

# THE MEDIA ACCESS REPORT

ISSUE 24, SPRING 2012



MEDIA  
ACCESS  
AUSTRALIA  
INCLUSION THROUGH TECHNOLOGY

# CONTENTS

Media Access Australia – inclusion through technology.....	4
Our expertise.....	4
Our heritage .....	4
Disclaimer .....	5
Submissions.....	5
Media access news .....	5
Death of Media Access Australia’s chairman, Graham Jones.....	5
Red Bee Media wins access contract with BBC .....	6
Exhibition celebrating blindness comes to the Melbourne Museum .....	7
Television .....	7
Audio description trial on Australian television commences.....	7
Audio description hits 20 hours a week in New Zealand.....	8
Audio description again mandatory on American television .....	8
Coles agrees to caption its commercials .....	9
New US access standards for electronic equipment.....	9
Olympics and Paralympics audio described in the UK.....	9
Video explains Canada’s new described video program guide .....	10
Race against the clock: the challenges of captioning live sport.....	10
DVD.....	12
Access on new release DVDs .....	12
New Zealand programs to be captioned on DVD.....	13
Education .....	14
Senator Stephens launches cap that! for 2012 .....	14
Live captions for the classroom made easier.....	16
Dell and Microsoft create program for accessible classroom .....	17
Cinema & the Arts .....	17
The accessible cinema rollout: January to June 2012 .....	17
Digital technology .....	18
Siri update boosts accessibility on iOS devices .....	18
Alligator clips make for accessible gaming .....	19
Georgie, the app enhancing Android phones for blind users .....	19

Australians with disabilities pay too much for IT .....	20
Accessibility you can bank on.....	21
Captions included on ABC iView app .....	21
Rival to Siri could increase accessibility of apps .....	22
YouTube caption editor increases quality of captions .....	22
Online media .....	23
Introducing Access iQ: helping create a web without limits.....	23
Closed captions required for online TV in the US .....	24
E-inclusion kit helps seniors with disabilities get online .....	25
Google Maps make Sydney public transport directions accessible.....	26
Closed captions now available on Google+ .....	26
US deafness organisation wins next stage of Netflix captioning suit.....	27
Netflix to use crowd-sourced captions .....	27
Facebook update fails to improve accessibility .....	28
Captions added to Google+ hangouts .....	28
Glossary .....	29
Acronyms .....	30

# MEDIA ACCESS AUSTRALIA – INCLUSION THROUGH TECHNOLOGY

'We believe that all Australians have the right to access all forms of media and information, through technology, so they can participate fully in society.'

Media Access Australia is Australia's only independent not-for-profit organisation devoted to increasing access to media for people with disabilities.

*At the core of our work is the understanding that exclusion from mainstream audiovisual media has profound effects on educational outcomes, workforce participation and social inclusion.*

Access to media through technology empowers people to be independent, gain knowledge, make their own choices, and be active members of our society.

## OUR EXPERTISE

We promote inclusion by providing expert knowledge and advice on existing and emerging mainstream technologies to government, industry, educators, consumer organisations and individuals.

We demonstrate how media accessibility can be improved in practical ways, by piloting innovative ideas and major projects.

We work as a catalyst for change in areas of access that include television, DVD, cinema, the arts, education, computing and the Internet, with a primary focus on people who are blind or vision impaired, or Deaf or hearing impaired.

We seek to improve national and international Internet accessibility standards as a member of the World Wide Web Consortium (W3C), an international online community where the general public and organisations work together to develop web standards.

We are a national organisation, based in Sydney, with a satellite office in Perth.

## OUR HERITAGE

Media Access Australia was formed out of the Australian Caption Centre, a not-for-profit organisation co-founded by Adam Salzer and Alexandra Hynes in 1982.

The Centre aimed to promote and produce captioning for Deaf or hearing impaired Australians. At the Centre's inception, captions were non-existent, however, over its life the organisation grew to provide captioning services on TV, video and DVD.



In 2005, the Centre sold its commercial operations including captioning services to Red Bee Media, and became Media Access Australia. We no longer provide services to business, allowing us to focus on promoting inclusion without the conflicts of commercial operations.

As Media Access Australia, our focus broadened to include people who are blind or vision impaired and others who are disadvantaged in access to media. We recognised that, while some needs are different between disabilities, there are important similarities in terms of solutions, technologies, industries and regulation. By focusing on these similarities we can achieve better results for all.

## DISCLAIMER

Statistical information published in *The Media Access Report* is derived from public sources such as television listings and websites. It has been made available for general use only and is provided without warranty as to its accuracy or currency.

## SUBMISSIONS

We are interested in receiving submissions for publication in the Media Access Report, including accounts of media or events and news items dealing with captioning, audio description and other access services. If you have any material you would like to submit, contact Chris Mikul on (02) 9212 6242, or email [chris.mikul@mediaaccess.org.au](mailto:chris.mikul@mediaaccess.org.au)

*The Media Access Report* is published by [Media Access Australia](#), Level 3, 616-620 Harris Street, Ultimo NSW 2007. Phone/TTY: (02) 9212 6242, Fax: (02) 9212 6289.

If you would like to be put on the mailing list to receive future issues of The Media Access Report, email [info@mediaaccess.org.au](mailto:info@mediaaccess.org.au)

---

## MEDIA ACCESS NEWS

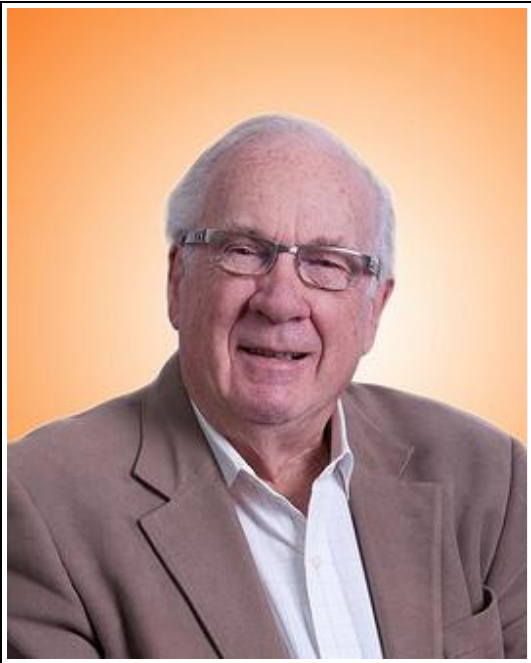
### DEATH OF MEDIA ACCESS AUSTRALIA'S CHAIRMAN, GRAHAM JONES

Media Access Australia's Chairman, Graham Jones, passed away on 22 July after a short illness.

Graham was elected to the board of the Australian Caption Centre in February 1997, and soon after elected as chairman, a position he held until his death. Over the next 15 years he led the organisation through a number of major changes, always with foresight, common sense and corporate courage.

In his tenure, the organisation was instrumental in achieving the adoption of captioning policies by all state and territory governments, the introduction of compulsory captioning quotas through the *Broadcasting Services Act* and subsequent quotas, the introduction of captioned and audio described cinema in Australia, the commencement of captioning on Qantas inflight entertainment, audio description production on DVDs built locally, and the adoption by Screen Australia of captioning and audio description policies for feature films and subsequently DVDs.





