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Should Australian courts give more witnesses the right to Skype?

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SHOULD AUSTRALIAN COURTS GIVE MORE WITNESSES THE RIGHT TO SKYPE?

DR MARYLYN KRAWITZ AND JUSTINE HOWARD

I INTRODUCTION

Have you ever thought about what courts will look like in 20 years? Will courtrooms be paperless? How will witnesses testify? This issue was addressed at an Australian conference last year.¹ The speakers at a session at the conference predicted that in 20 years, a significant number of witnesses will testify by Skype.² Chief Justice Marilyn Warren of the Supreme Court of Victoria³ and Judge Gibson of the New South Wales District Court have also discussed the issue of testifying by Skype.⁴

Millions of people use Skype daily.⁵ Skype allows users to hear⁶ and see video images of other users from locations worldwide.⁷ The authors of this article became intrigued by the issue of witnesses testifying by Skype. Instead of looking 20 years ahead, they believe that they can provide more useful information to judicial officers and court administrators if they primarily focus their research on current Skype use and its limitations. Although there is much debate on the use of technology in courts, there appear to be no Australian scholarly articles regarding witnesses testifying by Skype. This article specifically addresses this gap.

The topic of witnesses testifying by Skype is multifaceted. This article limits this topic to considering four practical research questions: (1) why should Australian courts consider using Skype when videoconferencing⁸ use is widespread? (2) how might security issues impact on Australian courts when they permit witnesses to testify by Skype? (3) how might Skype affect a witness’ demeanour/credibility? These three questions lead into question (4) should Australian courts permit witnesses to testify by Skype? The authors recognise that the audience for this article is judicial officers, court administrators and others working in the legal profession (as opposed to information technology professionals). The authors of this article tried to ensure that the technological language in this article is adapted to that audience.

The second section of this article will explain how courts use videoconferencing. The third section will explain how courts use Skype. The fourth section will discuss the similarities and differences between videoconferencing and Skype. The fifth section will examine the cases in which witnesses testified by Skype in Australia and overseas. The sixth section will consider the challenges of Skype use and the seventh section will provide recommendations. The final section will conclude. The authors note that an examination of other products that are similar

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¹ International Association for Court Administration Conference, Sydney, Australia, 24–26 September 2014.
² Skype is one form of VoIP technology. This article will explain what VoIP technology is in detail in section three.
⁸ When this article uses the word videoconference, it refers to videoconference through an ISDN line, and not to videoconference through an internet protocol network. This article uses the word videoconference interchangeably with the words videolink and audiolink.
to Skype, such as Facetime, is outside the scope of this article. However, some of the principles in this article may still apply to those other products.9

This article argues that judicial officers should consider using Skype if they are unable to use videoconferencing. If judicial officers decide to use Skype, they should be aware of its limitations, which this article will discuss.

II VIDEOCONFERENCING AND HOW AUSTRALIAN COURTS USE IT

Videoconferencing in Australia first began as closed circuit television (CCTV).10 CCTV ‘was proven technology based around point to point hardwired cabling systems that routed the video and audio signals from one room to another via central cabling hardware’.11 CCTV provided sufficient visual assistance, but there were problems hearing it.12 CCTV was first used in court so that certain vulnerable witnesses (e.g. children and sexual assault victims) did not have to be in the same room as the accused when they testified.13

Australian courts rarely use CCTV now. More courts use traditional ISDN (Integrated Services for Digital Network) videoconferencing instead of CCTV,14 because videoconferencing is more reliable than CCTV.15 Videoconferencing allows people to hear and see each other ‘in close to real time’.16 The progression from CCTV to ISDN is an example of courts adapting to changing technologies.

