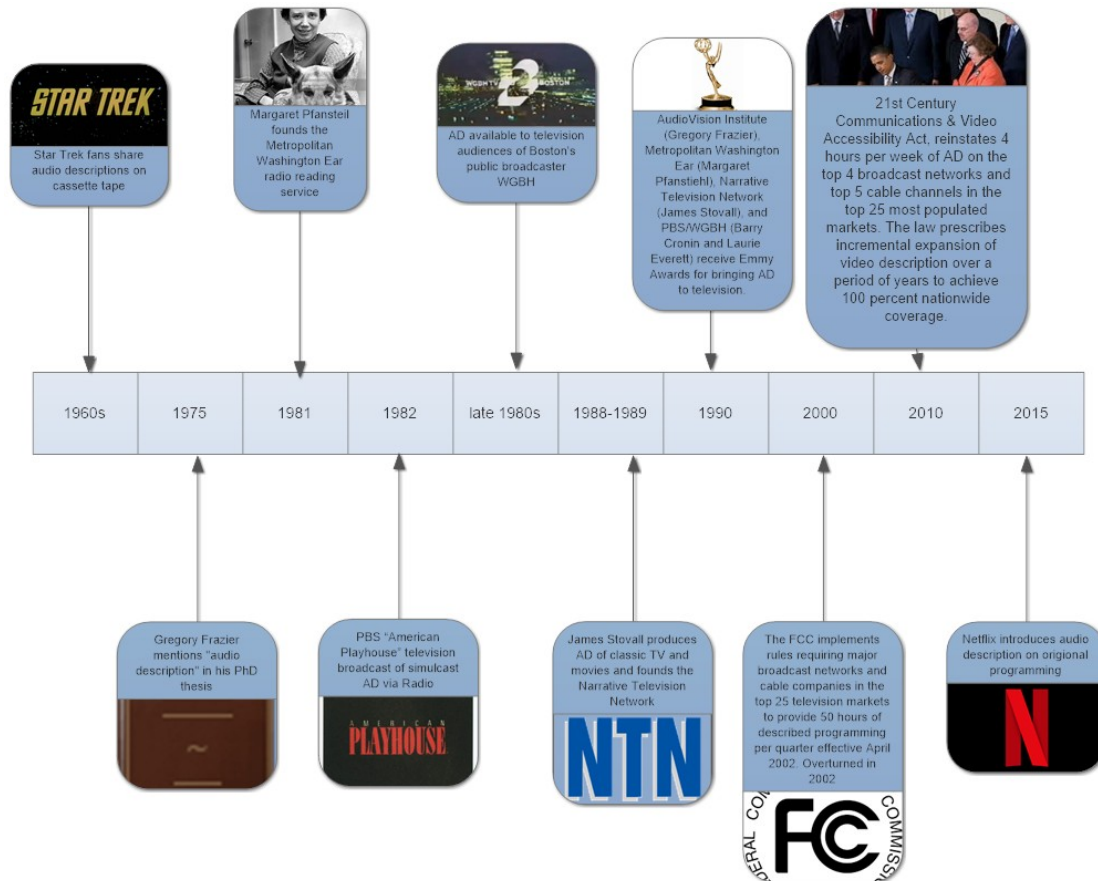
Delivery of Audio Description

This section will outline a brief history of AD worldwide and in Australia, from its beginnings in the middle part of last century to the modern formats available today. It will consider how standards, guidelines and legislation have shaped the AD industry and offers some brief country-specific examples. The section will then turn its focus to AD from an Australian perspective, discussing its current legislative situation, including in relation to a similar accessibility issue – the provision of closed captions. The section concludes by providing case studies on the two ABC AD trials and on the current situation of the provision of AD in this country via Screen Australia.

History

Traditionally, blind or vision impaired people have had to rely on friends or family members to describe media events to them, be it in live performances, in the cinema or on television. The idea of facilitating AD to a broader audience – just as closed captions offer inclusion for Deaf and hard of hearing audiences – is not a new one, although its timeframe has, and continues to be, a considerably slower one, particularly in Australia. This history, and its important milestones, is outlined in more detail below (see also Figure 1).

The first account of AD being made available occurred in Spain in the 1940s when Gerardo Esteban, a radio presenter, began narrating films on the radio. Prior to this early AD, Esteban was known for narrating other forms of entertainment such as bullfights, theatre performances and football games (Orero, 2007). The service ran until the late 1950s. In the US, in 1964 US department of education administrator Chet Avery encouraged consumer groups affiliated with the blind and vision impaired to apply for funding to describe educational media just as Deaf advocates were advocating for more accessible television through closed captions (Downey, 2008). However, whereas early proponents of AD such as Avery sought to align with the Deaf community's focus on access to education and entertainment via the provision of captions, the majority of Blind activists were instead more focused on the workforce and other areas of social inclusion (Snyder, 2005; Described and Captioned Media Program [DCMP], 2017). However, in an early example of textual poaching (see Jenkins, 1992) whereby television

audiences break copyright restrictions to provide access for others, or to enrich the source text, in the 1960s communities of *Star Trek* fans began to share AD versions of the original television show on cassette tape (Cronin & King, 1998) – this became the first example of popular English-language media being afforded a more widespread access through AD.

Figure 1. Detailed timeline of milestones in audio description since 1960

In the 1970s Gregory Frazier, a professor at San Francisco State University, began working on the concept of AD theatre. He founded AudioVision in 1972 to explore making media and live performances more accessible to people who are blind and vision impaired (DCMP, 2017). His 1975 Master's thesis, *The autobiography of Miss Jane Pittman: An all-audio adaptation of the teleplay for the blind and visually handicapped*, was an AD adaptation of the television–film drama *The autobiography of Miss Jane Pitman* (Frazier, 1975). The creative praxis explored historical attempts to entertain audiences of blind and vision impaired people, analysis of the teleplay itself to determine what information should be audio described to increase listener comprehension, and where this narration could be

inserted. Finally, Frazier explored the creative approach to developing an AD television script. He concluded (Frazier, 1975):
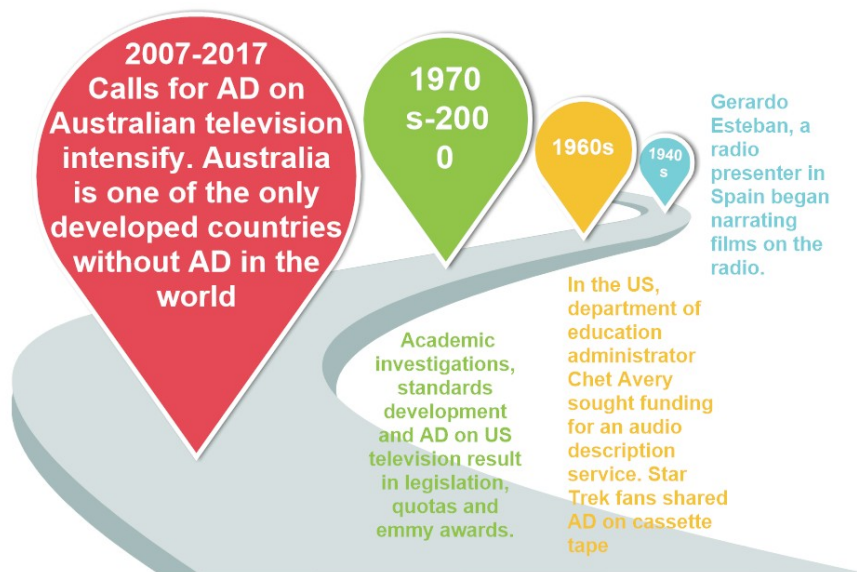
Although the all-audio adaptation appears successful in theory, the ultimate test of its validity lies in recording the drama for testing with a blind and visually handicapped audience.