Graham Jones

Graham's skills were most obvious during the successful sale of the Australian Caption Centre's commercial operation to Red Bee Media in 2006. The beginning and ensuing growth of Media Access Australia to its position today are achievements that we are sure Graham was very proud of.

Graham was excited by the prospects of our new social enterprise, Access iQ, launched in July, and this year's audio description trial on the ABC. He has left an indelible mark on access-to-media services in Australia and we will continue our work here at MAA with Graham's legacy firmly in mind.

His leadership and friendship will be greatly missed by the board members and staff of Media Access Australia.

## RED BEE MEDIA WINS ACCESS CONTRACT WITH BBC

Following a tender process, Red Bee Media has won a 7-year contract to provide access services for the BBC, including captioning, audio description and signing.

The deal will see the company providing access for more than 60,000 hours of programs between now and July 2019. David Padmore, Red Bee's Director, Access & Editorial, said in a media release, "Red Bee Media has a long and positive history of working with the BBC and we are delighted to continue our relationship for the next seven years... Red Bee Media is a pioneer in the innovation of access services and we remain committed to investing in and developing new technologies to ensure we continue to provide our clients and their audiences with the very best, industry-leading services."



Red Bee Media, which is based in the UK, is the largest access provider in Europe, while its Australian division provides captions for Network Ten, the Nine and Seven networks and SBS.

## EXHIBITION CELEBRATING BLINDNESS COMES TO THE MELBOURNE MUSEUM

An exhibition that celebrates people living with blindness or low vision and their achievements is currently on show at the Melbourne Museum. According to the museum website, the exhibition “shows how Australians with blindness or low vision participate in every aspect of community life – thanks to developments in education and training, technology, legislation and social change over the past 140 years”.

Supported by Vision Australia, *Living in a Sensory World: Stories of People with Blindness and Low Vision* gives visitors an understanding of the blindness and low vision community through personal stories, objects from Vision Australia’s heritage collection and examples of new technologies that are increasing the independence of thousands of Australians.

Audio description of the exhibition has been provided by Vision Australia in consultation with Media Access Australia. This gives access to the arts for blind and vision impaired people through an audio track which describes the appearance of displays.

Visitors can download the audio description file from the Vision Australia website and play it on an Mp3 player as they walk around the museum. The Melbourne Museum also provides a number of services catering to the needs of people with a disability, including captions, hearing loops and wheelchair access.

*Living In A Sensory World* is at Melbourne Museum until 28 October. It will then tour venues in regional Victoria.

---

## TELEVISION

### AUDIO DESCRIPTION TRIAL ON AUSTRALIAN TELEVISION COMMENCES

The long-awaited trial of audio description on television commenced on 5 August on ABC1, and will run for 13 weeks between 5pm and midnight.

The trial was announced in a joint media release issued on 19 July by Senator Stephen Conroy, Minister for Broadband, Communications and the Digital Economy, and Senator Jan McLucas, Parliamentary Secretary for Disabilities and Carers.

“This audio description trial is an Australian first,” said Senator Conroy. “It is being funded by the Gillard Government and will cover drama, documentaries and other content broadcast on ABC1.”

“Watching TV is something many of us don’t think twice about,” said Senator McLucas, “but the fact is there are many Australians who haven’t been able to enjoy this popular past time or take advantage of this source of news and information.”



14 hours of audio described programs will be broadcast each week during the trial. The audio description will be 'closed', which means that the viewer will need to switch it on. Only those who have an appropriate digital TV or set-top box will be able to access the service during the trial.

To aid consumers wishing to experience audio description during the trial, the Government commissioned a report on digital TVs and set-top boxes available in Australia which are capable of receiving it.

The report lists TV receivers manufactured by Bush, Grundig, Hisense, Samsung, Panasonic, Sanyo, Sharp, TECO, Samsung and Sony, and gives instruction, on how to activate the audio description on each of them. This is done via a button on the remote control, or by adjusting settings in the set-up menu. The report can be downloaded in PDF and Word formats from the [Audio Description Trial section](#) of the DBCDE website:

During the trial is a combination of AD files brought in from the UK, plus locally produced AD, will be broadcast The first Australian programs to be audio described were *Rake* and *Lowdown* on 6 September.

After the trial is completed, the ABC will report to the Government in late 2012, and the outcome will inform consideration of future audio description requirements.

## AUDIO DESCRIPTION HITS 20 HOURS A WEEK IN NEW ZEALAND

Audio description, which was introduced on New Zealand television in 2011, is now averaging an impressive 20 hours a week on TV1 and TV2.

After the service was trialled in early 2011, *Coronation Street* was the first program to be regularly broadcast with audio description. It has now been joined by the popular local series *Shortland Street* and a variety of other programs and movies. The audio description is produced by TVNZ and funded by New Zealand On Air.

In a news item on its website, Blind Citizens NZ described the growth of the service as "amazing" and said, "We applaud TVNZ and New Zealand On Air for getting behind audio description and continuing to increase the variety of programmes we can now enjoy."

## AUDIO DESCRIPTION AGAIN MANDATORY ON AMERICAN TELEVISION

On 1 July 2012, audio description once again became mandatory on television in the US, with the top four networks and top five cable TV channels obliged to screen 4 hours of audio described programs each week.

Audio description was originally made mandatory in 2000 with a ruling by the Federal Communications Commission (FCC), but this was struck down after a successful legal challenge by the Motion Picture Association. Reinstating it was one of the key provisions of the *21<sup>st</sup> Century Communications and Video Accessibility Act of 2010*, which was signed into law by President Obama in October 2010. The act also states that two years from now, the FCC will report to Congress on audio description, and four years from now, it will have the power to increase it to 7 hours a week.





The Audio Description Project has created a [list of described programs on US television](#).

## COLES AGREES TO CAPTION ITS COMMERCIALS

Following an investigation by *B&T* magazine which found that many major Australian brands are not captioning their TV commercials, Coles has commenced captioning its commercials, but Woolworths has announced that it has “no immediate plans” to introduce captioning.

*B&T*'s investigation named 30 companies which don't caption their ads, including Coles, Woolworths, Foxtel, Budget, Westfield, Subway, McCain and Hungry Jack's. Since the investigation was published on 9 July, Westfield, Hungry Jacks and Coles have announced they will be captioning in the future. The first Coles ad to be captioning, featuring the rock group Status Quo, went to air on 11 July.

In a follow-up article, 'Woolies snubs deaf by refusing to caption ads', *B&T*'s Alex Hayes noted that Woolworths' profit in the first half of last financial year was nearly \$1 billion. “The cost of captioning a 60-second ad is \$300, while around three million people in Australia suffer from hearing loss.”

Deaf advocate Michael Lockrey applauded the move by Coles, and criticised Woolworths for not following suit. “I'm quite surprised by this as both Woolworths and Coles compete so hard on nearly everything else, why not on accessibility and inclusion issues too?”

