



Australian Government

Australian Institute of Criminology

AIC reports

Research Report

22

**Audiovisual link
technologies in Australian
criminal courts: Practical
and legal considerations**

Russell G Smith

Rebecca Savage

Catherine Emami

© Australian Institute of Criminology 2021

ISSN (Online) 2206-7280

ISBN 978 1 922478 18 4 (Online)

<https://doi.org/10.52922/rr78184>

Apart from any fair dealing for the purpose of private study, research, criticism or review, as permitted under the *Copyright Act 1968* (Cth), no part of this publication may in any form or by any means (electronic, mechanical, microcopying, photocopying, recording or otherwise) be reproduced, stored in a retrieval system or transmitted without prior written permission. Inquiries should be addressed to the publisher.

Published by the Australian Institute of Criminology

GPO Box 1936 Canberra ACT 2601

Tel: (02) 6268 7166

Email: front.desk@aic.gov.au

Website: aic.gov.au

Please note: Minor revisions are occasionally made to publications after release. The online versions available on the AIC website will always include any revisions.

All publications in the Research Report series are subject to peer review—either through a double-blind peer review process, or through stakeholder peer review. This report was subject to double-blind peer review.

Disclaimer: This research report does not necessarily reflect the policy position of the Australian Government.

General editor: Dr Rick Brown, Deputy Director, Australian Institute of Criminology

Edited and typeset by the Australian Institute of Criminology

A full list of publications in the AIC Reports series can be found on the Australian Institute of Criminology website at aic.gov.au

Contents

iv Acknowledgements

iv Disclaimer

v Abstract

vi Executive summary

1 Introduction

4 Technological, administrative and procedural issues

4 Technological issues

7 Administrative and procedural issues

11 Fairness and legal implications

11 Legislative framework

13 Access to justice

14 Open justice and fairness

20 Better practice initiatives

20 Distributed courtrooms and virtual juries

22 Conclusion

24 References

Tables

7 Table 1: Court fees for videoconferencing in Australian jurisdictions

12 Table 2: Principal legislation permitting the use of videoconferencing in Australia

Boxes

2 Box 1: Does virtual justice increase discrimination?

Acknowledgements

Assistance with the preparation of this report was provided by Marissa Hood, former Research Librarian at the AIC.

Court registrars and administrators, staff of Departments of Justice and Attorneys-General, and AVL Project staff in each state and territory also provided assistance with the study and participated in the research.

The Project was approved by Human Research Ethics Committees in the Australian Capital Territory (AIC no. P0258A), Victoria (JHREC no. CF/16/22825) and Western Australia (RAAC no. 424).

Disclaimer

This research report does not necessarily reflect the policy position of the Australian Government. Any material in this report or made publicly available by the authors cannot be considered as either endorsed by, or an expression of the policies or views of, the Departments of Justice and Attorneys-General, court registrars and administrators and other participating entities or their staff in each jurisdiction.

Any errors of omission or commission remain the responsibility of the authors.

Abstract

Audiovisual link (AVL) technologies have had considerable impact on criminal court processes in Australia and overseas, particularly following the need for social distancing created by the coronavirus pandemic in 2020. AVL technologies have enabled courts to take oral evidence from witnesses and litigants in different geographical locations, reducing the need to travel long distances and minimising the time, administrative costs and health risks associated with attending court in person.

In 2016 the AIC commenced a project to document the extent to which AVL technologies are used in criminal courts in Australia, as well as the types and prevalence of AVL technologies used and the technological, administrative and procedural issues associated with their use in terms of fairness, openness, legality and natural justice. This report assesses the practical and legal considerations that need to be taken into account when adopting AVL technologies in the criminal courts and concludes by identifying best practice initiatives for the adoption of AVL technologies in Australia. An accompanying report presents findings regarding the implementation of systems in Australia (Smith, Savage & Emami 2021).

Executive summary

This report assesses the practical and legal considerations that need to be taken into account when adopting audiovisual link (AVL) technologies in the criminal courts in Australia. AVL technologies have had considerable impact on criminal court processes in Australia and overseas, particularly following the need for social distancing created by the coronavirus pandemic in 2020. AVL technologies have enabled courts to take oral evidence from witnesses and litigants in different geographical locations, reducing the need to travel long distances and minimising the time, administrative costs and health risks associated with attending court in person.

The need for social distancing created by the onset of the coronavirus pandemic in late 2019 has led to the use of AVL technologies on a wide scale for judicial processes as governments have restricted the extent to which individuals can congregate in public places in order to reduce risks of infection. The rapid implementation of AVL in all Australian courts has required extensive legislative and procedural reforms and has created an ever-expanding jurisprudence governing the application of these reforms to ensure legality and fairness in proceedings.

This report examines various technological, administrative and procedural issues related to the use of AVL technologies in Australian criminal courtrooms. Quantitative evidence regarding these issues is presented in an accompanying AIC publication (Smith, Savage & Emami 2021).

Technological issues associated with the use of AVL in the courts include ensuring that there is adequate bandwidth and transmission speed so that high-quality images and audio can be presented; that AVL technologies are actually working properly before court proceedings commence; and that the appropriate physical and data security measures are in place to prevent misuse of information obtained as a result of the AVL session.

Administrative issues relate to ensuring that the AVL equipment is available and working effectively in time for the AVL session to take place, and that the cost of the technologies and human supports required to manage them is not prohibitive.

Procedural issues that need to be addressed include ensuring that AVL sessions are scheduled appropriately, that remotely located individuals arrive on time and that they have access to technological support should systems not work properly.

The use of AVL technologies in criminal proceedings has also raised a number of important legal questions, particularly in relation to adherence to fundamental legal rights such as access to justice, the right to a fair trial and openness of court proceedings.

All jurisdictions in Australia allow AVL technologies to be used in court for procedural matters, for taking evidence from witnesses and for providing individuals in custody with access to the courts. Legislation and administrative rules, however, differ widely across jurisdictions, creating a need for harmonisation of rules across jurisdictions.

This report presents evidence to show that AVL technologies can both enhance and detract from the fairness of criminal court proceedings. With the onset of the coronavirus pandemic, a number of Australian courts have been required to examine these arguments and have concluded that it is possible to conduct fair trials using AVL technologies in appropriate cases. It has also been held that proceedings conducted using AVL constitute proceedings conducted 'in a courtroom', making them subject to general rules of evidence and procedure.

Options for improving AVL technologies in criminal matters are outlined in this report, including the use of distributed courtrooms using enhanced AVL technologies, improved record-keeping regarding AVL usage, better scheduling of cases, improved management of digital documents and the use of improved data security arrangements to protect privacy and maintain confidentiality of proceedings. Finally, the report suggests that enhanced training is needed both for those who manage AVL technologies and for judges, lawyers, witnesses and accused persons who participate in AVL hearings.

Criminal proceedings conducted using AVL technologies can lead to reductions in costs for governments and litigants and can provide improved efficiencies in courtroom processes, reducing the space and time needed to conduct court hearings and allowing for social distancing in times of a pandemic. There are, however, a number of ways in which AVL systems could be improved to enhance their operation and to ensure that accused persons receive lawful and fair hearings in the criminal courts.

Australian courts in many locations are leading the way in developing efficient and practical solutions to the use of AVL technologies, and the courts are continuing to ensure that these new technologies do not erode the rights and liberties of those who appear in criminal courts. In 2020 the coronavirus pandemic showed that the criminal courts can quickly adapt to new circumstances to provide judicial outcomes that comply with the law and community expectations.

Introduction

Digital technologies have had a considerable impact on criminal court processes in Australia and overseas in terms of communicating, managing and sharing evidence as well as for improving the administration of proceedings in courtrooms. Audiovisual link (AVL) systems have been particularly influential in this regard, enabling courts to take oral evidence from defendants and witnesses in different geographical locations, thereby reducing the need to travel long distances for court and lowering the time and administrative costs associated with attending court in person (McDougall 2013: 5; Wallace 2008a: 208; Wallace 2008b).