Throughout the 1970s and early 1980s, Dr Margaret Pfanstiehl offered Frazier's "ultimate" test through her work with the Metropolitan Washington Ear Reading Service. Pfanstiehl worked with both theatre and public television officials to develop technology to facilitate the provision of AD to audiences who were blind or vision impaired. Just as Gerardo Esteban had in 1940s Spain, Pfanstiehl utilised a cross-technology AD simulcast using radio, albeit this time pared with television rather than cinema, of the PBS show *American playhouse* (Lewis, 2017). This radio–television simulcast arrangement was also used in Europe throughout the 1990s. Pfanstiehl was awarded an Emmy in 1990 for her work with the Metropolitan Washington Ear Reading Service to bring AD to television (Bernstein, 2009).

Three other organisations facilitating AD on television also received Emmys that year – Gregory Frazier's AudioVision Institute, James Stovall's Narrative Television Network and Barry Cronin and Laurie Everett from PBS/WGBH (Lewis, 2017). Throughout the 1990s these four organisations developed initiatives, conferences and best practice guidelines for the provision of AD while offering AD movies, television shows and theatre performances. Indeed, it is these guidelines and policy changes which are now advancing the provision of AD in many countries. According to Media Access Australia, in 2017 AD was available on broadcast television services in the UK, US, Canada, New Zealand, Ireland, Germany, Spain, Italy, Poland, France, Portugal, the Czech Republic, Korea, Thailand, Austria, Switzerland, Belgium and a number of other European countries (Figure 2).

However, the timeline of AD provision in Australia has been longer than that of many other countries, and continues to lag behind (Figure 3).

A timeline of Audio Description

2007-2017
Calls for AD on Australian television intensify. Australia is one of the only developed countries without AD in the world

1970s-2000

1960s

1940s

Gerardo Esteban, a radio presenter in Spain began narrating films on the radio.

Academic investigations, standards development and AD on US television result in legislation, quotas and emmy awards.

In the US, department of education administrator Chet Avery sought funding for an audio description service. Star Trek fans shared AD on cassette tape
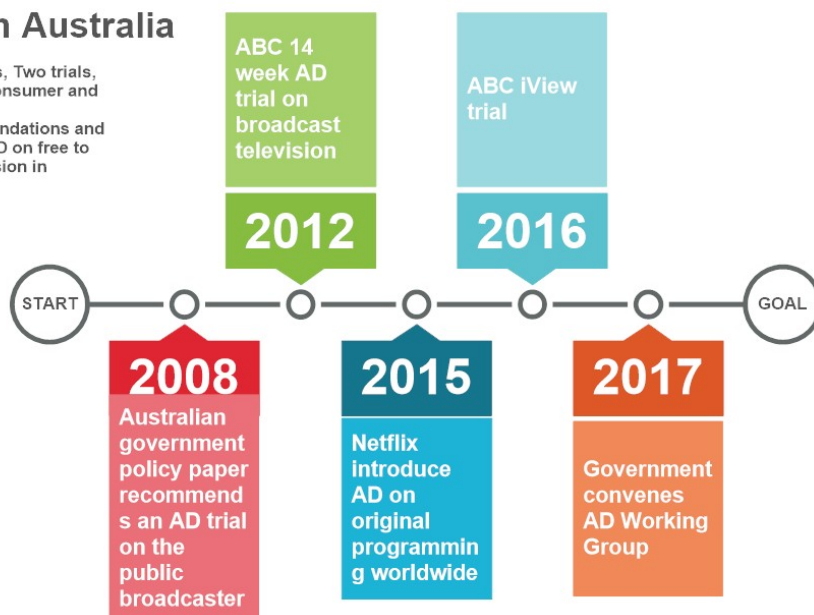
Figure 2. The long road to audio description in Australia

This shortcoming was despite the hope that from 2012, during transition from analogue to digital television broadcasting in Australia, things would start to change. Government policy documents predicted a more widespread availability of AD as a result of increased bandwidth available via digital television (Ellis, 2014a), and the importance of industry competition and innovation were also highlighted as a potentially positive move. Further, advances in technology meant that most smart televisions sets began to also include the ability to broadcast AD, and AD formats such as apps were beginning to become more accessible and user-friendly. Indeed, the optimism regarding these predictions paved the way for:

- A 14-week AD trial on ABC1 in 2012, and a second trial on ABC's catch-up portal iview in 2015-2016.
- The introduction of AD via some subscription services – such as on Netflix and through the BAM app integration with Foxtel Nickelodeon and Discovery channels – as well as some availability via iTunes (Figure 4).

AD in Australia

Ten years, Two trials, policy, consumer and industry recommendations and still no AD on free to air television in Australia

ABC 14 week AD trial on broadcast television

2012

ABC iView trial

2016

START ─── ○ ─── ○ ─── ○ ─── ○ ─── ○ ─── GOAL

2008
Australian government policy paper recommends an AD trial on the public broadcaster

2015
Netflix introduce AD on original programming worldwide

2017
Government convenes AD Working Group

Figure 3. Timeline of the journey towards audio description in Australia

Following several years of delay, subscription VOD was launched in Australia in 2015 with the introduction of Netflix, Stan and Presto within several months of each other. Netflix, already a world leader in this space, began offering AD on original programming within one month of launching. It was the first time Australians had access to a reliable and ongoing AD service. Following Netflix's success with AD iTunes began offering AD on some content.

However, despite both advances in technology and repeated calls to remedy this situation, at present AD is not available via broadcast television in Australia. Even more troubling is the fact that AD tracks have been created but there is no mechanism to broadcast them in this country. Indeed, issues remain regarding access to both AD on overseas content imported into Australia (despite it having AD content when distributed elsewhere), to Australian television drama AD content only being available for international distribution, as well as to the back catalogue of AD content created by Screen Australia that has never been made available to television audiences.

Formats

AD is usually provided via a secondary or alternative audio track that users can activate instead of, or in addition to, the normal audio track. These can be

accessed via a number of different 'traditional' formats (Table 1) – via terrestrial broadcast television or through over the top catch-up television – as well as via a number of secondary apps available for download onto a smartphone and tablet (Table 2).

| Format	Description
Broadcast mix	The secondary audio stream contains both the AD and the normal audio stream, pre-mixed. The user cannot change the relative volumes nor listen to the AD track separately (Couani, 2011)
Receiver mix	The secondary audio stream contains the AD narration and signals to lower the volume of the primary audio stream when descriptions need to be heard. The user can have AD delivered to headphones, allowing others to listen to the primary audio stream without AD (Couani, 2011)
Digital cinema package	Digital cinema package is the file format used in cinema, delivered via a digital hard drive. An AD file is often a standard inclusion. This audio file can be delivered via headphones connected to individual AD units in accessible sessions (Vision Australia, n.d.)
ESEF	A broadcast standard interchange file format for AD for use with advantage compiler products. An ESEF file set consists of a .esf file and individual WAV files for each description. The .esf file contains data, timecodes and file names for each description along with information about fading and the distribution of stereo sound (Starfish, n.d)
Layback	Layback is the process of recording an audio track onto a master video file, ensuring the audio and picture are in sync, and then exporting a single combined file. This is used for AD internet video (TriggerTone, 2017)