## NEW US ACCESS STANDARDS FOR ELECTRONIC EQUIPMENT

The Consumer Electronics Association (CEA) has just released five new standards for electronics equipment manufacturers, including one related to accessibility of remote controls for the blind and vision impaired, and another related to captions for 3D TVs.

Standard ANSI/CEA-2041 defines the size, shape and placement of a tactile indicator (known as a 'nib') to assist users who are blind or vision impaired in determining the location of numeric keys on handheld remote controls.

Standard CEA-708.1 outlines the technical specifications for the transmission of closed captioned information for 3D TV programs.

“CEA's standards committees are always looking for new ways to help grow the consumer electronics industry through technological co-operation,” said Brian Markwalter, senior vice president of research and standards at CEA. “The breadth of topics covered by these new standards reflects the innovation in the CE industry.”

For more information, see [the article](#) on the good3Dtv website.

## OLYMPICS AND PARALYMPICS AUDIO DESCRIBED IN THE UK

Following campaigning by the Royal National Institute of Blind People (RNIB), the Opening Ceremony of the Paralympic Games was audio described for British television.



In addition to this, all events at the Olympic and Paralympic Games were audio described for blind and vision impaired spectators at the various venues. The audio description was provided by 90 commentators and announcers who received training from RNIB, and could be heard by spectators via radio receivers and headsets.

Audio description of live events is still very rare on television, although the Royal Wedding in 2011 was live audio described for Canadians on The Accessible Channel. UK viewers were able to watch the Paralympics Opening Ceremony with audio description on the More 4 channel.

## VIDEO EXPLAINS CANADA'S NEW DESCRIBED VIDEO PROGRAM GUIDE

Accessible Media Inc. (AMI) has released a [YouTube video](#) outlining its new online guide to audio described programs across all Canadian TV networks.

In the video, AMI's Director of Accessible Digital Media, Robert Pearson, says, "This program is a natural extension of the services that AMI provides," and asks for feedback from users.

"We realise that a project created by a few representatives may not serve the needs of everyone, but it is important to realise we need to start somewhere. AMI is committed to support and evolve this guide based on your feedback to ensure that we always continue to fulfil our mandate of making all media accessible to all Canadians."

Recognising that not all blind and vision impaired users will have access to the internet, AMI has also set up a national bilingual Described Video Television Guide call centre, with representatives who will assist users to find the listings they want as well as recording their feedback on the service.

---

## RACE AGAINST THE CLOCK: THE CHALLENGES OF CAPTIONING LIVE SPORT

*With increasing levels of sport being captioned on Australian television, Media Access Australia's Eliza Cussen takes a look at the work going on behind the scenes to let Deaf and hearing impaired Aussies in on the action.*

Captioning of sport has lagged behind other types of TV, and while the amount of captioned sport coverage is now on the rise, there are a number of factors which make the logistics of delivering sports captions a unique challenge for broadcasters.

Hearing Jennifer Wardle speak, I think of elocution lessons and people walking with books on their heads. Australians usually blend their words, adding vowel sounds between words to form a continuous flow. Wardle's voice, on the other hand, is clear and clean.

Wardle works as a re-speaking captioner for Ai-Media, the company with the FOXTEL sports contract. Wardle must listen and speak simultaneously, a skill only 30 per cent of us possess. As AFL commentators babble in her headphones, Wardle re-speaks what she hears into a microphone. Voice recognition software dictates her voice as live captions which appear on TV seconds after the



commentator spoke. While she listens, Wardle must watch for errors and change the colour and position of the captions. It's a lot to do in just a few seconds.

"We can keep up with the commentators as long they don't speak over the top of each other. That's when you as a captioner have to choose which is the most meaningful bit being said," said Wardle. "Do you continue with the same person, do you caption the interruption or do you try to summarise both? So that's part of the skill as well – thinking about what's most valuable to the reader of the captions and captioning that content."

The key, especially when it comes to sports captioning, is preparation. Re-speakers need time to program in words the software might have trouble deciphering. The Samoan rugby team, for instance, with names such as Maurie Faasavalu and Faatoina Autagavaia, poses a challenge. The best captioners have a love of language and get kicks out of correct punctuation. The best sports captioners love language and the sport they're captioning.

As the play of the ball is visible on screen, captioners focus less on this and more on communicating the commentary that is of most value to the viewer. "Because captions take up a lot of space on the screen you don't want them there if they're getting in the way of the ball if you don't need them there," said Wardle. "So we like to let the viewer watch the game without the captions intruding."

It has taken a long time for re-speaking to become accepted by the industry. Traditionally, live captions are done by stenographers – professionals with a level of skill comparable to that of an accomplished pianist. Because of this there are few people willing to undergo the years of training required, and fewer companies willing to pay for them.

Media Access Australia's Television Manager, Chris Mikul has watched the industry evolve over 20 years. "Good re-speaking can be as good as stenocaptioning," said Mikul. "But there is a minimum level of quality you associate with stenocaptioning."

The quality of re-spoken captions has improved noticeably over the last couple of years. Much of this comes down to developments in technology. The speech recognition software used by Ai-Media is version 11. It wasn't even commercially usable until version eight. This technology is backed up by the networks' legal requirement to have captions of adequate quality, which have forced captioning providers to up their game.

Legislation plays a key role in providing access to sports coverage. Sports captioning only came about in 2001 after captioning during primetime became compulsory. There are no regulations that specifically cover sport on free-to-air TV, and subscription TV providers only have to caption ten per cent of programs on five of their sports channels this year.

"For a long time the Australian Government didn't impose any captioning regulation on subscription TV," said Mikul. "They accepted the arguments that it's a growing industry and, with Australia's small population, it's unfair to expect them to caption as much as their counterparts in the UK and US."



Wardle, however, has found the attitude of the TV networks more cooperative. “I actually would have thought it’s a little begrudging but what I’ve seen is that it’s something [networks] want to do. Sometimes they have limitations of budget but they continue to grow the amount of captions on TV ahead of their legal requirements which is always a good sign.”



Jennifer Wardle at work

---

## DVD

### ACCESS ON NEW RELEASE DVDS

Of the 82 DVD titles released in June and July and researched by Media Access Australia, 59 were captioned and 22 audio described. This equates to 72% with captions and 27% with audio description, a decrease from May’s all-time high of 40%.

One title, *Safe House* by Universal Sony, was released to the Australian market without audio description although this feature appeared on an international version. Seven titles were released locally without captions or English subtitles when their US releases had a form of access for the Deaf and hearing impaired.

The DVD titles released in Australia since May 2012 with audio description include:



- *21 Jump Street*
- *50/50*
- *Any Questions for Ben* – some DVDs may not be accessible
- *The Big Year*
- *Carnage*
- *Cleanskin*
- *Contraband*
- *Coriolanus*
- *The Devil Inside*
- *The Diamond Queen*
- *Extremely Loud & Incredibly Close*
- *Haywire*
- *J Edgar*
- *John Carter*
- *Killer Elite*
- *Like Crazy*
- *Meeting Evil*
- *Project X*
- *The Sitter*
- *This Means War*
- *The Vow*
- *Wanderlust*

## NEW ZEALAND PROGRAMS TO BE CAPTIONED ON DVD

Three of New Zealand's largest media organisations have joined forces to ensure local content that is broadcast with captions will now also be captioned for DVD release.