For the purposes of this report, AVL is defined as the use of a direct live image and sound connection between at least two people in different locations which enables them to interact as if they were communicating face-to-face (Van der Vlis 2011). The terms 'videoconference' and AVL are used interchangeably. From a policy perspective there is some overlap with electronic broadcasting of court proceedings, either to those located elsewhere in the court precinct, or more widely via the internet (see Stepniak 2004). The focus of the present report is, however, on live, interactive transmission of proceedings, sometimes called distributed courtrooms (Tait et al. 2017). Although the present paper deals with questions that largely focus on the experience of witnesses giving evidence, the accompanying report (Smith, Savage & Emami 2021) and the AIC AVL Project as a whole examine the use of AVL systems by any individuals including witnesses, defendants, lawyers and judicial officers.

The motivation for introducing AVL in courtrooms coincided with enhanced awareness of victims' rights in the 1980s. Recognition of the need to separate vulnerable witnesses from the courtroom, the defendant and the defendant's supporters played an important role in strengthening support for the introduction of these technologies in court environments. Since then, AVL has become a regularly used feature of court processes, making it possible for defendants and witnesses to appear in courtrooms together without being physically present, and assisting in enabling people who would otherwise be unable to travel to court due to illness or significant social, employment and familial disruption to participate in court proceedings (McDougall 2013; Wallace, 2008a: 208; Wallace 2008b).

The need for social distancing created by the onset of the coronavirus pandemic in late 2019 led to the use of AVL technologies on a wide scale for judicial processes as governments restricted the extent to which individuals could congregate in public places in order to reduce risks of infection. The rapid implementation of AVL in all courts has required extensive legislative and procedural reforms and has created an ever-expanding jurisprudence governing the application of these reforms to ensure legality and fairness in proceedings (Judicial College of Victoria 2020a, 2020b).

Jurists and academic commentators have, however, raised numerous concerns regarding the fairness of using AVL in courtrooms. Some commentators believe that videoconferencing impinges on an individual's right to confront one's accuser (McKay 2018; Tait et al. 2017). The courts have expressed concern about the implications for a defendant's human rights and access to justice, and the right to a fair trial and the security and integrity of transmitted testimony (*R v Kyu Hyuk Kim* [1998] VSC 215 (17 December 1998); *DPP v Finn (Ruling no. 1)* [2008] VSC 303 [24] (21 July 2008); see also Krawitz & Howard 2015). A recent example of the use of AVL technologies during the coronavirus pandemic in the United Kingdom is presented in Box 1. This highlights the impact of AVL on defendants with disabilities, which the Equality and Human Rights Commission (2020) examined in its report *Inclusive justice: A system designed for all*.

Box 1: Does virtual justice increase discrimination?

One day at Highbury Magistrates' Court a defendant appeared on video from a London police station. During the pandemic, nearly all defendants detained after being charged are appearing on video for their first hearing. Defendants are not given any choice. This is an important hearing where defendants plead guilty or not guilty and can be sentenced or remanded. The view from the court of the defendant is very poor—a small face on a small TV screen. The sound is often distorted. The lawyer (who was in person, in the court) said he had not been able to take instructions from his client, whom he did not know. He had tried to talk to him on the phone in police custody but the communication had failed. The police had told him the defendant appeared to be mentally ill, but there was no health assessment available to the court. So the district judge gave up on hearing the case and remanded the defendant to prison for a mental health assessment.

Source: Transform Justice (2020)

While recent academic research has focused on courtroom design (Poulin 2003; Rossner et al. 2017; Rowden et al. 2013; Tait et al. 2017) relevant to the use of technology in jury trials and jurors' comprehension of AVL evidence (Gertner 2004; Taylor & Joudo 2005; Widdison 1997), little research has been conducted on the more general use of AVL in Australian criminal courts. The Productivity Commission examined the use of technology in the civil courts in 2014 and how it affects access to justice, efficient use of court time and effective presentation of evidence during hearings. However, these issues were only examined in connection with the civil courts rather than the criminal courts (Productivity Commission 2014a, 2014b).

In order to address an apparent gap in research concerning the use of AVL technologies in Australian criminal courts, the AIC determined in late 2016 to conduct research to document the extent to which AVL technologies are used for the presentation of evidence and the application of administrative procedures in criminal courts in Australia, what advantages this has over conventional court processes and whether the use of AVL technologies creates problems in terms of efficiencies, cost and fairness.

The results of this research are presented in two Research Reports. The present report considers the technological, administrative and procedural issues associated with the use of AVL technologies in criminal proceedings to make an assessment of the fairness, openness, legality and natural justice implications. The accompanying report (Smith, Savage & Emami 2021) describes the types of AVL technologies used in Australian criminal courts, the extent to which they are used in various types of proceedings and, based on a sample of court observations in the largest Australian jurisdictions, how effective and efficient the systems are for delivering justice. Both reports conclude by identifying best practice initiatives for the future use of video technologies in criminal courts in Australia.

Technological, administrative and procedural issues

There are a number of technological, administrative and procedural issues related to the use of AVL technologies in Australian criminal courtrooms. Technological issues associated with the use of AVL include ensuring that there is adequate bandwidth and transmission speed so that high-quality images and audio can be presented in the courts. It is also important to ensure that the AVL technologies are actually working properly before court proceedings commence and that the appropriate physical and data security measures are in place to prevent misuse of information obtained as a result of the AVL session. Administrative issues largely relate to ensuring that the AVL equipment is available and working effectively in time for the AVL session to take place, and that the cost of the technologies and human supports is not prohibitive. There are also a number of procedural issues that need to be addressed such as ensuring that AVL sessions are scheduled appropriately, that remotely located individuals arrive on time and that they have access to technological support should systems not work properly. These issues are explored below.

Technological issues

The technological issues associated with the use of AVL in court proceedings are diverse and complex. One of the common concerns about appearing in court via AVL as opposed to appearing in person is that the technology may malfunction in some way, resulting in disruption to the court proceedings and the possibility that the proceedings may be unfair, resulting in a miscarriage of justice. Forell, Laufer and Digiusto (2011) noted the wide range of technological problems that can arise during an AVL session, including video screens freezing, the complete failure of audio or video connections or both, and the presence of a faulty or lost signal or connection (Forell, Laufer & Digiusto 2011: 11–12; see also National Center for State Courts 2010: 1–4). Warren (2015: 9), writing several years ago, observed that the technology remains ‘clunky and sluggish at times’. Even something as simple as a lapel microphone being slightly moved can inhibit the audio quality and muffle a party’s voice (Carter 2015). These disruptions, it has been argued, have the potential to outweigh the usual benefits of cost savings and convenience associated with AVL sessions (Warren 2015: 9). Of course, enhanced bandwidth and wireless networking have improved the reliability of AVL technologies in recent years, although many courtrooms have not been provided with the latest and more expensive systems.

Courts have been obliged to deal with malfunctions in AVL technologies on a number of occasions in the past (*O'Byrne v Whitney* (2016) WASC 420, 23 December 2016; *Debras v R Rustom* [2007] NSWCCA 118, 30 April 2007). In *O'Byrne v Whitney* (2016) WASC 420 (23 December 2016), the appellant had been required to appear before a magistrate using AVL from custody for sentencing for offences including burglary and motor vehicle misuse. However, the video link did not work. The magistrate said to the appellant's counsel, 'I believe you're happy to proceed in his absence'. The appellant's counsel answered in the affirmative. The matter then proceeded in the absence of the appellant. Under s 14(1) of the *Sentencing Act 1995* (WA), a court 'is not to sentence an offender unless the offender is personally present in court or appears before the court by video link under section 14A' (*O'Byrne v Whitney* [2016] WASC 420 [21], 23 December 2016). While Justice Fiannaca conceded that the magistrate had made a material error when sentencing the appellant, his Honour held that the sentence imposed would not have differed, regardless of the appellant attending physically, via video link or, in this case, not attending at all. Leave to appeal on this ground was granted but the appeal was dismissed (*O'Byrne v Whitney* [2016] WASC 420 [93], 23 December 2016).