In order for a party to use videoconferencing at court for an external witness to testify, they must first apply for a court order. If a judicial officer grants the court order, then the party must book the videoconferencing with the court, complete any paperwork and pay a court fee (if applicable). A test call may take place at the court in advance of the court proceeding. The relevant party or their counsel should appear at court 15 - 20 minutes early on the day that the videoconferencing will take place to test that the videoconferencing still works and to confirm the contact details for the external witness. The relevant party must inform the external witness about courtroom etiquette before the videoconference (e.g. that they must take an oath or affirmation). Videoconferencing works by having a dedicated ISDN line, videoconferencing software, a computer and video screen. Both the initiator and participant require these items. To make a videoconference call, the initiator dials the participant over the dedicated ISDN line.

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9 Facetime is an Apple product that allows people to have conversations on an iPhone, iPad or other Apple products. Participants can see and hear each other. See, Apple, iOS8, https://www.apple.com/au/ios/facetime/. The authors of this article chose to consider Skype as opposed to Facetime because they found many more cases mentioned using Skype than Facetime during their search in October 2014.
11 Rowden, n 10 at 49.
12 Rowden, n 10 at 49.
14 Rowden, n 10 at 49. The authors of this article note that some Australian courts use videoconferencing over an IP network. For example, the Supreme Court of New South Wales permits videoconferencing over an IP network in some civil matters, see: Supreme Court of New South Wales, Video and Telephone Conferencing http://www.supremecourt.justice.nsw.gov.au/supremecourt/sco2_courtroomtechnology/sco2_videoconferencingteleconferening.html?s=1001.
15 Rowden, n 10 at 49.
16 Wallace, n 13 at 2.
via the videoconferencing software. The videoconferencing software then establishes an encrypted connection between the initiator and participant. The external witness can see and hear counsel and the people in the courtroom can see and hear the witness. If the external witness will swear an oath, the relevant party must ensure that the external witness has the appropriate religious text. They must also ensure that any necessary staff are present with the external witness (e.g. an interpreter). The court and the external witness then conduct the videoconference. Both sounds and images are transmitted via the videoconference software. The testimony will follow the usual court procedures as much as possible. Participants must monitor the video and sound quality of the videoconference throughout the testimony. If there are any problems, then the judicial officer must be notified. The judicial officer may decide that the external witness will finish testifying at another time.17

Some common videoconferencing uses in Australian courts are for witnesses to testify outside the courtroom because it is convenient and cheap,18 and for accused to appear at bail hearings and other interlocutory hearings from gaol. Using videoconferencing can decrease security risks when transporting prisoners.19 Australian courts also use videoconferencing for bail applications, sentencing hearings, to connect lawyers to courts, for interpreters, expert witnesses, civil and criminal trials, appeals, ADR and for judges to appear in remote courts.20 A magistrate who has finished their work for the day may appear at another busy court by videoconferencing.21 Much sentencing occurs over videoconference in Western Australia because the State is large and it can take considerable time for the accused to travel to court.22 The authors of this article believe that courts can use Skype for the same purposes as those described above and more.

State and Federal legislation enables courts to permit witnesses to testify from outside the courtroom by using technology in a variety of settings and proceedings. Witnesses in need of special protection are able to give evidence by videoconference. State and Federal legislation applies to children, allowing the Court to permit child witnesses to give evidence by videoconference, closed-circuit television or other technological methods.23 In some jurisdictions, other witnesses in need of special protection are similarly enabled to give

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17 Supreme Court of New South Wales, Video and Telephone Conferencing