Government body NZ On Air, national broadcaster TVNZ and film and TV production company South Pacific Pictures have listened to calls from the cross-sector Captioning Working Group to increase captioning on DVDs.

Since 1984, captions on New Zealand television have been funded by NZ On Air, with a growing number of regular captioned programs. It is only now, through international comparison of access services brought to light by the working group, that New Zealand will move to ensure the captions created for TV will be carried to the DVD versions.

Louise Carroll, chairperson of the Captioning Working Group which is made up of a number of community organisations, said, "New Zealand's level of captioning was among the lowest in the world. NZ On Air is helping remove at least one aspect of this barrier by improving DVD access for more than 700,000 Deaf and hearing impaired people."

South Pacific Pictures head John Barnett said, "The audiences for captioned DVDs are comparatively small...but by working together we've found a way to move past a difficult business case to better serve the Deaf and hearing impaired community."

More information on the announcement can be found in the full [NZ On Air press release](#).



---

## EDUCATION

### SENATOR STEPHENS LAUNCHES CAP THAT! FOR 2012

Media Access Australia's **cap that!** campaign, proudly sponsored by Australian Communication Exchange, was launched by its patron, Senator the Hon Ursula Stephens, at St Clare of Assisi Primary School in Conder, ACT on 27 August. **Cap that!** is a national awareness campaign promoting captions as a literacy tool for all students, and Senator Stephens called on all Australian teachers to become Captions Champions during National Literacy and Numeracy Week (27 August – 2 September) to boost literacy and inclusion for all students.

The Senator said, "As a former teacher I understand that every single class is made up of a diverse learning group, whether those needs are obvious or not. One way to ensure the needs of all your students are met is to switch on captions when audiovisual resources are part of the lesson."

While captions are primarily used for students with hearing impairment, they have been shown to benefit all students, in particular those with a language background other than English, with learning disabilities, struggling readers and visual learners.

They're also available on many DVDs, online resources and TV programs used in the classroom – they just need to be turned on.

Captions Champions receive a free pack with tools to help them use captions in class and champion them in their schools. Over 350 Captions Champions have already been recruited from primary and secondary schools nationwide and thousands of teachers have downloaded the free resources available on the **cap that!** website that include captions.

"It has been inspiring to see educators from all over Australia committing to using captions and the impact in schools as a result. The powerful difference that every teacher can make with such a simple tool is extraordinary," said Senator Stephens.

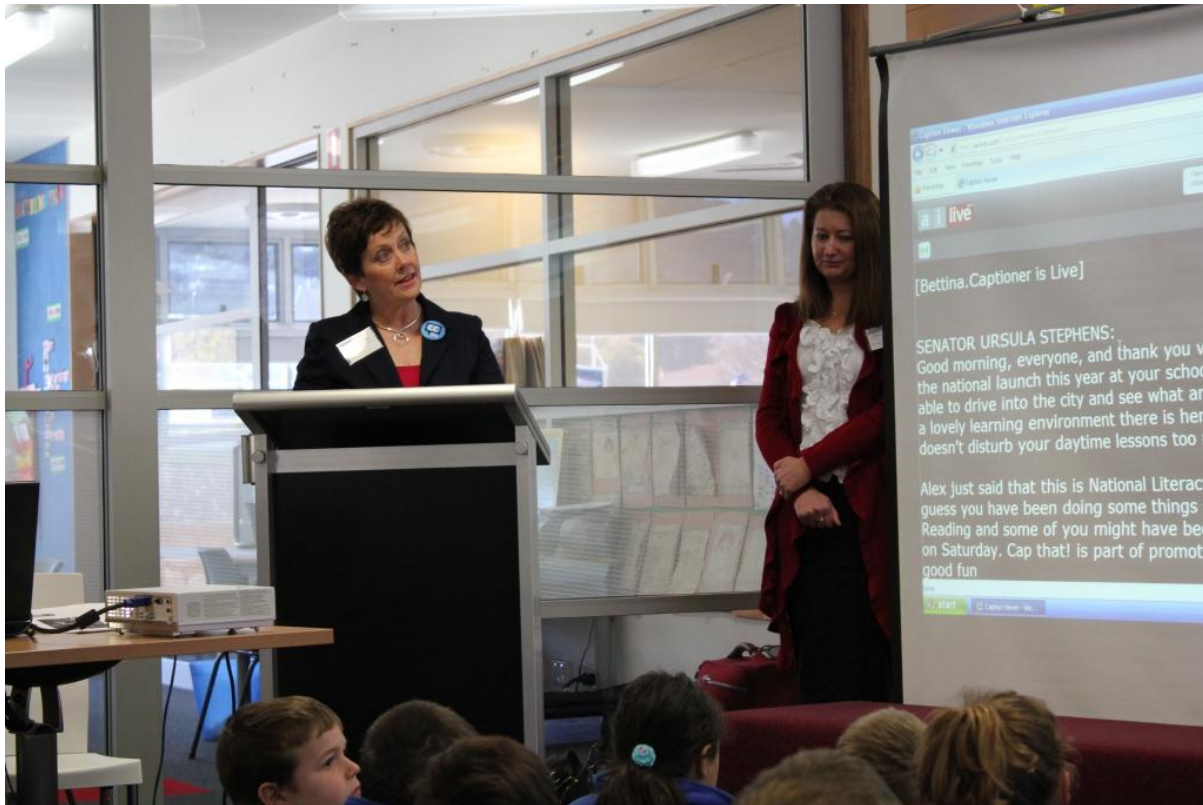
As captions link text to spoken words, they boost literacy and general comprehension skills, reading speed and vocabulary. For diverse learners they provide an alternative way of understanding and reinforce the information presented verbally. Captions also aid language uptake, including word recognition and vocabulary acquisition for the 17% of Australian students with a language background other than English.

Captions Champion at St Clare of Assisi, Tiffany Reedy said, "As the literacy coordinator at my school, captions provide me with another teaching method I can use to improve learning outcomes around literacy. It's something I hadn't thought much about previously but since being a Captions Champion I've started to seek out educational videos with captions, and in doing so I've seen benefits for every student in the class."





Additionally, students who are Deaf or hearing impaired, 83% of which attend mainstream schools, will most often not ask for captions to be turned on to avoid embarrassment. However, even with hearing devices such as hearing aids or cochlear implants, listening can be difficult and affected by background noise and distance from the source of sound.



Senator Ursula Stephens launches **cap that!** for 2012





Year 3 students Lana, Ashlyn and Taylor pose in front of the live captions at the **cap that!** launch

## LIVE CAPTIONS FOR THE CLASSROOM MADE EASIER

Providing professional live captions just got easier thanks to the launch of a new online portal by Ai-Media. The captioning provider hopes that this will ultimately lead to greater social inclusion for people who are Deaf or hearing impaired, particularly in education and the workplace.

The Ai-Live service provides live captions for schools, universities, conferences and workplace meetings. The system takes live audio from a university lecture, for example, and provides live captions to the student's personal computer within seven seconds. The discretion of this system allows for greater social inclusion for Deaf and hearing impaired students and caters to the needs of visual learners and those who speak English as an additional language.