In *Debras v R Rustom* [2007] NSWCCA 118 (30 April 2007), one of the grounds that the appellant relied on in his appeal was that the video evidence that had been used in the original trial had been wrongly admitted. A witness in the original trial had provided his evidence via AVL from a prison in New Zealand. Before the evidence was received, the parties were made aware that because of technical difficulties with the videoconferencing system there would be a delay between the receipt of the image and the words spoken by the witness. In light of this, the trial judge was asked to disallow the Crown's request to receive the witness' evidence in this way. The trial judge denied this request, noting that while the problems with the technology were unfortunate, they were not significant, and the delay between the image and sound could be easily explained and understood by the jury. This was reiterated by Chief Justice McClellan on appeal, who, while noting that there may be occasions in which imperfections in a video transmission will result in the exclusion of the evidence, explained that this was not the case in the present situation. Indeed, the court had been advised of the technical difficulties beforehand, and it was not difficult for the jury and lawyers to understand what was being said despite the delay between the visual and audio components. The appeal was dismissed.

Ensuring the security of information obtained through the use of AVL technologies, as well as the security of the systems that are actually enabling the AVL session to take place, is critical to maintaining confidence in the use of these technologies in the court environment. Although AVL technologies can be vulnerable both to physical and data security breaches, encryption is standard across most AVL systems and provides some assurance that data cannot be revealed even if the actual connection points and accompanying platforms used to access the videoconference may be vulnerable to hacking by unauthorised persons. Unauthorised access or interference with AVL systems could result in confidential deliberations conducted in courtrooms being disclosed externally and heard by unauthorised persons, sometimes even posted online. This can taint the integrity of the evidence, or cause undue disruption to the court proceedings (Wallace 2008b).

A prime example of this occurred in *State of Florida v George Zimmerman* (18th Judicial Circuit State Court of Florida, 13 July 2013, Judge Debra Nelson). Because there was considerable public interest in this case, proceedings were televised. Witness testimony using Skype was repeatedly interrupted by a large stream of incoming calls. This meant that members of the public could see the witness' Skype name. This led to a large number of people dialling the witness, causing pop-up windows of the incoming callers to cover the face of the witness and accompanying alert tones to obscure the witness' voice (CNN 2013; Krawitz & Howard 2015: 19; Quigley 2013: np). The defence attorney, Mark O'Mara, observed during the disturbance, 'there's now a really good chance we are being toyed with' (CNN 2013; Quigley 2013: np). The Skype call was eventually terminated by the judge, who requested that the testimony be continued over the telephone.

Given that court proceedings are very rarely televised in Australia (Johnston 2014), it is less likely that interference of this nature would occur in Australia. However, it is possible that the use of hand-held devices such as mobile phones could be discreetly used by a person in court to contact others outside the court about a witness' testimony (Krawitz & Howard 2015: 19). It is important to note that in the *Zimmerman* case, interference was possible because the Skype user had not switched the account to 'do not disturb' mode. If this setting had been applied, the testimony would not have been interfered with (CNN 2013). This highlights a lack of awareness about the operation of AVL links by the user and the court. It also emphasises the importance of ensuring that court staff are adequately trained in all aspects of the AVL technologies prior to sessions commencing. Over the last five years, levels of expertise and resourcing of trained staff in the courts have increased, and more secure platforms are now being used instead of Skype (Smith, Savage & Emami 2021).

The privacy of individuals using AVL technologies can also be breached if an unauthorised person enters the room from which videoconferencing is being broadcast; this could include courtrooms, custodial settings and other places such as lawyers' offices. Internet Protocol and VoIP-based communications platforms are particularly vulnerable in this regard. Indeed, Cohn and Watzlaf (2011) found that only 30 percent of VoIP companies that provided free videoconferencing software, including Skype, had encryption to mitigate eavesdropping. Little is known about the relative security of videoconferencing sites and their use of encryption, although the flaws detected in Zoom during the coronavirus pandemic were quickly identified and rectified (Paul 2020).

Dupasquier et al. (2010: 313–25) demonstrated that a false sense of privacy and security exists between Skype users and Skype's use of encryption. For example, user messages have been decrypted with up to 83 percent accuracy, regardless of Skype's high-security policy promise. Moreover, it was noted that even if a message is encrypted, this does not mean that a person cannot eavesdrop on the transmission if they have the appropriate technology (Dupasquier et al. 2010: 325).

The security issues associated with AVL technologies can be mitigated by ensuring users are adequately trained in understanding the way in which the technologies operate in the specific courtroom in question. By ensuring the operators of the technology are aware of the security risks, appropriate measures can be put in place to reduce the risk of sensitive information being obtained by unauthorised people. In addition, the courts should ensure they have strong password protections and a dedicated AVL system for use in the court environment. Furthermore, a risk analysis should be undertaken of the area and the technologies used to ensure that security problems have been identified and addressed (Cohn & Watzlaf 2011: 27–28; Watzlaf et al. 2011). Users should also take precautions to ensure that they do not leave sensitive documents or other types of personal information within view of videoconferencing cameras. To mitigate the threat of documents being seen from the camera, a camera hood should be placed on the camera when not in use (Korvakangas 2016: 11).

Although many court administrators now give adequate information to members of the public and litigants about the nature of AVL systems in place, a balance needs to be struck between informing individuals of security measures to enhance their own privacy and security and providing too much information that could be used improperly to compromise privacy and security when AVL systems are being used (Transform Justice 2019).

Administrative and procedural issues

Despite the fact that AVL technologies are used by courts in each state and territory in Australia, there are no national guidelines to govern their use in a courtroom environment. Instead, many of the courts that use AVL systems rely on their own practice directions, court rules or guidelines (see, for example, Judicial College of Victoria 2020a). The absence of a uniform set of AVL procedures for courts in Australia means that there are many differences in the administrative and procedural requirements across jurisdictions. For example, while some courts routinely use videoconferencing for certain hearing types (in which case, no booking of the equipment is required), in other cases parties to proceedings have to apply to courts seeking approval for evidence to be taken, or for a mention or submission to be made, via AVL. While there is often a booking fee and other charges associated with the use of AVL technologies in civil proceedings, these charges are borne by the court in criminal matters in most states and territories (see Table 1).

State/Territory	Court	Booking/Set-up fee	Room hire fee	Line charge	Court charges in criminal proceedings	Cancellation fees
NSW	Supreme Court	\$120 (civil matters, any location)	–	–	No fees for video links in criminal matters	–

Table 1: Court fees for videoconferencing in Australian jurisdictions (cont.)						
State/ Territory	Court	Booking/ Set-up fee	Room hire fee	Line charge	Court charges in criminal proceedings	Cancellation fees
Vic	County Court Magistrates' Court	\$16.50 (Vic Govt users) \$82.50 (Non-govt users) \$75.00 to non-court or custodial locations	–	\$8.80 per hour (local metro call) \$89.10 per hour (calls to country Vic) \$122.10 per hour (interstate) \$242 per 15 mins (overseas)	Magistrates' Court charges \$15 per 15 mins for prison video- conferences	–
Qld	Supreme Court District Court Magistrates Court	\$121.90 per site	\$257.70 per hour (+ \$103.10 per hour if between 5 pm and 8 am Mon–Fri; + \$132.00 per hour weekends or public holidays)	Actual Telstra rates	–	\$60.95 per site
WA	District Court	\$130.50 (within WA) \$193.50 (interstate and overseas bookings) Admin fee of \$102.00 per hour or part-hour	–	All charges incurred by the court	No charge to defendants	–
SA	South Australian courts do not charge videoconferencing costs in criminal matters. However, if leave has been granted for an appearance via videoconference it is up to the requesting party to pay any associated cost for the remote location whether this is in South Australia, interstate or overseas. South Australia does, however, reserve the right to charge any associated fees if a videoconference is performed outside of core business hours (SA time).					
Tas	Magistrates Court	\$110 + \$110 per hour (video) \$50.00 (audio)	\$200 per day	–	Charges are incurred by the party who requests the use of the technology, except in cases where the judge orders otherwise	

Table 1: Court fees for videoconferencing in Australian jurisdictions (cont.)