Table 1. Audio description formats

App / Description	Availability
Disney Movies Anywhere: This app is a cloud locker for Disney Pixar movies, with AD as a feature. The app itself is available on a range of platforms, but the AD feature is only available on iOS. It can be used with headphones in any setting, including the cinema, syncing with the ambient film audio. As of 12 October 2017, it will be replaced with Movies Anywhere, which will include a wider range of film studios. It is not yet clear if the AD feature will be retained in the new app (ABC, 2017)	Not available in Australia
MovieReading: An app (moviereading.com) originally designed for subtitles and captions, it also features AD. It is available on Android and iOS, so is compatible with most tablets and smartphones, provided the device has a microphone. MovieReading auto-syncs AD and captions with the ambient film audio. It can be used in any setting, including a cinema, requiring only a smart device and headphones. The AD file is downloaded ahead of time, and the smart device can be used in Airplane mode to avoid disrupting others.	There are limited films available, particularly in English-language regions. Only two films appear to be available in the Australian region – *Defiant lives* and *Notes on blindness.* In addition, the UK app offers three others: *Beauty and the Beast, Pete's dragon* and *Philomena.* The US region offers *Defiant lives* and *Looking at the stars.*
Actiview: The app (http://actiview.co/) offers features including AD, amplified audio, combined AD and amplified audio, and closed captioning. The access feature file is downloaded ahead of time. It requires wired headphones before it will play an audio file. It uses auto-syncing technology, using the ambient film audio via the device microphone.	Limited content. On the 12 November 2017, three films were available: *Dealt, Wonderstruck* and *Breathe.* Two more films were 'coming soon' – *The man who invented Christmas* and *Coco.*
BAMDemand: BAM (http://bigaccessmedia.com/home/) provides audio with AD for a range of children's television programs. It is available on iOS, though an Android version is expected soon. It can also be used through a web browser, with Google Chrome currently the best option. The audio syncs with the ambient audio from the program and, whilst advertisement breaks are usually included where scheduled, users can also re-sync the AD if unexpected breaks occur. BAM services can be played through the device speakers, so it is not necessary to use headphones.	BAM provide AD for selected Discovery Kids and Nickelodeon children's programs and are now expanding to content for all ages. The children's content covers many episodes of 14 different programs. Available in Australia.

Table 2. Audio description apps

For example, BAM is an Australian company that seeks to provide AD access as an app for people who are blind, vision impaired or with autism spectrum disorder (ASD) so as to enhance their enjoyment of watching television (Figure 4). CEO Stefan Carey aligns his service with the aforementioned notion of full media access being a human right of all Australians (philsandberg, 2016).
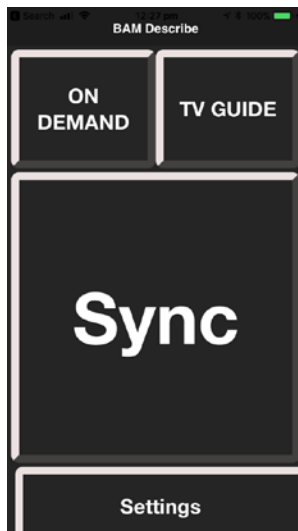
Figure 4. Screenshot of the Big Access Media app

BAM launched their 100 shows over 100 days project on World Sight Day 13 October 2016 – the initiative provided 100 days of AD for children's television on Nickelodeon and the Discovery Channel (BAM, 2016). The response to the availability of 100 shows was so favourable that BAM exceeded their target (philsandberg, 2016) and have further goals for expansion. Currently the main target group remains children – aged 4-18 years – and AD programs include cartoons, preschool, children's and teenage programming (philsandberg, 2016). Nickelodeon and the Discovery Channel are supporters, and the word KIDS is displayed in large letters above the link to the apple store where the app is available to download. A television schedule, listing all the shows that have been audio described, is also available.

Content is accessed in two ways. First, BAM have created a database of AD files. When a file is uploaded to the system it goes into the On Demand library which consumers can access at any time. Second, an entertainment guide is created for all shows that have a live broadcast for that 24-hour period on an Australian or international network. This then allows users to sync with the program when it is

broadcast or to download the file ahead of the broadcast time once it has been uploaded into the database. Once a user has the app on their phone, the system enables the user to gain access to an AD program at the time that it is being broadcast through their smart phone or tablet. To operate the app, users hold their phone up to the television to the program they want AD for and press the sync button. After 30 seconds the phone will provide a synched AD track for the appropriate show. A similar app is available for Australian movie goers. The MovieReading app detects the point at which the movie is at, via the smartphone's microphone, and streams AD to the user (Stitt, 2017). For details of how these apps work see Table 2 earlier in this report. In addition, in recognition that a number of people who most desire AD do not have access to the internet nor smart devices, BAM have developed a fixed line phone service whereby audiences can access AD via their landline.

If BAM can expand its offerings beyond children's television and onto free to air television, it offers a good way forward for Australia. As we highlight later in the report, a significant amount of Screen Australia funded Australian television drama is produced with an associated AD tracks. However, this is not made available when the programs are broadcast, and is only included in DVD releases 25% of the time (Media Access Australia 2012c).

Standards, Guidelines and Legislation

However, while AD is available in many different formats, its provision – and its associated standards, guidelines and legislation – varies greatly across countries. There is currently no official international standard for the provision of AD (Fryer, 2016) and different countries take different approaches to both the creation of the script and the technological means of delivery. For example, while AD is intended primarily for people who are blind or with some vision loss, in some guidelines it is expected that most users may have partial sight or will have had sight previously (American Council of the Blind (ACB), 2010; World Blind Union, 2016). Some standards also recognised that other people may also benefit from AD's "concise, objective 'translation' of the key visual component of [a media text]" (ACB, 2010, p. 8). For example, the *French charter on audio description* includes the elderly, sick people and people learning the language (Rai, Greening, & Petre, 2010).

There are also differing guidelines offered for the type of text, for example performing arts or visual art.

For those countries which have guidelines in place, a number of core themes for the provision of AD can be identified, including what is described, objectivity and delivery technique (ACB, 2010; Audio Description Coalition, 2009; Mikul, 2010; OfCom, 2015; Rai et al., 2010; World Blind Union, 2016).

With regard to what content is described, some guidelines highlight that certain television formats and genres do not lend themselves to AD, for example, OfCom (UK) Code on Television Access Services (OfCom, 2015, p. 6) states that:

> *… [there is less need for] audio description of music and news programmes and services, where there is little space within the dialogue/sound track to provide audio description.*

Most guidelines agree that the level and timing of AD is expected to best fit the text itself (for example determined by the dialogue and soundtrack). Descriptions should be provided in 'gaps' between dialogue and should coincide with the action/setting. Further, titles, onscreen text and subtitles (referenced as 'subtitles' when describing) should be described, yet lyrics of songs should be included only if necessary. Major credits should be included.

With regard to objectivity, most guidelines state that descriptions should reflect what the describer sees, not what they "think they see" (Audio Description Coalition, 2009, p. 2). Descriptions should therefore be neutral and avoid interpretations, value judgments or opinions. The amount of detail provided will be determined by the amount of time available to the describer. Describing these 'basics' is considered the key role of AD, and may include:

- Who – is in the image, what do they look like.
- What – with an understanding of vision impairments, for example general to specific, colour, actions, movement and gestures, other critical information not mentioned in the dialogue.
- Where – location.
- When – time of day.

With regard to delivery technique or 'voicing', each guideline provides for differing levels of specificity. In general, describers should:

- Timing – describe what is happening as it happens without encroaching on dialogue or music.
- Enunciation/ word rate – speak at a rate which can be clearly understood (160 wpm is often cited as an appropriate pace).
- Consonance – ensure delivery is consistent with the nature of the text, and the describer remains unobtrusive and impersonal.
- Vocabulary – emphasise clear and simple language as well as variety and suitability to genre (for example children's programming vs adults).
- Censorship – relay all visual material and avoid omitting information for their own personal reasons/discomfort.