As quoted in an Ai-Media media release, New South Wales high school graduate Rabia Muhammad said, "I used to sit in class wondering what's happening. With Ai-Live I can understand fully. I was very happy with what came up on the screen and I got really excited. I'm not being left out anymore."

Tony Abrahams, Ai-Media CEO, said the site was developed with the National Disability Insurance Scheme in mind. "We continually shape our products by listening to our clients and truly





understanding how we can help them participate. This process ultimately facilitates the growth of a more equitable and innovative society.”

The new Ai-Live portal, available on desktop computers, mobiles and tablets, is designed to make booking and reading live captions easy and efficient. Technologies such as these are contributing to the prevalence of captioning in education and occupational settings.

## DELL AND MICROSOFT CREATE PROGRAM FOR ACCESSIBLE CLASSROOM

A new collaborative effort by Microsoft and Dell has introduced an education program in the U.S. that will provide training and support to teachers of students with disabilities. The program will help them incorporate and promote the use of assistive technologies and software features in classrooms for students who are blind or vision impaired or have a cognitive disability.

The program, called Dell’s Assistive Technology Service, was designed in consultation with teaching professionals and accessibility specialists, and offers access to training on assistive technology. Assistive technologies like screen magnifiers, screen readers, text-to-speech software or braille devices provide alternative ways for students who are blind or vision impaired or have cognitive disabilities to access information in the classroom.

Dell’s Assistive Technology Service will assist teachers with selecting assistive technologies suited to the students they will be used by, and provide training to students, parents and teachers on how to use them. The program also offers training on how teachers can use the accessibility features of Microsoft programs like Windows and Office.

Services such as these highlight the importance of incorporating accessible technologies in the classroom so that all students have equal access to education materials.

For more information, see [this article](#) Dell website.

---

## CINEMA & THE ARTS

### THE ACCESSIBLE CINEMA ROLLOUT: JANUARY TO JUNE 2012

Following on from the successful 2011 rollout of captioned and audio described cinema locations under the Cinema Access Implementation Plan, the first six months of 2012 have delivered more locations but fallen behind the expected schedule.

The indicative plan to 30 June 2012 provided access to 123 screens across 62 locations nationally. Media Access Australia can report that 65 screens across 34 locations were in operation by the given date. Of the 65 screens in operation, 51 screens show both captions and audio description and 14 screens show captions only.



There is a considerable variance in the number of functioning screens compared to the numbers indicated on the plan. It is publicly noted that the plan is subject to change, and Media Access Australia has been informed by a few of the locations that they expect to commence accessible sessions soon.

A major hold-up remains the provision of audio description on screens that are currently caption-only.

A significant number of locations have not commenced any type of accessible sessions several months after the indicated date. They include Event Cinemas Browns Plains, Burwood, Garden City Mt Gravatt, Hornsby, Rockhampton and Shellharbour; Hoyts Bankstown; and Village Airport West, Albury, Century City, Fountain Gate, Geelong, Karingal, Morwell, Rivoli, Sunshine and Werribee.

A few of these locations indicated that their equipment has been installed but for various reasons they have not commenced sessions.

A positive variance to the plan is the addition of Event Cinemas Townsville, with the commencement of closed caption sessions on one screen in its complex.

The full rollout schedule can be viewed on the Department of Families, Housing, Community Services and Indigenous Affairs' [Accessible Cinema in Australia](#) web page.

This page also provides a Question and Answer document addressing key issues raised for consideration.

---

## DIGITAL TECHNOLOGY

### SIRI UPDATE BOOSTS ACCESSIBILITY ON IOS DEVICES

An update to Apple's operating system iOS 6 announced in June will provide a boost to the accessibility of Apple's mobile devices such as the iPhone and iPad. Improvements made to its voice activation software Siri, which will now also be included on the iPad tablet, will increase the accessibility of apps, particularly those with geolocation features.

Apple also announced the introduction of Apple's own Maps service. The Maps app will now replace the Google Maps app as the primary maps service on all iDevices and will have integration with Siri.

The integration of the Maps app with Siri means users can use voice commands to navigate the Maps app and retrieve geolocation information such as turn-by-turn directions, find the nearest petrol station and landmarks, and provide estimates of arrival times. The Maps app will also include crowd-sourced information about traffic conditions so users can be kept up-to-date on nearby



accidents. You can also view maps in a variety of modes including the 3D 'Flyover' view which shows landmarks and streets in 3D.

Other improvements to Siri include expanding its local search capabilities to international locations so users can ask Siri to provide information on restaurants and movies using reviews and recommendations on the crowd-source service Yelp.

Perhaps most interesting is that Siri can now be used to launch other apps on iOS devices.

The improved integration of Siri with other apps, particularly the Maps app, will enable blind or vision impaired users to access more features on their iOS device through voice commands.

The iOS 6 update for both the iPhone and iPad have been available to download from iTunes in Australia since September.

## ALLIGATOR CLIPS MAKE FOR ACCESSIBLE GAMING

Two graduates of the Massachusetts Institute of Technology who live by the belief that 'everyone is an inventor' have come up with an invention kit that will potentially make different technologies accessible to people with a disability.

The invention kit, called MaKey MaKey, is a circuit board that can be attached to different objects through alligator clips, turning anything into a keyboard or touch pad. Posted on crowd funding website Kickstarter, MaKey MaKey can be used to create customised

keyboards to surf the web, type or play games.

A video posted on Kickstarter shows how bananas, pencil-drawn controllers and even Play-Doh can be used with MaKey MaKey to play games on a computer. The MaKey MaKey board can be attached to a computer through a USB port and works with Windows XP, Vista, Windows 7 and OS X.

The ability to create a customised keyboard or touch pad provides an alternative way for people to access and navigate a computer. People who have a cognitive or mobility impairment, for example, can use a custom-built keyboard using MaKey Makey which can then be adjusted to suit their needs.

## GEORGIE, THE APP ENHANCING ANDROID PHONES FOR BLIND USERS

A vision impaired couple from the UK have come up with an app that improves the way blind or vision impaired people use phones. The app for Android smartphones, called Georgie, combines screen reader technology and add-on features that make it easier to use.

Designed by Roger and Margaret Wilson-Hinds, the app comes with core features as well as add-on packs that can be purchased according to user needs. The core features include screen reader and speech-to-text technology. Users can navigate the app menu and receive audio feedback,



according to where their fingers are on the screen. Users can also dictate text messages which will then be read out by the screen reader before it is sent to another user.

Other packs that are available to download include the Travel, Lifestyle and Communication packs. On the Travel pack, GPS technology allows users to mark nearby places. In a video posted on Sight, Sound and Technology, Roger Wilson-Hinds explains how he uses Georgie's 'Near Me' feature to alert him to a low-hanging branch. He says he can mark the location of the low-hanging branch using the smartphone's GPS and set 'Near Me' to alert him via voice prompts when he is near so he can avoid continually running into it.

Users can also customise the colour and contrast of the app's menu so that people who are vision impaired can optimise the smartphone's interface to suit their needs.