State/Territory	Court	Booking/Set-up fee	Room hire fee	Line charge	Court charges in criminal proceedings	Cancellation fees
ACT	Magistrates Court Supreme Court	–	\$100 (only charged when room is booked for an interstate matter and the witness lives in ACT and can't travel)	–	No charge for any links during trials	–
NT	Supreme Court Local Court	\$150 (set up and test for first 15 mins) \$54 per 15 mins of use thereafter	\$55 per 30 mins	\$118.80 per hour \$29.70 per each 15 mins thereafter (local and national calls)	No charge to defendants	\$110 if cancelled within two working days

Note: Rates of fees are current as at time of writing in June 2020; some more up-to-date information appears at the below sources

Source: ACT Courts 2020; County Court of Victoria 2020; District Court of Western Australia 2020; Magistrates Court of Tasmania 2020a, 2020b; Magistrates' Court of Victoria 2020; Queensland Courts 2020; Supreme Court of New South Wales 2020a, 2020b; Supreme Court of the Northern Territory 2020a, 2020b

In addition, the use of AVL in courtrooms differs in a number of other practical ways. These present both administrative and procedural challenges that must be considered and addressed if the benefits of the systems are to be fully realised. For example, many differences exist in terms of the physical layout of remote witness rooms, the type of AVL technologies being used and the way in which hardware is installed and adjusted both in the courts and in remote witness rooms. Rowden et al. (2013) sought to document these differences in their study, which not only examined the use of AVL in justice settings in Australia but also sought to create a set of design and operational guidelines for remote participation in court proceedings. That study found that the benefits of AVL technologies were often not being fully realised owing to different practices and procedures employed by the courts and other justice facilities prior to, during and following AVL sessions (Rowden et al. 2013). In particular, it was found that many of the rooms used for remote participation in court proceedings were 'small, bland and anonymous in character' (Rowden et al. 2013: 30), not designed in a way that was conducive to calming down or easing the anxiety of individuals using them, lacking adequate lighting, not properly integrating the technologies into the room, and often lacking appropriate equipment to allow documents to be transmitted effectively back to the courtroom (Rowden et al. 2013).

Other difficulties associated with individuals appearing in court via AVL included:

- distorted images of witnesses being transmitted to the courtroom;
- lighting difficulties;
- failure of audio and video to match; and
- inadequate room acoustics, resulting in distorted, low or amplified audio being apparent (Rowden et al. 2013).

Some commentators have noted that the layout of many remote witness rooms may result in some witnesses not being made to feel part of the proceedings (see, for example, McKay 2018). Defendants and witnesses may fail to notice verbal and non-verbal cues that are needed to facilitate mutual understanding during AVL sessions. In addition, the sense of solemnity and gravitas of the judiciary's functions may not be fully appreciated via AVL (McKay 2018; Tait et al. 2017). Rowden et al. (2013) sought to examine these issues by conducting a controlled experiment that compared the experiences of witnesses in a room that had 'enhanced environmental conditions' with those in a room that resembled a standard remote witness room. The room with enhanced environmental conditions contained items to enhance the audio and visual capacity of the room such as 1200mm x 2400mm acoustic panels, a table with a 50-inch plasma screen, camera and co-located speaker, existing ceiling-mounted light fittings, supplementary videoconferencing ceiling-mounted lighting, decorative blinds to help control glare and a ceiling-mounted microphone. It also contained a number of decorative items such as a moveable background panel, a rug, a flowering plant, comfortable tub chairs and views to the city outside (Rowden et al. 2013).

The room that was described as the standard type of room that remote witnesses would often encounter was considerably different to the enhanced room, containing a moveable trolley with CCTV equipment enclosed, two plastic chairs for the witness and support person, a stack of extra plastic chairs, a ceiling-mounted judge's overview camera and an existing window that was covered by a screen so that natural light was blocked out (Rowden et al. 2013). It was found that the technology and environment in the enhanced remote space resulted in improved interactions between those in the remote location and those in the courtroom. In addition, improving the design of the remote witness room resulted in witnesses and jurors viewing the overall environment more positively compared to those who used the standard room (Rowden et al. 2013).

It is acknowledged that the costs of upgrading courtroom facilities to improve the AVL experience can be substantial. Indeed, a number of state and territory governments have allocated considerable amounts of money from their annual budgets for court technology enhancements in recent years. For example, the Victorian Government allocated \$14.7m over four years between 2015 and 2019 to enhance the service delivery of AVL in the courts, and in November 2020 the New South Wales Government announced that it would be spending an additional \$54m over three years to deliver a digital transformation for the courts, in addition to the \$40m already spent between 2014 and 2018 to upgrade and expand AVL technologies in courts and correctional facilities as part of its Justice Audio Visual Link Consolidation Project (Department of Communities and Justice NSW 2020a; Department of Justice NSW 2014). These jurisdictions have justified their investment in AVL technologies in the courts by citing research that has demonstrated how improvements in design and technological layout of remote witness rooms and courts can address many of the administrative and procedural problems often associated with AVL technologies in criminal proceedings (eg Rowden et al. 2013; Tait et al. 2017).

Fairness and legal implications

The use of AVL technologies in criminal proceedings has raised a number of important legal questions, particularly in relation to its implications for fundamental legal rights such as access to justice and the right to a fair trial. With the increased use of AVL sessions since the onset of the coronavirus pandemic, the jurisprudence associated with AVL usage has increased greatly (see Judicial College of Victoria 2020b). This has addressed topics such as sentencing practices, bail decisions, entitlement to face-to-face hearings, the need for adjournments, the requirement for open justice, the meaning of ‘courtroom’ and when judge-alone trials should be available (Judicial College of Victoria 2020b).

Legislative framework

The rapid pace at which technology has developed and been adopted by society has resulted in a number of legislative instruments having to be introduced or amended in an effort to ensure the law keeps pace with these developments (Moses 2007: 239). Each of the states and territories now allows AVL technologies to be used in court for the purposes of taking evidence from vulnerable witnesses and for providing individuals in custody with access to the courts (MacDonald & Wallace 2004: 650; Rowden et al. 2013). A summary of the principal state and territory Acts authorising the use of AVL in courtrooms is presented in Table 2. This table does not contain the extensive legislative amendments to court procedures introduced to deal with the coronavirus pandemic in 2020, which are reviewed by the Judicial College of Victoria (2020a) and the Department of Communities and Justice NSW (2020b).

Table 2: Principal legislation permitting the use of videoconferencing in Australia

Commonwealth
ss 47A–47F, 59(2A), <i>Federal Court of Australia Act 1976</i>
ss 102C–102K, 123(1)(ma), <i>Family Law Act 1975</i>
r 15.02(2)(a), <i>Family Law Rules 2004</i>
ss 15YI–15YJ, <i>Crimes Act 1914</i>
ss 66–72, <i>Federal Circuit Court of Australia Act 1999</i>
New South Wales
Pt 6 Div 4, <i>Criminal Procedure Act 1986</i>
ss 5B, 5BAA, 5BA, 5BB, <i>Evidence (Audio and Audio Visual Links) Act 1998</i>
Victoria
ss 360(a), 362, 363, <i>Criminal Procedure Act 2009</i>
ss 42E–42S, <i>Evidence (Miscellaneous Provisions) Act 1958</i>
Queensland
ss 21AB, 39E, 39R, <i>Evidence Act 1977</i>
s 110C–110E, <i>District Court of Queensland Act 1967</i>
s 178C, <i>Justices Act 1886</i>
Western Australia
ss 106N, 121, <i>Evidence Act 1906</i>
ss 219AB–AE, <i>Family Court Act 1997</i>
ss 77, 88(5), 140(2)–141, <i>Criminal Procedure Act 2004</i>
s 66B(2), <i>Bail Act 1982</i>
s 14(1) <i>Sentencing Act 1995</i>
South Australia
ss 13(2)(a), 59IE, 59IQ, <i>Evidence Act 1929</i>
ss 13(5), 15(7), <i>Bail Act 1985</i>
Tasmania
ss 6B, 8(2)(b)(ii), 8(6), <i>Evidence (Children and Special Witnesses) Act 2001</i>
ss 6, 7, 8, <i>Evidence (Audio and Audio Visual Links) Act 1999</i>
s 67, <i>Justices Rules 2003</i>
Australian Capital Territory
ss 20(1), 32(1), 40Q, 40T(4), 40U, 43, <i>Evidence (Miscellaneous Provisions) Act 1991</i>
Northern Territory
ss 21A(2)(a), 49E–F, <i>Evidence Act 1939</i>

Since the coronavirus pandemic took hold, all courts in Australia have had to adapt their administrative procedures to facilitate social distancing. This has led to an increase in the use of AVL sessions in the courts, a reduction in or postponement of jury trials, increased availability of judge-alone hearings, enhanced electronic filing procedures, extended availability of bail and other applications dealt with on the papers rather than in person, provision for interlocutory matters to be dealt with electronically and hearings from remote prisons to be conducted by AVL. Specific changes have also been made to proceedings in specialist courts. For example, as at 10 June 2020, the Children's Koori Court in Victoria has been suspended until further notice and all other Children's Court users are required to make use of AVL or telephone (Judicial College of Victoria 2020a).