AD is typically 'voiced' by human reading a script; however, increasingly, the feasibility of synthetic voice or text to speech recordings is being debated as a way to increase the amount of AD available (Cryer & Home, 2008; Media Access Australia, 2012b; Szarkowska, 2011). Proponents of synthetic voice AD point to the cost efficiencies and the familiarity people who are blind and vision impaired already have with synthetic voices in their everyday lives; detractors suggest synthetic voice affects intelligibility and comprehension rate. At this stage, research has only been able to demonstrate that "while the visually impaired viewers find natural speech *preferable*, many of them would find synthetic speech *acceptable*" (Szarkowska, 2011).

In 2012, OfCom, the independent regulator and competition authority for the UK communication industries, created *The code on television access* to help encourage accessibility for people with vision impairments. This code stipulates AD targets up to a total of 10% of content after 5 years of broadcasting, while still allowing for some exemptions if audience share is less than 0.05, or where there are technical or financial difficulties (OfCom, 2012, 2017). Following the introduction of this code, broadcasters began exceeding their minimum requirements, with some achieving 100% (OfCom, 2013).

Similarly proactive, in 2000 in the US, the Federal Communications Commission (FCC) announced it intended to phase-in video description for television. In their Notice of Proposed Rulemaking, they noted three main audiences for AD – people

who are blind or vision impaired, people with learning disabilities, and people doing several things at once. In fact, as the FCC explained at the time, 60 per cent of the audience mail received from the Narrative Television Network (NTN) was from sighted viewers who enjoyed the programming (FCC, 1996; 1999). It directed "the four big television networks and the 5 biggest cable networks to show 50 hours of AD programmes per quarter by April 2002" (Mikul, 2010). The FCC's description regulations came into effect in 2002. When this ruling was challenged by the Motion Picture Association, the Supreme Court ruled in their favour. Ironically, however, the networks had already begun to comply with the FCC's mandate. Further legislation to reinstate these rules were drafted and gained increasing support up until 2007 but could never progress beyond the Senate subcommittee stage. In 2010 the 21st Century Communications and Video Accessibility Act (2010) restored the rules earlier set up by the FCC to mandate 4 hours of AD content per week (Media Access Australia, 2012a).

In addition to these examples of successful legislation, some countries have effectively embraced a non-legislative approach. For example, in New Zealand, where there is currently no legislation in place, 40 hours of AD is available across three channels (TV ONE, TV2 and TV ONE plus 1). The service, which is government funded, began in 2011 with 2 hours a week. From 2013 AD was provided by the federally funded Able who both source existing AD content and create their own tracks. To simplify the process, the same person scripts, voices and mixes the AD track. The service, which is used by 3% of all New Zealanders and 72% of that country's blind and vision impaired community, is offered only on terrestrial broadcast television. However, Able are considering options for offering an over the top online service as well.

Similarly, in Italy, despite the lack of official legislation, AD is available on the public broadcaster Radiotelevisione italiana (RAI) and airs on a total of 13 channels across RAI1, RAI2, RAI3 and RAIPremium. The number of AD hours available rose from 387 in 2012 to 574 in 2014 (RAI, 2014). In addition to local programming, some international television series and movies are audio described. People seeking to access this service must refer to the weekly programming available on the teletext video (Televideo) to check what is on-air and audio described. An AD mode can be activated by clicking on the info button of the remote control of a

smart television. AD is available online through the on-demand service RAI-Segretariato Sociale webpage. This website allows users to listen/watch and to choose among the entire AD programming produced by RAI; however, it must be noted that this site is not the RAI's usual online player www.raiplay.it, where AD is not available. AD is therefore segregated onto RAI-Segretariato Sociale, a site responsible for the creation and production of all social promotion and awareness campaigns.

However, while guidelines and discussion around AD content and its provision seem to be on the discussion table in many countries, to date this has not yet been the case in Australia. For some, this is seen as an historical failure to future proof incoming technology – Media Access Australia note that the transition to digital television in Australia created some confusion because "no legislation was introduced to ensure that digital broadcasters transmit AD as a secondary channel, and no standard for receiver manufacturers was developed" (Media Access Australia, 2012a). That is, while there was increased public and governmental awareness of AD at the time, no official legislation was put in place to ensure its smooth delivery.

Indeed, while the content and technology are available for the provision of AD in Australia, there seems to be a general reluctance from policy makers to acknowledge the importance of AD. The government and industry have, at several points since 2007, claimed that, in the Australian context, alternatives to regulation would be a more effective path towards the provision of AD in this country (Department of Broadband Communications and the Digital Economy, 2010; Department of Communications and the Arts, 2017a). This is in contrast to international research which shows that accessible television is more widely available when legislation is in place (Kubitschke, Cullen, Dolphi, Laurin, & Cederbom, 2013). Similarly, Australian commentators have regularly called for the introduction of legislation (ACCAN, 2012, 2017; Ellis, Kent, Locke, & Merchant, 2016).

This lack of policy has meant that the only AD available to Australian audiences is via DVDs or a few programs on international subscription VOD services. With a new international broadcast network entering the Australian television industry with CBS' takeover of Channel 10, broadcasters can no longer afford to resist the

introduction of AD. CBS has a long history of providing AD in the US. CBS provide AD as part of their terrestrial television service in the US where they are subject to AD requirements under the 21st Century Communications and Video Accessibility Act (FCC, 2016). Indeed, they regularly exceed their mandated AD requirements by voluntarily providing "200% of the video described hours required under the FCC's reinstated regulations, with over 100 hours of video described programming on CBS per calendar quarter". However, some popular CBS shows already screening on Australian free-to-air and subscription television – which contain AD content when distributed in the US – do not have this feature when screened here as they are not mandated to do so. Examples include *Blue bloods, Criminal minds, NCIS: Los Angeles, NCIS: New Orleans* and *The big bang theory* (CBS, 2017). We call on the CBS to also exceed their mandated AD requirements in Australia. The lack of readily accessible AD content in Australia – and specifically any legislation for it – is in direct contrast with the provision of other accessibility features in television such as closed captions for Deaf or hard of hearing audiences. Crucially, to date, there has been no amendment to the BSA to mandate either the provision of AD on television nor the provision of television sets sold in Australia to display them (Ellis, 2014b) in contrast to captions services. BCA noted this disconnect between the availability of captions verses AD as a human rights issue in 2013 when they lodged a human rights complaint against the ABC (BCA, 2013):

> *People who are blind have waited too long and are frustrated that audio description on television remains indefinitely beyond our reach. Our Deaf or hearing impaired peers have always seen great commitment from the ABC, but we continue to feel like second class citizens.*

In some ways, the process of implementing the inclusion of AD on Australian television has mirrored the experiences of captioning in both pressures from discrimination complaints, coordinated advocacy through representative groups such as BCA, and in benchmarks set internationally. For example, in 2013 the BCA lodged the aforementioned human rights complaint against the government and the ABC for disability discrimination, specifying the lack of AD on Australian television (BCA, 2013). In addition, the Accessible Netflix Project (established by Robert Kingett) has been an important and effective instigator for change in AD practices in the US, including the inclusion of AD on all original Netflix content in

the US, and some in Australia, whilst also influencing the growing public and government discourse around AD in Australia (Ellis, 2015, 2016).