Another interesting feature is the Optical Character Recognition which comes with the Communications pack. This feature allows users to take pictures of surrounding objects which are then converted into text information. In the same video, a woman is seen taking a photo of a restaurant menu which is converted into text information and read by the app's screen reader.

The app also comes with an 'Alert Me' feature which is designed to help users receive assistance from an assigned carer. By pushing the 'Alert Me' button, a message is sent to the user's carer telling them their assistance is needed. The GPS will also pick up information about the user's location which will then be sent to the carer.

A trial version of the Georgie app is available to download on Google Play, however it is only currently available to users in the UK.

## AUSTRALIANS WITH DISABILITIES PAY TOO MUCH FOR IT

The Australian Communications Consumer Action Network (ACCAN) has published a report outlining how Australians pay too much for technology, with people with disability being hit hardest.

[ACCAN's submission to the Inquiry into IT Pricing](#), which is being conducted by the House Standing Committee on Infrastructure and Communications, investigated how much Australians pay for software and hardware compared to the rest of the world. In particular, assistive technology costs more here than elsewhere in the world, yet Australians with disability are more likely to be under financial pressure.

Submission author Erin Turner said, "Companies are asking people with disability to pay more for essential equipment – these products allow people to communicate with friends and family or access basic government services online. The extra amount people with disability in Australia have to pay for this IT equipment makes living on tight budgets even more difficult."

ACCAN compared the price of assistive technology sold by Humanware in Australia, Canada, the UK, the USA and New Zealand. Price differences were startling. For instance, the BrailleNote Apex BT 32 Braille Notetaker costs AU\$6,242 in the USA but AU\$8,750 when bought in Australia.

ACCAN attributes much of this price difference to the size of the assistive technology market in Australia compared to that of larger countries. One solution proposed by Turner is for the



Government to adopt a public procurement policy for IT equipment. This would mean that the Government purchases technology in bulk, increasing market competition and, ultimately, lowering prices for consumers. Turner says that similar programs have been successfully implemented in other countries, including the USA.

## ACCESSIBILITY YOU CAN BANK ON

A bank in Switzerland, Credit Suisse, called itself “the barrier-free bank” as it launched its accessibility initiative for the fifth year running. Showcasing its services for those with impaired hearing, vision or mobility, as well as the elderly, the campaign aims to increase awareness amongst customers and staff.

Services offered by the bank include wheelchair access at some branches, sign language interpretation and talking ATMs for the blind and vision impaired. These ATMs are activated once a customer plugs in headphones into an output identified by a tactile sign. More than 400 talking ATMs have been installed across branches in Switzerland since July 2008.

Importantly, Credit Suisse has stated that each element of its website complies with international accessibility standards, which ensures that customers using assistive technology can access information and perform tasks such as filling out forms.

The campaign places emphasis on staff training, helping to ensure that the principles put in place trickle down to the customer experience. The bank’s Centre of Accessibility details an impressive commitment to catering to the needs of customers with a disability.

## CAPTIONS INCLUDED ON ABC IVIEW APP

The Australian Broadcasting Corporation has launched an ABC iView app for iPhone, with caption functionality included.

The app allows iPhone users to watch programs and movies aired on the ABC network through WiFi and 3G connections. ABC iView is the ABC’s television show streaming service that allows people to watch programs online after they have been broadcast. The ABC iView app allows people to access this service through different mobile devices such as smartphones and tablets.

The release of the app for iPhone will increase the accessibility of the ABC’s streaming service through the inclusion of the captions for Deaf or hearing impaired users as well as its compatibility with the iPhone’s inbuilt screen reader VoiceOver for blind or vision impaired users. Early testing of the ABC iView app on the iPhone 4S shows the app is compatible with the VoiceOver screen reader, as it has been in the iPad version of the app.

The app has also been updated with some improvements including:

- Access through 3G or WiFi (the previous version of the app only allowed streaming of programs through a WiFi connection)
- Support for AirPlay through AppleTV
- Parental control functionality



The ABC iView app is free to download on iTunes. The ABC is yet to release the iView app for Android.

## RIVAL TO SIRI COULD INCREASE ACCESSIBILITY OF APPS

A voice-activated virtual assistant tool called Nina could improve the accessibility of smartphone apps. Developed by Nuance Communications, the rival to Apple's Siri will give users the option to use their voice to perform tasks on their phones, increasing usability for people with a disability.

Nuance has released the software development kit so developers can begin to integrate Nina into their apps. The virtual assistant technology can be used across both Android and Apple iOS apps.

Similar to Siri, available on the Apple iPhone 4S, Nina allows users to use voice commands to access features and perform tasks within apps. Using the tool, people can perform tasks such as dictating messages and setting reminders eyes-free. In addition, Nina uses voice biometrics technology to recognise a user's voice as unique so that it can be used for security purposes such as for a password.

A video entitled 'Introducing Nina' on the Nuance website demonstrates how users can perform voice commands such as paying bills, making money transfers and retrieving information like flight schedules and availabilities.

Because Nina is an add-on app, a range of businesses could potentially include voice-prompt features in their apps, making them accessible to blind or vision impaired users. Technology news site ITWire reports that in Australia, Nuance is targeting government,

telecommunications companies, banks and airlines as the first to adopt the technology for their apps.

For more information, see [the section on Nina](#) on the Nuance website.

## YOUTUBE CAPTION EDITOR INCREASES QUALITY OF CAPTIONS

An intern has developed a way of editing captions within YouTube, drastically increasing the quality of auto-generated captions across the video sharing service.

To provide captions on their YouTube videos, users can either upload their own caption files or use the 'machine transcript' function to generate automatic captions through Google's voice recognition technology. These are automatically generated with time codes and appear as captions on the videos once they are turned on. However, the auto-generated captions are renowned for their inaccuracy.

The new caption editor function, developed by a Google intern and his mentor, allows users to correct automatic captions within the YouTube website. Previously, making changes to captions meant users had to create a separate caption file, usually through third party services such as Amara. Once the captions are edited, changes can be saved directly to the associated video.



Unfortunately, the new function does not allow you to change time codes, so it works best with corrections to spelling and grammar.

The ability to edit caption files directly online on such a widely used and free video streaming website is a positive move towards quality captions, particularly for Deaf or hearing impaired users.

---

## ONLINE MEDIA

### INTRODUCING ACCESS IQ: HELPING CREATE A WEB WITHOUT LIMITS

Access iQ is Media Access Australia's new social initiative. Launched on 19 July, the Access iQ website is a hub for anyone who wants to learn how to make websites and applications accessible to users of all abilities. Disability Discrimination Commissioner Graeme Innes joined Media Access Australia CEO Alex Varley in unveiling the project in front of media, industry leaders and disability advocates.

The [Access iQ](#) website provides resources aimed at equipping web professionals with knowledge to build websites which meet international accessibility guidelines. These resources are written by Access iQ's own accessibility experts and a number of external contributors at the top of the development, design and usability fields.

"People with disabilities just want to access websites and have digital experiences like everybody else," said Varley. "Access iQ will help web professionals solve the problems which are currently creating access barriers on their sites. Access iQ will form not only a hub for information but a portal for a vibrant and growing community."