Access to justice

The ability to have 'one's day in court' is a critical component of the rule of law. Indeed, 'People need to be able to access the courts and legal processes or the law cannot enforce people's rights and responsibilities. People need access to the law to settle disputes, and to deal with situations where people or society as a whole are harmed as a result of someone's actions' (Rule of Law Education Centre nd: np).

For many people, access to the justice system is substantially curtailed by the high cost of legal services and the inability to attend courts in many remote and regional areas in Australia. A number of factors further contribute to the difficulties that some individuals face when trying to access and understand the legal system: reductions in the amount of Commonwealth funding allocated to community legal centres and legal aid in recent years (Law Council of Australia 2016: 2), problems in retaining and recruiting suitably qualified lawyers and the considerable costs associated with running a legal practice in an isolated area. One of the ways that these difficulties can be overcome is through the use of AVL technologies in courts and providing individuals in rural and remote areas with the opportunity to speak to a lawyer and/or attend court via video link. The use of these technologies reduces the disruption faced by individuals in some regional and remote areas who may have previously had to leave behind their support networks and families in order to travel to the nearest court. It can also assist courts to process and hear routine matters more efficiently.

Despite the positive impact that AVL technologies can have on improving access to justice, the use of AVL has been subject to some criticism. Practical concerns have been raised about the availability and reliability of AVL systems in many regional areas. Indeed, as noted by the Law Council of Australia (2013: 55):

“

Solicitors often have to attend court to use an audio-visual suite and not all courts currently use this technology. Most private practitioners do not have appropriate equipment in their offices. In a large number of regional towns there is no access to audio-visual facilities at all, either in the courts or in the township. For example, the Law Council is advised that in Gunnedah, solicitors have to travel to Tamworth to utilise the Legal Aid Commission’s regional office if they are to have access to video-conferencing facilities (a round trip of two hours).

Thus, while the use of AVL technologies can certainly be of assistance in improving access to justice in regional and remote areas where the appropriate AVL technologies and facilities are available, the cost and time efficiencies attributed to these technologies may not be realised in towns that do not possess the appropriate equipment or technology to operate such systems. Concerns have also been raised about the implications of such technologies for other important legal rights, such as those associated with the provision of a fair and open hearing.

Open justice and fairness

An alleged offender has a number of ‘fair trial’ rights under the Australian legal system. These derive from Article 14 of the *International Covenant on Civil and Political Rights* (ICCPR), to which Australia is a party, and have also been reinforced in case law (see, for example, *Whitehorn v The Queen* (1983) 152 CLR 657, 8 November 1983). Article 14(1) of the ICCPR provides:

“

All persons shall be equal before the courts and tribunals. In the determination of any criminal charge against him, or of his rights and obligations in a suit at law, everyone shall be entitled to a fair and public hearing by a competent, independent and impartial tribunal established by law. The Press and the public may be excluded from all or part of a trial for reasons of morals, public order (*ordre public*) or national security in a democratic society, or when the interest of the private lives of the parties so requires, or to the extent strictly necessary in the opinion of the court in special circumstances where publicity would prejudice the interests of justice; but any judgement rendered in a criminal case or in a suit at law shall be made public except where the interest of juvenile persons otherwise requires or the proceedings concern matrimonial disputes or the guardianship of children.

In addition, the ICCPR outlines a number of guarantees that individuals involved in criminal trials are entitled to rely on. These are found in art 14(3), as well as arts 14(5), 14(6) and 14(7). The most relevant of these insofar as they relate to the use of AVL in criminal proceedings is the guarantee that the defendant can examine, or have examined, 'the witnesses against him and obtain the attendance and examination of witnesses on his behalf under the same conditions as witnesses against him' (art 14(3)(e), ICCPR). Indeed, in *Lee v The Queen* (1998) 195 CLR 594 [32] (30 September 1998) the High Court noted that 'confrontation and the opportunity for cross-examination is of central significance to the common law adversarial system of trial'. It has been suggested that AVL alters the look and feel of the courtroom and, as a consequence, may inhibit a party's ability adequately to cross-examine the opposition, confront one's accuser or confront the offender. While the courts have indeed recognised that the right of an accused person to confront witnesses in person is fundamentally important in the criminal justice system, they have also acknowledged that this is not an absolute right at common law; rather, it is only one element of the right of an accused person to a fair trial: *R v Goldman* [2004] VSC 165 (3 March 2004); *DPP v Finn (Ruling no. 1)* [2008] VSC 303 (21 July 2008); *R v Cox (no. 6)* [2005] VSC 364 (14 September 2005); *R v Lyne* [2003] VSCA 118 [31] per Eames JA (15 August 2003); *R v Knigge* [2003] VSCA 94 (1 August 2003).

Indeed, when deciding whether to allow video links to be used in criminal trials, there are a number of factors that the courts will consider. Central to this is considering whether allowing a witness to appear via video link is in the interests of justice by 'balancing, on the one hand, the interests of the accused, and, on the other hand, the public interest in the ability of witnesses to give evidence in significant criminal trials without thereby occasioning danger to themselves or to other members of the community': *R v Cox (no. 6)* [2005] VSC 364 [7] per Kaye J, 14 September 2005.

Although AVL allows for witnesses to be cross-examined and to participate actively in the proceedings, it has been argued that the visceral responses that are often experienced in face-to-face encounters can be lost when witnesses appear via video link rather than in person. The fact that the parties on the computer screen are only two-dimensional means that it is possible for some non-verbal cues to be present, yet remain unnoticed. In addition, video technology may actually encourage (consciously or otherwise) a witness to behave in a disinhibited manner, which may manifest itself through fidgeting or averting one's gaze from the screen (Nelson 2015). Maintaining eye contact throughout the proceeding, while desirable and often requested, can be difficult. Western cultures view eye contact as a sign of respect, friendliness and attentiveness to the speaker. Those who do not make eye contact are perceived to be less credible, hostile, submissive and less adept intellectually (Akechi et al. 2013). However, some cultures, such as those of the Aboriginal and Torres Strait Islander population, have customarily viewed the avoidance or lowering of eye contact as a sign of respect throughout conversation (Queensland Health 2015: 1–2).

While some commentators have argued that AVL technologies create a perception analogous to being physically present (Marshall 2009: 29–30), complications may arise if the faces, bodies and surroundings of the parties to the proceedings are obscured by the camera. This may lead to a loss of demeanour evidence, as well as a level of asynchronous communication—conditions often mitigated when witnesses provide evidence to the court in person (Marshall 2009: 158). The courts have considered these concerns in a number of cases. For example, in *R v BNS* [2016] ACTSC 51 (24 March 2016), Justice Refshauge stated that:

“

...the general rule is that the Crown case should be presented by the prosecution of witnesses giving their testimony in the presence of the accused. That is the position taken in *R v Diane*. See also *R v Ngo* [2003] NSWCCA 82 (3 April 2003); (2003) 57 NSWLR 55. Nevertheless, courts have accepted that measures may be accepted which qualify that position to protect vulnerable witnesses, as in the case of informers: *R v Savvas* (1989) 43 A Crim R 331; *R v Mr C* (1993) 67 A Crim R 562.

It has been suggested that the use of AVL in court proceedings can disrupt the traditional scenography and legal architecture of the courtroom, potentially giving the impression that the remote party is not a part of the spatial organisation of the trial (Dumoulin & Licoppe 2016: 316). However, Mulachy (2011: 165) argued that this is not the view of all participants. Child witnesses in Scotland reported that the use of videoconferencing was a superior method for protecting their physical and emotional wellbeing compared to the use of physical screens, written testimonies or prerecorded evidence (Mulachy 2011: 165). Indeed, in *R v Kyu Hyuk Kim* [1998] VSC 215 [12] (17 December 1998), Justice Coldrey indicated he did not view the use of videoconferencing technology to be a hindrance, stating:

“

The necessary public scrutiny may still occur with video link, the production of documents need not occasion difficulty, there is no real delay in voice transmission, and the demeanour of a witness may be assessed using video link, with such assessment, as I have already mentioned, being facilitated by the length of time a witness is in the witness box.