Yet, to date, the acceptance of AD as of equivalent 'value' as captions has not yet occurred. Again, this is due to a lack of legislation. For example, although newer model smart televisions imported into Australia include AD functionality, there are no Australian standards mandating for this, nor any free-to-air broadcaster offering this service. We argue that for effective changes to occur, the argument for AD needs to be widened. For example, while early captioning advocates and activists focused on the rights of people with hearing impairment to access and enjoy television as a form of social inclusion, it was only when these advocates could demonstrate the benefits of captioning for groups beyond those with hearing difficulties that the technology of closed captions really took off (Downey, 2008). Now, people who are not Deaf or hard of hearing regularly make use of captions (Griffin, 2015; Hawkins, 2011) – this feature is particularly popular amongst people who are 18-24 (Hawkins, 2011). AD offers similar mainstream benefits to audiences, and broadcasters also stand to benefit from the innovative potential of AD, both in terms of capturing new audiences and the potential to retain the attention of existing audiences distracted with other things. With multitasking activities effecting consumer engagement and advertising effectiveness (Ortiz, Cummins, & Bichard, 2016), broadcasters, content providers, and advertisers therefore should consider the innovative potential of supports to improve comprehension such as AD.

Case Studies in the Australian Media

ABC Trials

Just like the provision of captions has increased audience participation across all television genres and demographics, the delivery of an AD service on Australian digital free-to-air television offers great promise. An AD trial was undertaken on the ABC in 2012, providing 14 hours of AD content over 13 weeks. However, while the trial was largely successful, the benefits were short-lived. The ABC trial report, and feedback from disability groups, identified several technical impediments and limitations which affected the experience of AD content during the trial. These included the timing of the trial during a period in which the transition from

analogue to digital television was still occurring (creating hardware compatibility issues for some consumers); the limitations of the 'ad hoc' approach undertaken by the ABC and manual implementation of AD, including its rollout on limited devices; and the need for upgraded digital receivers (Department of Communications, 2014, p. 2). While advocacy groups acknowledged the technical complexities involved, the expected stakeholder discussions that were due to be held post-trial, in part to attempt to resolve the issues experienced, were never undertaken. The lack of subsequent commitments to providing AD resulted in the 2013 BCA formal complaint of disability discrimination against the ABC and the Federal government.

In more recent times, there has been renewed interest in improving the accessibility of AD broadcast content. As the lines between primary and multichannels continue to blur and the importance of catch-up television offerings improve online, new attempts to improve such accessibility have occurred, most notably the second trial of AD on the ABC's catch-up portal iview in 2015. Over the 15-month trial, 1,305 hours of AD content was provided – this was played 158,277 times across multiple platforms, including iOS, Android, the Freeview app and desktop computers (ABC, 2016). The trial further confirmed that AD held considerable benefits for people with a vision impairment and also, importantly, demonstrated that AD was technically feasible, with far less "technical difficulties" than the experience of the 2012 broadcast-based trial.

Vision Australia presented a series of qualitative insights regarding the two ABC trials. Two key themes were clear across the compiled feedback. In 2012, the human rights issues and associated feeling of social inclusion were foregrounded, as these indicative quotes suggest:

> *The trial has opened my eyes to the sheer impact that television has on people's lives and the extent to which we are excluded by not having access to it.*

> *I realised the worth of television as social currency. When I catch up with the family for example, we might talk about other things as well, but a fair chunk of the conversation seems to revolve around television programs and I can finally participate in these conversations.*

While the importance of social inclusion remained, a new focus on the *quality* of the service and associated technological issues became paramount after the 2015-16 trial:

> *I attempted to access the iview audio description trial even though I realised it would be very limited because of my quite low monthly download limit. I had acquired an Apple TV and was playing the iview stream through my TV so I could sit comfortably on my lounge (not at my computer, and not listening through the tiny iPhone speaker). However, the stream invariably stopped half way through and I got tired of having to start it again only for the same thing to happen. Thus, because I could not get my iPhone to stream through my Apple TV to my main TV, and was not prepared to have an unrelaxing night at my computer just to get relaxing entertainment, I gave up.*

Several participants also noted issues with the provision of AD as an over the top internet service citing slow download speeds, expensive internet connections and an inability to sync technologies. This shift in focus replicates our research into television audiences with vision impairments over a 5-year period. In 2012, Australian audiences had no prior access to AD and so were arguing for its relevance in human rights terms, whereas in 2016, when audiences had some experience with AD through the trials and subscription services such as Netflix and iTunes, this human right expanded to include a high quality service. A similar approach occurred as Deaf audiences demanded better quality captions the more experience they had with them. Significantly, the second iview trial occurred after Australians had access to AD via the 2012 trial, Netflix and iTune's AD VOD offerings, and a government funded national upgrade of cinemas to be caption and AD compliant by 2013. All of this seemed to pave the way for more AD content across many platforms and, as such, the small trial on the national broadcaster perhaps seemed to make up only one piece of a bigger picture. Indeed, because the trial had an end date, some even refused to participate, knowing this was not a permanent AD service:

> *I watched* Rake *during the 2012 trial and I was looking forward to watching it again thanks to audio description on iview, but then I realised that I wouldn't enjoy it because it would always be in my mind that this was limited*

access and none of my friends would have the door closed on them in July 2016 when the iview trial ended. So I didn't watch it.

These concerns over the lack of long-term change were valid – despite repeated AD trials and the lodgement of aforementioned discrimination complaints by BCA in 2013, there remains no notable AD service on Australian broadcast television.

Screen Australia

To coincide with a 2013 cinema upgrade, the Australian film and television funding agency Screen Australia announced that it would significantly improve the accessibility of Australian feature films for both the hearing and visually impaired (Calder, 2011) so that "[financed] feature films… be captioned to provide access for the hearing impaired, and audio-described for the visually impaired" (Screen Australia, n.d.). CEO Ruth Harley said, "better and more equitable audience access to Australian films at a reasonable cost is a benefit for the industry and community as a whole" (Calder, 2011). Indeed, Screen Australia's Terms of Trade that apply to funding recipients state that (Screen Australia, 2017):

> *Screen Australia requires feature films that it funds to be captioned and audio described to provide access for the hearing and/or visually impaired, for cinemas and DVD. The producer will need to budget for these requirements. Feature film producers are also required by Screen Australia to use reasonable endeavours to ensure that all Australian distribution agreements include access for the hearing and/or visually impaired via captioned and audio-described theatrical screenings and DVDs.*
>
> *Screen Australia also encourages producers of all non-feature film content to budget for captioning and audio description, and for accessible web design, to provide access to their projects for both hearing and visually impaired audiences.*

The estimated cost of providing both captioning and AD for films would be $6000-$8000 per film, and would bring Australia into line with the UK and US markets where strict requirements for captioning and AD already applied (Calder, 2011). Screen Australia's 2014-2015 Annual Report also reaffirmed a commitment to AD (Screen Australia, 2015). Further, section 21.3.5 of the Core Conditions which also

apply to television dramas, cites AD as a matter that must be included in each Marketing Agreement, stating that (Screen Australia, 2013):

> *… an undertaking by the Marketing Licensee to use best endeavours to provide access for the hearing impaired and visually impaired by means of captioned and audio described theatrical screenings and DVDs.*

Nevertheless, while Screen Australia encourage the inclusion of AD on theatrical release and cinematic DVD distribution through their marketing and budgeting policies and terms of trade, only 25% include an AD track compared to 55% with captions (Media Access Australia, 2012c). This percentage is even lower when discussing AD content on Australian television. This was highlighted using an analysis of Screen Australia funded dramas screened on the ABC primary and digital multichannels during prime time (6pm to midnight) across a 1-week period (from 31 October 2017); we also noted the most popular content being accessed via iview during the same period. This list was compiled through a search of the Freeview TV guide and was cross checked with the screen guide on the Screen Australia website and with a list of the substation's AD television content, the DVDs' accessibility information on the JB HiFi and ABC websites, as well using the DVD ISBN/Cat No. to find the trove library records.