The following is an excerpt from Mr Innes's speech:

*When people consider accessibility, good things happen. Imagine being able to do the grocery shopping without assistance for the first time in your life. I don't have to imagine – I did it. Briefly, this opportunity was there, until Woolworths updated their app and rendered it inaccessible.*

*As a web professional, equipping yourself with accessibility knowledge means increased independence for people with disability world-wide. It means that what you create online has longevity and the power to reach the biggest audience possible. It means that, over time, Australia will become a more inclusive place, one that treats people with equality and dignity online.*

*As members of a forward-thinking society, this is something everyone should adopt. But to do this, we need to work together. It's not about you as a developer, or a designer, or a manager. It's about the user. And there's an increasing likelihood that that the user will be a person with a disability.*

*I'd like to congratulate Media Access Australia for stepping up and providing the missing piece of the puzzle. With Access iQ, we're one step closer to a world that fully includes people of all abilities. I'm proud to launch this initiative.*







Disability Discrimination Commissioner Graeme Innes and Media Access Australia CEO Alex Varley at the launch of Access iQ

## CLOSED CAPTIONS REQUIRED FOR ONLINE TV IN THE US

The US Federal Communications Commission (FCC) has announced a September 30 deadline for TV networks and online video providers to include closed captions on their content as required by the *Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA)*. The act makes it a legal responsibility of TV networks to provide closed captions on content streamed online if it has already been broadcast with closed captions on TV.

Confirmation of the deadline provided by the FCC had been postponed due to members of the Digital Media Association, which include media providers such as Apple, Amazon and Google, arguing that more time was needed to implement the requirements. However, the FCC pushed back and confirmed that TV networks and video sites must provide closed captions on their content – offline or online – by 30 September.

Previously, disability advocates argued that the CVAA did not address the need for captions online, particularly for website-only businesses such as Netflix. But in June 2012, when the National Association of the Deaf successfully sued Netflix for failing to provide captions and therefore violating the *Americans with a Disability Act (ADA)*, the relevance of the ADA and the CVAA to online videos was highlighted by the judge in his ruling.

However, the FCC said that TV content distributors were not required to provide the raw caption data to web video player providers, which would enable captions to be customised for better accessibility, including changing the font colour and size. This requirement has been postponed for 16 months.





The CVAA aims to address access legislation and policies as it applies to traditional forms of media and online media. Cases such as the Netflix suit prove the increasing need to review access legislation and policies in light of the changing media landscape.

## E-INCLUSION KIT HELPS SENIORS WITH DISABILITIES GET ONLINE

A new resource kit that will help seniors with disabilities get online was launched in July in a collaborative project between Media Access Australia and the Council of the Ageing (COTA) WA.

Supported by nib foundation, the *Helping seniors with disabilities get online* manual will be used by COTA members and their computer trainers across COTA WA's 170 member organisations to discover how to access the web, computers and other devices with free, readily available technologies.

Project Manager at Media Access Australia and author of the resource kit, Dr Scott Hollier, said, "This manual aims to support seniors with disabilities by providing step-by-step instructions to make it as easy as possible to get online. Once they know how, people will have a lot of opportunities to be included in online media and use other modern technologies."

Ken Marston, Executive Director of COTA WA, stated that, "Disability is unfortunately a part of life for many seniors, so this project has been very important for COTA WA."

"We know that, for example, 40% of those aged between 65 and 69 and 88% of those aged 90 years and over are affected by a disability, compared to 3.4% of children aged 4 and under."

"Media Access Australia has been a wonderful partner, bringing a fantastic level of expertise to the task to make this a valuable resource."

Along with their regular one on one computer sessions, COTA WA will hold social media workshops throughout the year, using the manual to provide seniors with disabilities the confidence to use social media to connect and socialise with friends and family, for example, through Skype or Facebook.

The manual will assist seniors with everyday tasks, such as paying bills, finding news and information, watching videos and the use of speech recognition and Microsoft Word to write personal documents with ease.

COTA WA board member Marie Moloney, who has arthritis, said that "from personal experience, learning to use speech recognition software can be a great asset to anyone with arthritis or any disability that makes using a keyboard difficult. Being able to document my memoirs and short stories for my granddaughters keeps my family history connected."

nib foundation Executive Officer Amy Tribe said the project played an important role in allowing seniors with a disability to maintain their quality of life through access to information and social networks. "The internet opens up a world of opportunities for these seniors, allowing them to connect with family and friends online as well as providing entertainment and the ability to learn new ideas and skills," she said.



“We believe every Australian should have access to such technologies that can significantly improve their lifestyle and this project will help make this a reality for seniors with disabilities in Western Australia,” she added.

The guide has also been released as [an audiobook which can be downloaded from the Geoff Gallop Digital Library](#).

## GOOGLE MAPS MAKE SYDNEY PUBLIC TRANSPORT DIRECTIONS ACCESSIBLE

Google and Transport New South Wales have teamed up to introduce Sydney public transport directions to the Google Maps app.

Media Access Australia staff tested the public transport option in the Google Maps app for iPhone and found it is accessible via the VoiceOver screen reader. This means people who are blind or vision impaired will now have greater access to information on Sydney’s trains, buses, ferries and light rail services when using the Google Maps app on the Apple iPhone.

Information that can be accessed through the public transport option on the Google Maps app includes:

- Walking directions to the nearest bus stops, train stations and wharves
- Suggested public transport routes
- Estimated time of arrival of public transport routes
- Estimated travel time of suggested route
- Detailed directions, for example "Take 370 – Coogee to MarketPlace Leichardt via Newtown towards Coogee"

The app also announces icons denoting the form of transport such as bus, train or ferry. Based on this testing, the inclusion of Sydney public transport information on Google Maps will increase the mobility and independence for blind and vision impaired Sydneysiders.

The app is inbuilt in Apple and Android smartphones. To use the public transport option, select the bus icon at the top of screen.

## CLOSED CAPTIONS NOW AVAILABLE ON GOOGLE+

Google has announced closed captions are now available on the Google+ video player, following suit with YouTube, the online video streaming and sharing site where closed captions are already available.

The new feature was announced by Google Accessibility Engineer James de Boer on his Google+ account in June. Google+ is a social networking service where various types of media such as video, pictures and links can be shared.

Users can upload caption files in SubView (.SUB) or SubRip (.SRT) format. Closed captions can be activated in existing videos with captions uploaded by selecting the ‘CC’ button on the bottom corner of the video screen.

Instructions on how to use and upload captions on videos in Google+ can be found on the Google+ help page.



## US DEAFNESS ORGANISATION WINS NEXT STAGE OF NETFLIX CAPTIONING SUIT

The National Association of the Deaf (NAD) has had a significant win in its lawsuit against the online movie provider Netflix, with the District Court of Massachusetts holding that the *American with Disabilities Act* (ADA) applies to website-only businesses.