Similar views have been expressed in international jurisprudence. In the Canadian case of *R v Heynen* (2000) YJ no. 6 [315], it was noted that AVL technologies allow for varying camera angles and close-up views to assess the demeanour of the witness. This was reinforced in *Pack All Manufacturing Inc v Triad Plastics Inc*, 2001 CanLII 7655 [6], where the judge stated:

“

In my experience, a trial judge can see, hear and evaluate a witness' testimony very well, assuming the video-conference arrangements are good. Seeing the witness, full face on in colour and live in a conference facility is arguably as good or better than seeing the same witness obliquely from one side as is the case in our traditional courtrooms here in the Ottawa Court House. The demeanor of the witness can be observed, although perhaps not the full body, but then, sitting in a witness box is not significantly better in this regard.

Widdison (1997) supports this view, suggesting that AVL technologies can actually enhance the courts' ability to assess credibility and demeanour. High-quality images and sound reproduction, accompanied by 'textual subtitles drawn from the computer-generated transcript, all may give a far better impression of whether the witness in question is being truthful or not' (np). Witnesses can also be observed using several cameras, thus allowing them to be assessed from different angles. Moreover, videoconferences can be recorded, allowing for a replay of action and the ability to enhance or enlarge the footage.

In a recent study in New South Wales, an assessment was undertaken of the causal impact of appearing via AVL on a defendant's likelihood of being granted bail. It was found that there was no meaningful difference in the likelihood of bail refusal for defendants appearing via AVL at their first court bail hearing compared with those appearing in person. Using a 95 percent confidence interval range from -3.7 to 4.2 percent, it was concluded that, if any impact existed, it was a relatively small effect. It was also found that there were no meaningful differences by demographic characteristics or offence type (Kim 2021).

In *United States of America v Anita Yates, Anton F Pusztai*, 391 F 3d 1182 (11th Cir 2004), the appellants argued that witness testimonies given via video link from Australia violated their sixth amendment right to confront the witnesses testifying against them because it did not meet the requirements of the public policy and evidence reliability rule enunciated in *Maryland v Craig*, 497 US 836, 110 S Ct 3157, 111 L Ed 2d 666 (1990). In the *Maryland* case, the court upheld a Maryland rule of criminal procedure that allowed child victims of abuse to testify by one-way closed circuit television from outside the courtroom. While the defendant in that case had argued that this rule breached his constitutional right to confront the witness, the court held ‘that a defendant’s right to confront accusatory witnesses may be satisfied absent a physical, face-to-face confrontation at trial only where denial of such confrontation is necessary to further an important public policy and only where the reliability of the testimony is otherwise assured’ (3 Id at 850, 110 S Ct at 3166). The court distinguished *Maryland v Craig*, 497 US 836 from *United States of America v Anita Yates, Anton F Pusztai*, 391 F 3d 1182 (11th Cir 2004), arguing that while the protection of children from secondary trauma that may occur as a result of giving evidence in person in the presence of their attacker is a public policy issue, ‘providing the fact-finder with crucial prosecution evidence and expeditious resolution of the case, on the record before us, are not important public policies that justify the denial of actual confrontation between witness and defendant’. The court ultimately upheld the appellants’ appeal on the basis that the evidence provided through the video teleconference to Australia violated the appellants’ sixth amendment confrontation rights and a retrial was ordered.

With the onset of the coronavirus pandemic, a number of Australian courts have been required to examine these arguments. In *JKC Australia LNG Pty Ltd v CH2M Hill Companies Ltd* [2020] WASCA 38 (30 March 2020) [7]), it was decided that a party is not ‘entitled’ to have a face-to-face hearing but that where the court, especially an appellate court, has found that telephone or AVL hearings provide a satisfactory experience, it is not necessary to adjourn hearings at the request of a party who seeks a face-to-face hearing. In *R v Macdonald* [2020] NSWSC 382 [29] (8 April 2020), however, the court held that difficulties in proceeding with a virtual trial, including technical problems, voluminous exhibits that cannot be shared readily and the need of participants to care for family members during the pandemic, may threaten an accused’s right to a fair trial and require an adjournment of proceedings:

“

The accused are entitled to a fair trial which includes, necessarily, fair process and procedures. I am of the view that a trial of the accused in a virtual courtroom is impractical. I have further resolved to the view that the accused’s right to a fair trial would be at risk were I to order that it continue at this time [29].

However, as Chief Judge Kidd in the County Court of Victoria noted in *DPP (Vic) v Combo* [2020] VCC 726 [6] (1 June 2020), ‘where matters can appropriately be determined on the papers in this COVID-19 environment, they should be’.

In *Quirk v Construction, Forestry, Maritime, Mining and Energy Union (Remote Video Conferencing)* [2020] FCA 664 [7]–[11] (26 March 2020), the court summarised the approach to be adopted for AVL hearings as follows:

“

Section 17(1) of the [*Federal Court Act 1976* (Cth)] requires the jurisdiction of the court to be exercised in open court, but s 17(4) allows the public to be excluded if their presence would be contrary to the interests of justice... Open justice is not absolute – a balance must be struck between the need for cases to be heard and determined, on the one hand, and the demands of open justice, on the other... Section 47C(1)(a) requires that the Court must be satisfied that the ‘courtroom or other place’ where the Court is sitting has the facilities to enable all eligible persons in the courtroom or place to see and hear the remote person. In my view, the expression ‘courtroom’ includes a digital courtroom, such as occurs where a hearing is conducted by video conferencing and all participants are remotely located.

Better practice initiatives

In the context of criminal justice proceedings, AVL technologies have a number of advantages: they support cost-cutting in the public sector, generally provide improved efficiencies in courtroom processes, reduce the space and time needed to conduct court hearings and allow for social distancing in times of a pandemic (Cock 2000: 9–10). While Rowden et al. (2013) have developed a range of best practice guidelines to improve the use of AVL technologies in criminal cases—specifically, minimum standards for the design of future (and upgrade of existing) remote witness facilities and minimum standards for courtrooms that have AVL capabilities—a number of other initiatives have also been suggested for the future use of AVL in the criminal courts. One such initiative is the ‘distributed courtroom’ (Tait et al. 2017).

Distributed courtrooms and virtual juries

A distributed courtroom enhances the current AVL model by introducing life-sized video screens and directional sound. These screens are used in place of the defendant, lawyer, the judge, or even the entire court. The number of screens depends on the number of persons not present in the physical courtroom. The aim is to heighten the impact of the trial, thus giving the physical and virtual parties a sense of being immersed in the proceedings (Carrick 2015; Carter 2015; Nelson 2015). Images of participants are projected on large screens, known as large-scale video set-ups. Documents are presented on accompanying iPads, tablets or laptops. These systems, along with videoconferencing, reduce the need for prisoner transportation and eliminate the need for prisoners to spend potentially long periods of time in prison holding cells while they wait to appear before the court. Each participant can join the hearing from physical courtrooms or court-like spaces. This further assists participants to feel that they are physically present in a courtroom (Tait et al. 2017: 8–11).

Tait et al. (2017) have suggested that for a ‘distributed courtroom’ to work effectively, it is important that the television screens are placed in appropriate positions. For instance, the judge should appear at (or just behind) the bench, and the witness, defendants and lawyers should be arranged in such a way that enables them to directly see each other. In addition to this, images of participants should appear on the screens to scale, and in context. The posture and demeanour of participants should be visible, and any gestures by the hands and body should be able to be seen.

In addition to these requirements, Tait et al. (2017) suggest that sound should come from where the person speaking is located (whether in person or by screen). This helps the listener to direct their attention to the person who is actually speaking. Ensuring that participants can look at and easily see each other when they are speaking is also important. This type of courtroom also allows members of the public to listen in on proceedings. Indeed, Tait et al. (2017) suggest that there may be a public gallery in more than one of the spaces used which could facilitate this type of public access.