This brief case study focused on the public broadcaster the ABC because it was identified during interviews as being of significance to Australians with blindness and vision impairment. Significantly, the ABC charter pledges a commitment to providing news and entertainment to *all* Australians. By contrast, internationally, many public broadcasters take responsibility for providing accessible content such as AD (Kubitschke et al., 2013) and their willingness to do so has a significant impact on its availability and subsequent legislation. For example, as noted by the US FCC in 1999, AD had been made available on the public broadcaster for almost a decade by the time they introduced their notice of regulation (FCC, 1999), in the UK and Canada public broadcasters regularly exceed quotas, and in Italy and New Zealand where there is no legislation, AD is nevertheless made available by the public broadcaster.

In Australia, by comparison, as our research shows, despite AD tracks being created, they are not broadcast. As Table 3 illustrates, of the nine Screen Australia funded dramas screened on ABC1 during this 1-week period, four had AD tracks

available, and of the three dramas screened on the multichannels, none had AD available. The results from iview were even more troubling (Table 4), finding AD available for two of the four 'best dramas', one of the two 'trending shows', three of the six 'new shows', and one of the six 'complete series'. We also discovered one further Screen Australia funded program available on iview that had an available AD track. Yet none of these AD tracks were broadcast on terrestrial television or via catch up portals. This confirms that, while a substantial back catalogue of Australian televsion content, is audio described, it is being withheld from the free-to-air broadcast platform.

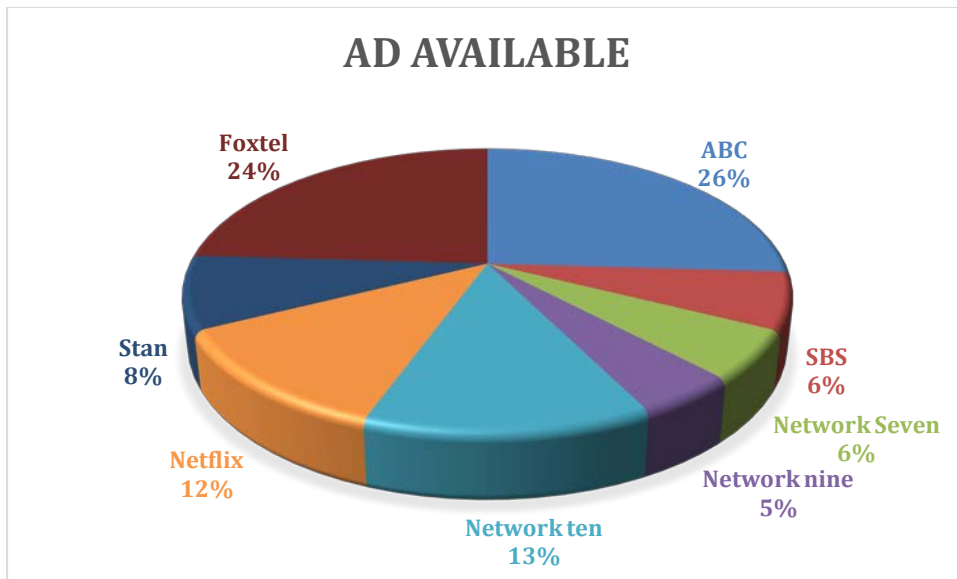| Channel / Program	Viewing times	AD created	AD broadcast
ABC1			
Australia's great war horse	Tuesday 11:17–12:17pm	**Yes**	**No**
Rosehaven (series 2)	Wednesday 9:08–9:34pm	No	No
Rage 30 – The story of rage	Wednesday 11:35–12:30pm	No	No
The Ex-PM	Thursday 8:33–8:58pm	**Yes**	**No**
Bucket	Thursday 8:59-9:26pm Repeated Friday 3 Nov 12:40am	No	No
Upper middle bogan (series 3)	Thursday 9:52–10:22pm	**Yes**	**No**
Classic countdown (series 1)	Sunday 6:02–7:00pm	No	No
Dr Blake (series 5)	Sunday 8:30–9:30pm	**Yes**	**No**
The divorce	Sunday 11:02–12:37am	No	No
ABC2			
Prisoners and pups	Wednesday 9:26pm–10:26pm	No	No
ABC3			
Little lunch	Tuesday 6.37–7pm	No	No
Barney's Barrier Reef	Daily 7:31–7:59pm	No	No
ABC24			

Table 3. Audio described content on Screen Australia funded dramas on the ABC

Category / Title	Genre	AD created	AD broadcast
Best dramas			
Glitch	Drama	**Yes**	**No**
Dr Blake	Drama	**Yes**	**No**

Pulse	Drama	No	No
The warriors	Drama	No	No
Trending on iview			
Dr Blake	Drama	**Yes**	**No**
Rosehaven	Comedy	No	No
Discover new shows			
The Ex-PM	Comedy	**Yes**	**No**
The letdown	Comedy	**Yes**	**No**
Upper middle bogan	Comedy	**Yes**	**No**
Wham bam thank you Ma'am	Comedy	No	No
The edge of the bush	Comedy	No	No
The Kettering show	Comedy	No	No
Watch the complete series			
The house with Annabelle Crabb	Documentary	No	No
The warriors	Drama	No	No
Get krack!n	Comedy	No	No
Pulse	Drama	No	No
Glitch	Drama	**Yes**	**No**
Rosehaven	Comedy	No	No
Ronny Chieng: International student	Comedy	**Yes**	**No**

Table 4. Audio described content on Screen Australia funded dramas on ABC iview

In addition to ABC content audio described for the iview trial, a further 122 Australian television shows have been audio described by The Substation, including several full series. The majority of these have aired on either Australian free-to-air or subscription television in the last 10 years. While this is admittedly a small proportion of the total number of television content screened in Australia across this period, it certainly represents more than the 193 hours of AD offered during the 2012 terrestrial trial and the 922 hours during the iview trial. It is significantly more than the 2-14 hours per week the vision impaired community are requesting As Figure 7 shows, about a quarter of these shows were first broadcast on the ABC and Foxtel, with network nine having the least amount of available content at 6%.

AD AVAILABLE

- Foxtel 24%
- ABC 26%
- SBS 6%
- Network Seven 6%
- Network nine 5%
- Network ten 13%
- Netflix 12%
- Stan 8%

Figure 5. Audio described content on Australian television (2007-2017)

Although these AD tracks have been created, they are typically unavailable to potential audiences, except via DVD release and are not screened on television, even by broadcasters who have AD infrastructure in place. The reality is that there is therefore a large 'back catalogue' of AD Australian television content that is not made available to Australians who are blind or vision impaired, nor indeed the other potential audiences suggested in this report. This is not due to a lack of technology – the BAM app profiled earlier for example is able to access AD content reasonably easily. Instead, the challenges can be broadly defined as being due to resistance to change by the Australian television industry and, a recurrent theme, the lack of legislation.

Television licensing agreements have had a clear impact on the potential of broadcast television accessing any AD back catalogue that may be available. As the CEO of BAM explained in an interview:

> *The hurdles are quite substantial. Trying to gain content from networks and productions companies can sometimes get lost in a 'legal jungle' of who owns the rights and what copyright laws are applicable. Attitudes to these issues seem to be heading in the right direction but there is still a lot of work to be done.*

This same legal jungle of media rights delayed both the introduction of pay television and subscription VOD in Australia. Indeed, innovation has not traditionally been a feature of the Australian television industry, which has tended to stay closed in a mutually beneficial relationship between politicians and media barons – this is despite the Australian government's 2008 policy discussion paper into access to electronic media for the vision and hearing impaired which predicted industry innovation would result in the provision of AD on Australian broadcast television (Department of Broadband Communications and the Digital Economy, 2010). While this may start to change for the VOD industry – due in no small part to imported AD content from US programming – the same cannot be said for free-to-air content.