The NAD brought its suit against Netflix in July 2011, alleging that it violated the ADA by only providing captions on 5% of its 'Watch Instantly' streamed programming. Judge Posner denied Netflix's motion that the ADA applied only to physical businesses. "In a society in which business is increasingly conducted online, excluding businesses that sell services through the Internet from the ADA would run afoul of the purposes of the ADA and would severely frustrate Congress's intent that individuals with disabilities fully enjoy the goods, services, privileges and advantages, available indiscriminately to other members of the general public."

Judge Posner's ruling also clarified the impact on the lawsuit of the *21<sup>st</sup> Century Communications and Video Accessibility Act*, which directed the Federal Communications Commission to make rules for the provision of online captioning. Netflix had argued that the act "carved out" online video programming as separate from the ADA, but Judge Posner dismissed this, stating that there is "no conflict between the statutes".

Howard Rosenblum, CEO of the NAD, welcomed Judge Posner's ruling, calling it "a major decision that ensures the ADA remains current with this technological age and makes it possible for deaf and hard of hearing people and people with disabilities to have full access to the same programs and services available to everyone else".

## NETFLIX TO USE CROWD-SOURCED CAPTIONS

Online video company Netflix is testing crowd-sourced captions for the TV shows and movies available on its service. After calling out for volunteers, Netflix has built a community of captioners on Amara, an open-source, non-profit project that promotes the captioning of online video content.

Following a landmark case made against Netflix in the US, the company is trialling the use of crowd-sourced captions to fulfil its commitment to accessible content. This week, Netflix called on volunteers to join the Amara community to help provide captions for Netflix using Amara's online captioning tool. Netflix has one captioned video uploaded to the community page so far.

There are currently 50,000 movies and television shows available to be streamed on-demand through Netflix. Members who have subscribed to the service are able to stream movies and television shows to devices of their choice including desktop computers, TVs, Apple iPads and game consoles. In addition to the US, Netflix has expanded to include Latin America, Canada, the UK and Ireland.

In June, the National Association of the Deaf (NAD) in the US won a lawsuit brought against Netflix. The NAD claimed Netflix was in violation of the *Americans with Disabilities Act* (ADA) by failing to provide captions on movies and TV shows that appeared under its 'Watch Instantly' service. This is



an important case for people with a disability as it shows for the first time that the ADA can apply to website-only businesses and services.

In a February 2011 blog post by Netflix, chief product officer Neil Hunt claimed 30% of the television shows and movies on the site had been captioned. Should this crowd-source initiative prove successful, it will drastically increase the availability of captioned content online.

Amara's captioning tool has been used by the likes of news organisations Al Jazeera and the PBS *NewsHour*.

## FACEBOOK UPDATE FAILS TO IMPROVE ACCESSIBILITY

Facebook's latest app update in August has improved the speed of the software but failed to increase the app's accessibility, and made performing some tasks impossible for blind users.

According to Facebook, newsfeed updates will load faster and actions such as commenting and clicking 'like' will be updated in real time. However, our testing of the updated app on an iPhone 4S shows a number of features that are still inaccessible using VoiceOver.

Some of the new accessibility barriers include:

- General inconsistencies with being able to scroll through the newsfeed. The status, photo and check-in options aren't consistently available.
- When a status update in the newsfeed is in focus by VoiceOver, the status and amount of likes and comments is announced but no instructions on how to 'like' or comment on a status update is given by VoiceOver.
- When writing a status update, users are unable to tag friends as VoiceOver doesn't announce friends' names when in focus.
- Unable to send messages. VoiceOver doesn't announce how to select contacts when composing a message.
- Unable to chat. Users can scroll between online friends but not begin chatting with them.
- Event details aren't announced when highlighted.

Although some things have been improved, such as the labelling of the notification, friend request and message buttons, the update makes it clear that accessibility is not a concern for the social network giant. While other social networks such as Twitter have taken recent steps to improve access, Facebook continues to disregard the needs of users with a disability.

Instead of the app, many screen reader users prefer the simplified Facebook mobile site. This has not been updated and makes Facebook's basic functions possible

## CAPTIONS ADDED TO GOOGLE+ HANGOUTS

Google's flagship social network, Google+, has made a breakthrough with the launch of Hangout Captions. The app will allow people who are Deaf or hearing impaired to access live transcription services while using the video chat feature on the social network.



Hangout Captions will display real-time text updates from professional transcribers of conversations that take place in Google+ Hangouts. Google+ Hangouts is the video chat feature of social network Google+ which allows up to 10 people to communicate through streamed video. The Hangout Captions app also allows users to type text versions of the conversation for friends who are Deaf or hearing impaired, providing captions for the conversation in real-time.

Announced on the Google+ profile of Naomi Black, a member of Google's Accessibility team, the app works with real-time streaming text service StreamText.

The Hangouts feature allows groups to take part in conversation via video. The main advantage of the captions addition is Deaf or hearing impaired users being able to talk to their friends without having to ask them to instant message.

This follows a number of accessibility improvements to the social network, including adding closed caption support for videos uploaded to Google+, announced earlier in June.

---

## GLOSSARY

**Audio description:** The descriptive narration of all the visual elements of a TV

program, movie, DVD, performance or other media, giving access for the blind or vision impaired. AD may be pre-recorded and delivered as an option for television programs or DVDs, or it may be performed live (e.g. for a theatrical performance).

**Captions:** A transcription of the audio elements of a TV program, movie, DVD, performance or other media, giving access for the Deaf and hearing impaired. Unlike subtitles, captions include song lyrics, descriptions of sound effects and music, and are often positioned and coloured so as to make it easier for the viewer to identify who is speaking. Captions may be divided into:

- **Open captions:** Captions which are 'burnt onto' a video or digital image and will be seen by anyone who looks at it, and
- **Closed captions:** Captions which a viewer chooses to see (e.g. by accessing teletext captions on TV, or activating the captions on a DVD).
- **Signing:** Access to a TV program, movie, DVD, performance or other media via a

signer using one of the various Deaf sign languages, e.g. Auslan (Australian Sign Language). Some TV programs in the US and UK have a signer occupying a space on the screen.

**Stenocaptioner:** A highly trained captioner who captions live programs using a stenographic keyboard.

**Subtitles:** This generally refers to English translations of foreign language TV programs or movies, presented as text at the bottom of the screen. It can also be a straight transcription of the dialogue of an English language program (this is a common feature on



DVDs). Note however that captions are often called subtitles in the UK and other parts of Europe.

Teletext: The broadcast data delivery system used in Australia to transmit captions on analog television.

## ACRONYMS

ACCAN	Australian Communications Consumer Action Network
ACMA	Australian Communications and Media Authority
AD	Audio description
ADA	<i>Americans with Disabilities Act</i>
AHRC	Australian Human Rights Commission
AMI	Accessible Media Inc. (Canada)
ASTRA	Australian Subscription Television and Radio Association
COTA	Council on the Ageing
CRA	Consumer Electronics Association
DBCDE	Department of Broadband, Communications and the Digital Economy
FCC	Federal Communications Commission (US)
MAA	Media Access Australia
NAD	National Association of the Deaf (US)
NVDA	Non Visual Desktop Access
Ofcom	Office of Communications (UK)
RNIB	Royal National Institute of the Blind (UK)