In May 2015 the Australasian Institute of Judicial Administration held a mock trial using entirely life-sized screens to test the virtual set-up. The judge, prosecution and defence counsel presented remotely in different courtrooms in the Brisbane Supreme and District Courts. It was found that this set-up was an improvement on current AVL techniques as it enhanced the rights of the accused, improved the ability of lawyers to cross-examine remotely and improved the comfort level of witnesses (Carter 2015).

Virtual juries are another initiative that may become increasingly used in the future as AVL technologies improve. These types of juries are comprised of jurors who deliberate together and in private using AVL technologies (Widdison 1997). To date, Australia has not used virtual juries in criminal court proceedings. Indeed, there is some uncertainty in relation to whether or not, and if so how, a judge could adequately prevent the jurors' exposure to inappropriately prejudicial information; whether or not a judge could determine if jurors were concentrating or had lost interest in proceedings; and whether or not a judge could determine if a juror appears to be unwell.

Conclusion

Since the 1980s, AVL technologies have become an increasingly common feature of the criminal justice system. Recent imperatives created by the coronavirus pandemic have made their use essential in many cases. Based on the literature reviewed for this report, a number of issues have arisen that remain to be addressed if the benefits of AVL in the criminal courts are to be fully realised.

There are competing interests arising from the need to ensure that participants in criminal proceedings, particularly accused persons, receive fair and just treatment in proceedings, particularly criminal trials in which evidence is given via AVL. Defendants must have an opportunity to confront their accusers, participate effectively in cases and present their evidence and views clearly to decision-makers. AVL proceedings also need to be conducted so that prejudice and bias do not arise through the manner in which defendants are seen during AVL sessions, both in terms of their location, physical appearance such as attire and willingness to participate freely. Lawyers need to be able to consult their clients in confidence as and when needed—before, during and after proceedings—and individuals in custody need to be provided with privacy during AVL sessions so that others cannot overhear what transpires. Balancing these competing interests is difficult for judges and court administrators alike, as Wallace, Roach Anleu and Mack (2017: 709) noted:

“

On one side is a movement, largely driven by cost and efficiency concerns, towards greater use of AV technology which allows court users, especially defendants in custody, to ‘appear’ in court or before a judicial officer, without being physically present in the same location. On the other hand there is a parallel and competing drive for more human engagement between the judicial officer and court users. Both demands require specific and different judicial qualities and skills, and associated technological training, management and administrative infrastructure.

AVL technologies should also be able to support the viewing of exhibits and documents clearly. This could be achieved through the adoption of a model similar to that used by the ‘distributed courtroom’ whereby iPads (or other types of hand-held devices or tablets) are used to view the evidence in conjunction with the ability to scrutinise participants to proceedings on large screens.

Further development is clearly needed in the policy frameworks that facilitate the use of AVL technologies in the criminal courts. It is not enough simply to expend resources on installing and improving the latest technological solutions of hardware and software. Much more thought needs to be given to assessing the human impact of AVL technologies on those making use of them—including court officials, judges, lawyers, witnesses and accused persons. As Mike Hough observed in the United Kingdom:

“

[V]irtual technology inevitably degrades the quality of human interaction. Nuances may be undetected, misunderstandings may go unnoticed more easily. Empathy may be lost. Defence counsel may find it harder to support their clients effectively, and there are some indications that the technology may actually affect court outcomes. In other words, there is no guarantee at present that virtual hearings will not damage the quality of justice. (in Gibbs 2017: 1)

Finally, courtroom participants should be informed of the potential risks associated with the use of AVL technologies—specifically, those risks associated with potential interference by unauthorised people and problems of data security. Central to this is the need for the technologies to be reliable and for the individuals responsible for operating these technologies in court to be appropriately trained. In this regard, court staff should be trained to recognise any interference with the systems as well as methods to mitigate threats to the integrity of evidence. Ensuring that court staff are as prepared as they can be to deal with any security threats as they arise will go a long way to maintaining confidence in the use of AVL technologies in the criminal courts in Australia.

References

URLs correct as at December 2020

ACT Courts 2020. Attending a court remotely. <https://www.courts.act.gov.au/about-the-courts/news/response-to-the-covid-19-virus/connecting-to-a-court-video-call>

Akechi H, Senju A, Uibo H, Kikuchi Y, Hasegawa T & Hietanen J 2013. Attention to eye contact in the west and east: Autonomic responses and evaluative ratings. *PLOS ONE* 8(3): e59312. <http://doi.org/10.1371/journal.pone.0059312>

Carrick D 2015. Distributed courtrooms [radio program]. *Law Report*, ABC Radio National, 28 July. <http://www.abc.net.au/radionational/programs/lawreport/distributed-courtrooms/6651446#transcript>

Carter JS 2015. Virtual courtrooms: Inevitable reality or potentially damaging for justice? *Law Report*, ABC Radio National, 30 July. <http://www.abc.net.au/radionational/programs/lawreport/virtual-courtrooms-an-inevitable-reality-or-dangerous-justice/6657496>

CNN 2013. Skype pranksters dial up Zimmerman trial [Video]. *CNN*, 4 July. https://www.youtube.com/watch?v=8j-M_287BJo

Cock R 2000. Evidentiary rules and aids in the presentation of evidence. Paper to AIJA/SCAG Conference on Criminal Trial Reform, Melbourne, 24–25 March

Cohn ER & Watzlaf VJ 2011. Privacy and internet-based telepractice. *Perspectives of the ASHA Special Interest Groups* 1(1): 26–37

County Court of Victoria 2020. *Procedural requirements for videolink applications in the County Court of Victoria*. <https://www.countycourt.vic.gov.au/going-court/criminal-division/videolinks>

Department of Communities and Justice NSW 2020a. *Building and tech to aid recovery and justice*. Media release, 17 November. <https://www.dcj.nsw.gov.au/news-and-media/media-releases/building-ans-tech-to-aid-recovery-and-justice>

Department of Communities and Justice NSW 2020b. *Courtroom meeting space* [Factsheet and reference guide]. <https://www.publicdefenders.nsw.gov.au/Documents/practitioner-court-meeting-space-instructions-to-appear.pdf>

Department of Justice NSW 2014. *\$81.9 million technology upgrade to slash costs and time in justice system*. Media release, 17 June. <http://www.justice.nsw.gov.au/Pages/media-news/media-releases/2014/technology-upgrade.aspx>

District Court of Western Australia 2020. Electronic communication with courtrooms – video links. https://www.districtcourt.wa.gov.au/E/electronic_communication_with_courtrooms.aspx

Dumoulin L & Licoppe C 2016. Videoconferencing, new public management, and organizational reform in the judiciary. *Policy & Internet* 8(3): 313–33

Dupasquier B, Burschka S, McLaughlin K & Sezer S 2010. Analysis of information leakage from encrypted Skype conversations. *International Journal of Information Security* 9(5): 313–25

Equality and Human Rights Commission 2020. *Inclusive justice: A system designed for all*. London: Equality and Human Rights Commission. <https://www.equalityhumanrights.com/en/publication-download/inclusive-justice-system-designed-all>

Forell S, Laufer M & Digiusto E 2011. Legal assistance by video conferencing: What is known. *Justice Issues* 15: 1–13

Gertner N 2004. Videoconferencing: Learning through screens. *William & Mary Bill of Rights Journal* 12: 769

Gibbs P 2017. *Defendants on video: Conveyor belt justice or a revolution in access?* London: Transform Justice. <https://www.transformjustice.org.uk/reports/>

Johnston J 2014. Morcombe, Pistorius and the public interest in court broadcasts. *The Conversation*, 19 March. <https://theconversation.com/morcombe-pistorius-and-the-public-interest-in-court-broadcasts-24463>

Judicial College of Victoria 2020a. Coronavirus and the courts. Melbourne: Judicial College of Victoria. <https://www.judicialcollege.vic.edu.au/news/coronavirus-and-courts>

Judicial College of Victoria 2020b. Coronavirus jurisprudence. Melbourne: Judicial College of Victoria. <https://www.judicialcollege.vic.edu.au/news/coronavirus-jurisprudence-0>

Kim M-T 2021. *Estimating the impact of audio-visual link on being granted bail*. Crime and Justice Bulletin no. 235. Sydney: NSW Bureau of Crime Statistics and Research