Audio Description Audiences

This chapter reports the findings of and offers discussion on the results of two research projects conducted within the Department of Internet Studies at Curtin University between 2013 and 2017. These projects focused on access to digital television via terrestrial broadcast and web capable devices, as well as access to subscription VOD. These projects suggest three clear audiences for AD in Australia:

- People who are blind or vision impaired
- People with other disabilities such as those with ASD or an intellectual disability
- Mainstream audiences individualising their television experience

While these projects took a cross-disability approach to television accessibility for people with disability, 13 people with vision impairment were interviewed regarding their access to television and an additional 64 participated in online surveys. This section reflects on the unique observations of this group and considers the potential audiences and users of AD. The second part of this chapter introduces the potential benefits of AD to a more mainstream audience.

Observations from the Blind and Vision Impaired Audience

A number of common themes emerged across these projects and interviews, including:

- The importance of the public broadcaster.
- Television being a social activity.
- The feeling of exclusion – television is considered integral for inclusion.
- Issues surrounding cost – the "economics of disability" (Ellis et al 2016).
- Contradictory approaches to technology – some were willing to try new technology, others preferred older technology and were unwilling to upgrade.
- The frustration that Australian content is audio described when exported overseas or released on DVD but is not available on broadcast television.
- Frustration with watching non-AD television content once AD has been experienced.

Throughout these projects, participants often complained that AD was not available in Australia, or that it was inconsistently available, and that it was too

expensive to access. Further, there were frustrations that, even when AD was available for both local and international content screened in Australia, Australian audiences were never given access:

> *… audio description, you know, [is] really great. And of course, there's lots of blind citizens and members that love the [ABC] trial, that are very much involved in the trial and would love to see audio description built in some way here in Australia. It would be fantastic. It happens in the UK and there's plenty in Canada in the US and other places. And it's interesting. An example, for instance,* Neighbours, *which is an Australian show, is audio-described in the UK, but not audio-described here. Unbelievable.*

> *… if you look at the UK [or] the American experience… probably fifty percent of the shows come on the ABC, on iview, [already have] audio description on them, so why not just buy the audio description?*

After the ABC iview trial and, to a lesser extent, the introduction of AD on Netflix original programming, audiences who are blind or vision impaired found it difficult to impossible to go back to watching television without AD:

> *… when the availability of iview came in, and Netflix, I find it really difficult to go back to watching shows that don't have any audio description.*

> *Now that there is audio description I don't bother watching shows that don't have it. As the great majority of TV shows don't have AD, I don't feel like I'm missing out by not having a TV.*

Public broadcasters have typically shown leadership in countries where AD is available. As discussed earlier, AD was already provided on the public broadcaster in the US before quotas and legislation were introduced and they are the main provider of AD in Canada, New Zealand and Italy. Indeed, a study of e-accessibility in 27 member states of the European Union in 2013 found it was the public broadcasters who most often provided AD and that AD became more available in countries in which legislation had been demanded (Kubitschke et al., 2013). Our participants were also of the view that public broadcasters have a responsibility to offer AD:

> *Overall my dominant viewing is via ABC iview and SBS on Demand websites.*

I watch iview on my phone... but there is less and less AD and a lot of good shows don't even have it. Consequently, I tend to watch iview less and less.

I watch a lot of ABC. So if I'm gonna watch something, I watch a lot of stuff on iview, on my iPad, and also on 7PLUS or PLUS7, whatever it's called, on my iPad as well. So generally that's how I will watch – so, I will keep up with what's going on, but only if it's available in Catch Up. I use my iPad because my iPad's got voiceover software and whatever I touch, it reads. So I can sort of move around a lot easier, but it doesn't work with every channel.

Cost is a significant factor for this community. Costs associated with internet connections and hardware required to access VOD for example were prohibitive. With AD only available via paid subscriptions or purchases, people with Blindness and vision impairment were left behind:

Technology works to create and enforce class divides by excluding those of us without the latest computer equipment.

All but ABC iview have 'updated' systems, which excludes me from accessing. My iPad, although but a handful of years old, cannot 'upgrade' its OS – Apple requires that a new model is purchased!

Across the board, participants in our research projects were of the view that setting up television was difficult to impossible, while accessing the same content on a mobile device such as a smartphone or tablet was much easier. Accessible or AD remote controls have been highlighted in a number of research projects as an essential access feature for people with disability, and for vision impairment in particular (Carmichael, Rice, Sloan, & Gregor, 2006; Clarkson & Keates, 2004; D. Costa & Duarte, 2017; L. C. P. Costa, Ficheman, Correa, Lopes, & Zuffo, 2012; Ellis, 2014a; Pedlow, 2008). Another key theme that emerged throughout both projects was the difficulty people experienced trying to set up their televisions and access AD:

I do get help setting up the channels and I'm a perfectionist, I want all the channels to work. I've never done this by myself as I believe it is not accessible... It wasn't accessible to set up. I had to point the remote control to a certain part of the TV to get it to work (that was very annoying as I'd

usually miss the spot or go right up to the TV with the remote to make it work – defeats the purpose of having a remote).

Pedlow (2008) recommends a broader universal design approach to accessibility to make technology accessible and useable for all with varied needs. Such an approach has been embraced by Apple TV which is marketed as being accessible 'out of the box', with an audio remote control being one of its main features. Increasingly, these audio features are being used by the mainstream population. As a research participant without a vision impairment reflected when asked to describe the ultimate television experience:

… probably all the voice-controlled ones are very good now and all the new technologies that has come out. It looks like it's really good…. all the technology that makes everything easy to say, turn on turn off and all those. I think voice control is probably the best.

Benefits for the Mainstream Audience

This new media environment is characterised by choice – people can employ a variety of tools to find the content relevant to them. Indeed, television producers are increasingly recognising the importance of smaller niche audiences (Barr, 2011; Hartley, 2008; Lotz, 2007; Morsillo & Barr, 2013; Napoli, 2011; Sepinwall, 2012), and, as Napoli argues, despite content at times only attracting a small audience, "when these audiences are aggregated, they are quite significant" (Napoli, 2011, p. 59). For example, Netflix targets specific and niche audiences through targeted recommendations (see Amatriain & Basilico, 2012; Brown, 2012; Keating, 2012; Napoli, 2011).

However, difficulty in accessing the back catalogue of AD contents suggests a lack of knowledge amongst the industry, particularly from broadcasters and producers, about the importance of AD and its potential to attract new audience sectors. Yet with more than 575,000 people in Australia reported to have vision impairment (National Disability Insurance Scheme [NDIS], 2015), a recommendation based on the availability of AD could result in a considerable audience. While AD would be of most benefit to audiences who are blind or vision impaired, increasing advances in technology – and associated increase in user engagement – are resulting in the emergence of an unexpected audience demand for AD content.

Research by Judy Garman and 3Play Media note that the benefits of AD extend beyond the vision impaired community (Garman, 2011). That is, as its advantages become more known, others are embracing its features, including the elderly, people with intellectual disabilities, and people whose first language is not English, as well as the non-disabled mainstream audience – Table 5 outlines the benefits of AD to these three broad groups. These can be summarised as assisting:

- People with an intellectual disability in an educational setting who benefit from receiving both visual and audible information (Mechling & Collins, 2012).
- People with ASD who may have difficulty deciphering facial expressions and emotion (Garman, 2011). This group also report educational benefits as students with ASD have a strong preferences for voice-over narration on instructional videos (Bennett, Gutierrez, & Honsberger, 2013).
- The development of literacy and vocabulary and the development of descriptive writing skills through modelling in children (Hoffner, Baker, & Quinn, 2017; Peskoe, n.d.). The International Literacy Association describes AD as an instructional tool that can help "students improve their writing abilities and their attention to details while experiencing a new technology" (Hoffner et al., 2017). The association shows an example whereby students' comprehension of a video scene is compared – students watch a lesson without, and then with, AD – and suggests AD offers the opportunity for increased comprehension.
- Video based medical education (Mills, n.d.).
- The creation of transcripts and image databases (Turner & Mathieu, 2008).
- People who need to switch focus between watching television and other tasks (Udo, Acevedo, & Fels, 2010).
- Fans to find out more information about the content of television shows (Mancuso, 2015).