Korvakangas J 2016. *Audio/video systems and information security* (Bachelor thesis). Helsinki Metropolia University of Applied Sciences, Helsinki, Finland

Krawitz M & Howard J 2015. Should Australian courts give more witnesses the right to Skype? *Journal of Judicial Administration* 25: 44–63

Law Council of Australia 2016. *Fact sheet 1: Legal aid matters*. South Australia: Law Society of South Australia. http://www.lawsocietysa.asn.au/pdf/MR_Legal_Aid_Matters_-_Fact_Sheets.pdf

Law Council of Australia 2013. *Inquiry into Access to Justice Arrangements*. Submission to Productivity Commission. <http://www.pc.gov.au/inquiries/completed/access-justice/submissions/submissions-test/submission-counter/sub096-access-justice.pdf>

- MacDonald R & Wallace A 2004. Review of the extent of courtroom technology in Australia. *William & Mary Bill of Rights Journal* 12(3): 649
- Magistrates Court of Tasmania 2020a. Fees and charges. <https://www.magistratescourt.tas.gov.au/fees>
- Magistrates Court of Tasmania 2020b. Support services – video linking and equipment. https://www.magistratescourt.tas.gov.au/support_services
- Magistrates' Court of Victoria 2020. Audio visual links. <https://www.mcv.vic.gov.au/lawyers/audio-visual-links>
- Marshall J 2009. *Creating illusion in computer aided performance* (Doctoral thesis). University of Nottingham, Nottinghamshire, UK
- McDougall R 2013. The uses and abuses of technology in the courtroom. *New South Wales Judicial Scholarship* 29: 1–10
- McKay C 2018. *The pixelated prisoner: Prison video links, court 'appearance' and the justice matrix*. Abingdon, UK: Routledge
- Moses B 2007. Recurring dilemmas: The law's race to keep up with technological change. *University of Illinois Journal of Law, Technology and Policy* 7: 239–85
- National Center for State Courts. 2010. What are the most common problems associated with the video conferencing system in your court or state? https://ncfsc-web.squiz.cloud/__data/assets/pdf_file/0018/17037/q40a.pdf
- Nelson F 2015. Trial by 'immersive' video link a world first. *Lawyers Weekly*, 19 May. <http://www.lawyersweekly.com.au/wig-chamber/16538-trial-by-immersive-videolink-a-world-first>
- Paul K 2020. Worried about Zoom's privacy problems? A guide to your video-conferencing options. *The Guardian*, 9 April. <https://www.theguardian.com/technology/2020/apr/08/zoom-privacy-video-chat-alternatives>
- Poulin AB 2003. Criminal justice and videoconferencing technology: The remote defendant. *Tulane Law Review* 78: 1089
- Productivity Commission 2014a. *Access to justice arrangements*. Inquiry report no. 72 (vol 1). Canberra: Commonwealth of Australia
- Productivity Commission 2014b. *Access to justice arrangements*. Inquiry report no. 72 (vol 2). Canberra: Commonwealth of Australia
- Queensland Courts 2020. Booking a courtroom venue. <http://www.courts.qld.gov.au/services/booking-a-courtroom-venue>
- Queensland Health 2015. *Communicating effectively with Aboriginal and Torres Strait Islander people. Aboriginal and Torres Strait Islander cultural capability*. https://www.health.qld.gov.au/__data/assets/pdf_file/0021/151923/communicating.pdf

Quigley R 2013. George Zimmerman's DNA was not found under Trayvon Martin's fingernails and there was no trace of the teen's [DNA] on the gun. *Daily Mail Australia*, 4 July. <http://www.dailymail.co.uk/news/article-2354908/Skype-users-interrupt-George-Zimmerman-trial-flood-witness-online-testimony-calls.html#ixzz4MpTtvXPH>

Rossner M, Tait D, McKimmie B & Sarre R 2017. The dock on trial: Courtroom design and the presumption of innocence. *Journal of Law and Society* 44(3): 317–44

Rowden E, Wallace A, Tait D, Hanson M & Jones D 2013. *Gateways to justice: Design and operational guidelines for remote participation in court proceedings*. Sydney: University of Western Sydney. <http://researchdirect.westernsydney.edu.au/islandora/object/uws%3A15505/datastream/PDF/view>

Rule of Law Education Centre nd. Access to justice. <http://www.ruleoflaw.org.au/education/case-studies/access-justice/>

Smith RG, Savage R & Emami C 2021. *Benchmarking the use of audiovisual link technologies in Australian criminal courts before the pandemic*. Research Report no.23. Canberra: Australian Institute of Criminology. <https://doi.org/10.52922/rr78191>

Stepniak D 2004. The broadcast of court proceedings in the internet age: The role of courts, *Australian Law Reform Commission Reform Journal* 85: 33–37

Supreme Court of New South Wales 2020a. Filing fees as at 01 July 2020. <http://www.supremecourt.justice.nsw.gov.au/Pages/Current-fees.aspx>

Supreme Court of New South Wales 2020b. Technology in the courtroom – protocols and procedures for video and audio link. https://www.supremecourt.justice.nsw.gov.au/Pages/sco2_facilitiessupport/sco2_courtroomtechnology/sco2_videoconferencingteleconferencing.aspx

Supreme Court of the Northern Territory 2020a. Court support services: Request for videoconference. https://supremecourt.nt.gov.au/__data/assets/pdf_file/0008/727217/video-conference-application.pdf

Supreme Court of the Northern Territory 2020b. Video conferencing. <https://supremecourt.nt.gov.au/about/video-conferencing>

Tait D, McKimmie B, Sarre R, Jones D, McDonald LW & Gelb K 2017. *Towards a distributed courtroom*. Sydney: Western Sydney University. https://courtofthefuture.org/wp-content/uploads/2017/07/170710_TowardsADistributedCourtroom_Compressed.pdf

Taylor N & Joudo J 2005. *The impact of pre-recorded video and closed circuit television testimony by adult sexual assault complainants on jury decision-making: An experimental study*. Research and public policy series no. 68. Canberra: Australian Institute of Criminology

Transform Justice 2020. Does virtual justice increase discrimination? *Transform Justice*, 11 June. <http://www.transformjustice.org.uk/does-virtual-justice-increase-discrimination/>

- Transform Justice 2019. The secret room: Who is listening to what in digital courts? *Transform Justice*, 14 April. <http://www.transformjustice.org.uk/the-secret-room-who-is-listening-to-what-in-digital-courts-2/>
- Van der Vlis EJ. 2011. Videoconferencing in criminal proceedings. In S Braun and JL Taylor (eds), *Videoconference and remote interpreting in criminal proceedings*. Guildford: University of Surrey: 11–25
- Wallace A 2008a. E-justice: An Australian perspective. In A Cerrillo & P Fabra (eds), *E-justice: Using information communication technologies in the court system*. New York: IGI Global: 204–28
- Wallace A 2008b. Virtual justice in the bush: The use of court technology in remote and regional Australia. *Journal of Law, Information and Science* 19(1): 1
- Wallace A, Roach Anleu S & Mack K 2017. Judicial work and AV use: Perceptions from Australian courts. *Oñati Socio-legal Series* 7(4): 691–716
- Warren MCJ 2015. Embracing technology: The way forward for the courts. Paper presented to 23rd Biennial Conference of District and County Court Judges, Australia and New Zealand, Melbourne, 19 April
- Watzlaf VJ, Moeini S, Matusow L & Firouzan P 2011. VOIP for telerehabilitation: A risk analysis for privacy, security and HIPAA compliance: Part II. *International Journal of Telerehabilitation* 3(1): 1–10
- Widdison R 1997. Beyond Woolf: The virtual courthouse. Paper presented to 12th BILETA Conference: The Future of Legal Education and Practice, University of Durham, UK, 24–25 March

AIC reports
Research Report

Dr Russell G Smith is an Honorary Fellow and former Principal Criminologist at the Australian Institute of Criminology and Professor in the College of Business, Government and Law at Flinders University.

Rebecca Savage and Catherine Emami contributed to this report as Research Officers at the Australian Institute of Criminology.

Australia's national research and
knowledge centre on crime and justice

aic.gov.au