Genre	Examples of benefits to:		
	The blind and visually impaired	**Other disability groups**	**Mainstream audience**
News / current affairs / documentaries	Identified by Vision Australia clients as top three genres they want audio described (Vision Australia, 2014). Documentaries were the most sought after genre in the iview trial (ABC, 2016) and in the 2012 trial was in the top two genres (ABC, 2012). However, other studies suggest it is inappropriate to audio describe the news (Fryer, 2016)		Visual indexing for thematic information retrieval is useful in media education, newsrooms (Turner & Mathieu, 2007) and creating a television database (Caldera-Serrano, 2010)
Cooking	Identified as a highly visual genre (Sueroj & Sarakornborrirak, 2016)	Teaches people with intellectual disability important life skills (Mechling, Ayres, Bryant, & Foster, 2014)	
Drama	Findings from the ABC trials suggest drama is best suited to AD (ABC, 2012, 2016). Drama was in the top two genres of the 2012 FTA trial (ABC, 2012)	Helps people with ASD understand human emotion and engagement (Garman, 2011)	For fans / those interested in the show by offering another layer of information (Mancuso, 2015) as well as for people multitasking (Mills, n.d.)
Kids' television	Promotes literacy, social skills and comprehension, vital on children's television which tends to be very visual (Kleck, 2015)	Helps people with ASD understand human emotion and engagement (Garman, 2011)	Acquisition of vocabulary for all children (Peskoe, n.d.)
Educational television	Promotes literacy, social skills and comprehension (Kleck, 2015)	Students with ASD indicate a preference for audio (Bennett, Gutierrez, & Honsberger, 2013)	Improved comprehension (Hoffner, Baker, & Quinn, 2017), multimedia literacy (Mills, n.d.), acquisition of new vocabulary (Peskoe, n.d.) and video-based medical education (Mills, n.d.)

Table 5. Benefits of audio description according to television genre

The increasing personalisation of television – both through an increase in programming options such as VOD and due to the rise in the preference for individualised devices – offers an opportunity to introduce accessibility features as an option for all (Ellis, 2014b, 2015; Ellis & Kent, 2015). These personalised accessibility options are not just for their 'obvious' markets – it is predicted that AD will become increasingly mainstreamed as the general population discover – and embrace – its convenience. As Mills (n.d.) explains:

> *Audio described videos have been advertised as aids for multimedia literacy; for "eyes-free viewing" by sighted people (e.g. while driving); for video-based medical education; and for training Autistic people to read facial expressions.*

For example, when Netflix introduced AD on their original programming in 2015, they also recognised its more mainstream benefits and normalised the feature, describing it as "just like choosing the soundtrack in a different language" (Wright, 2015). AD is also being embraced by mainstream audiences to provide more information about the content of television shows. For example, viewers of *Sense 8*, a Netflix series well known for its convoluted storyline, note the usefulness of the AD track (Mancuso, 2015), and Netflix now promote the entertainment potential of their AD service to augment consumer experience of such shows. As communities of fans converge online to discuss key moments of popular television programming, the increased information about the programs via AD can be seen as offering an important fan resource. There is even the opportunity for newsrooms to create image databases to enable them to respond more quickly within the 24-hour news cycle. Indeed, the benefits go beyond just an improved user experience for everyone – technology companies such as Apple and Google recognise that solving accessibility problems will also result in a commercial advantage (Bownlee, 2016; Reena, 2009).

Conclusions and Recommendations

AD is not available on Australian broadcast television. Television audiences who are blind or vision impaired have been advocating for this to change for the last 10 years, claiming access to television is a fundamental human right and integral to social inclusion. At the same time, successive governments have offered industry innovation in response to technological change and the digitisation of television as the most effective solution to this problem. While to a certain degree this has been the case – with subscription services including Foxtel, Netflix and iTunes offering some limited AD – the extra costs associated with both subscribing to these services and accessing them via the internet are not feasible for a large proportion of the vision impaired community.

By comparison, AD is available on broadcast television in the UK, US, Canada, New Zealand, Ireland, Germany, Spain, Italy, Poland, France, Portugal, the Czech Republic, Korea, Thailand, Austria, Switzerland, Belgium and a number of other European countries. Typically, the public broadcasters in these countries take responsibility for the provision of AD. In some cases, this has resulted in the introduction of legislation and quotas forcing commercial stations to likewise offer this service. Similarly, in many countries where legislation is not in place, AD is still made available by public broadcasters. In both contexts, once AD is introduced, its numbers steadily increase and new audiences are attracted to it. Yet, despite this international context of an increasing provision of AD, the Australian television industry continues to claim there are unique barriers related to technology, licencing agreements and Australian standards. Further, as we show throughout this report, a substantial back catalogue of Australian AD content – created due to funding agreements, export requirements and even international legislation – exists which potential audiences are being denied access to.

The following recommendations are therefore proposed as a result of the findings of this project:

- AD be made available on Australian free-to-air television either via terrestrial broadcast, catch-up portals or a dedicated app.
- Any imported programming with an AD track created for international audiences must be licensed with the AD track for distribution in Australia.

- Further research is conducted to establish the mainstream benefits of AD and talking electronic programing guides (EPGs). The ways people consume media is constantly changing – if these formats and technologies can be embraced by the mainstream, disability inclusion will improve.
- Regulation and standards introduced in the 1990s be brought up to date with the 21st century digital and online television environment:
  - The Broadcasting Services Act (BSA) 1992 should immediately be expanded to encompass television screened online;
  - Australian standards should be introduced to ensure set-top boxes can receive and display AD;
  - The BSA should be expanded to include AD.
- The government needs to support people with disability to acquire digital literacy skills. Low income members of this group should also be supported financially to get online.
- Innovation and competition in the business sector must be encouraged, for example to develop more apps to facilitate AD.
- Screen Australia policy should be expanded to television drama in more explicit terms.
- The public broadcasters should be supported to provide AD.
- Australian licensing laws be relaxed to allow pubic broadcasters to continue airing shows on their catch-up portals with AD tracks even when they have moved to commercial or subscription channels.
- Further audience research into the feasibility of synthetic voice systems be conducted to discover whether this is an acceptable interim or long-term solution to the provision of AD.

AD is an essential television access feature for audiences who are blind or vision impaired that is increasingly also being found to benefit other non-disabled audiences. In the current international climate of improving human rights for people with disability and individualising and innovating the television experience, Australia can no longer afford to refuse to provide AD on television.

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Glossary

ABC   Australian Broadcasting Corporation

ACB   American Council of the Blind

ACC   Australian Caption Centre

ACCAN   The Australian Communications Consumer Action Network

AD   Audio description / audio described

ASD   Autism spectrum disorder

BAM   Big Access Media

BCA   Blind Citizens Australia

BSA   Broadcasting Services Act (1992)

EPG   Electronic program guide

FCC   Federal Communications Commission

NWPC   National Working Party on Captioning

UN   United Nations

UNCRPD   United Nations Convention on the Rights of Persons with Disability

VOD   Video on demand

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