18 Wallace, n 13 at 3.
19 Wallace, n 13 at 3.
20 Rowden, n 10 at 23.
21 Wallace, n 13 at 4.
23 For footnotes 23 – 33, the authors first viewed the legislation stated in: Rowden E et al, Gateways to Justice: Design and Operational Guidelines for Remote Participation in Court Proceedings (2013) at p 49, http://www.uws.edu.au/__data/assets/pdf_file/0019/471223/Gateways_to_Justice_Guidelines.pdf; Family Law Rules 2004 (Cth), r 15.02; Crimes Act 1914 (Cth), s 15Yi; Criminal Procedure Act 1986 (NSW), s 306ZB; Evidence Act 1977 (Qld), s 21AB; Evidence Act 1929 (SA), s 13A; Evidence Act 1906 (WA), s 106N; Evidence (Children and Special Witnesses) Act 2001 (Tas) s 6B; Evidence Act 1939 (NT) s 21A; Evidence (Miscellaneous Provisions) Act 1991 (ACT), s 9; Criminal Procedure Act 2009 (Vic), ss 369, 372.
evidence in this manner, such as those with cognitive impairments or those who are vulnerable due to the nature of the proceeding before the court.

Videoconferencing is also permissible in criminal matters. State legislation permits the accused to appear in this manner. Some exclusions can apply to certain court appearances, depending on the jurisdiction. This can include the inability to use videoconferencing for initial court appearances and enquiries into fitness to stand trial.

State and Federal legislation may permit other witnesses to give evidence by videoconference, provided certain conditions are satisfied. Subject to jurisdiction, these can include the availability of videoconferencing itself, issues of fairness, the ‘interests of justice’ and additional limits which the court can impose. The legislation that permits witnesses to testify by videoconferencing provides definitions for the words ‘audio visual link’ or ‘video link’ – these are the words that the legislation uses when it discusses videoconferencing. The authors of this article argue that the existing statutory definitions for ‘audio visual link’ and ‘video link’ are sufficiently broad to include Skype and permit courts to use it. For example, the New South Wales legislation states that “audio visual link” means facilities (including closed-circuit television) that enable audio and visual communication between persons at different places. The ultimate assessment of videoconferencing use within the courtroom is with the presiding judicial officer. It is arguably the same with Skype.

A 2013 Australian study of 61 judicial officers, lawyers, court staff and expert witnesses found that they believed the following about videoconferencing: it made court processes quicker, it minimised travel times to court, it helped vulnerable witnesses and aided justice generally.

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24 Criminal Procedure Act 1986 (NSW), s 3062B; Evidence Act 1929 (SA), s 13A; Evidence (Children and Special Witnesses) Act 2001 (Tas), s 8; Evidence Act 1939 (NT), s 21A.
25 For example, Crimes Act 1914 (Cth), s 15YI; Evidence (Children and Special Witnesses) Act 2001 (Tas), s 8; Evidence Act 1939 (NT), s 21A; Criminal Procedure Act 2009 (Vic), ss 369, 372.
26 Evidence (Audio and Audio Visual Links) Act 1998 (NSW), s 5BB; Evidence (Miscellaneous Provisions) Act 1958 (Vic), s 42K; District Court of Queensland Act 1967 (Qld), s 110C(3); Justices Act 1886 (Qld), s 178C(3); Evidence Act 1929 (SA), s 59IQ; Criminal Procedure Act 2004 (WA), ss 77, 141; Justices Rules 2003 (Tas), s 67.
27 Evidence (Miscellaneous Provisions) Act 1958 (Vic), s 42K; Evidence Act 1929 (SA), s 59IQ.
28 Evidence Act 1929 (SA), s 59IQ.
29 Federal Court of Australia Act 1976 (Cth), s47C; Family Law Act 1975 (Cth), s102F; Evidence (Audio and Audio Visual Links) Act 1998 (NSW), s 5B; Evidence (Miscellaneous Provisions) Act 1958 (Vic), s42G; Evidence Act 1929 (SA), s 59IQ; Evidence Act 1906 (WA), s 121; Family Court Act 1997 (WA), s 219AB; Evidence (Audio and Audio Visual Links) Act 1999 (Tas), s 6; Evidence Act 1939 (NT), s 49E; Evidence (Miscellaneous Provisions) Act 1991 (ACT), ss20, 32.
30 Evidence (Audio and Audio Visual Links) Act 1998 (NSW), s 3; Evidence (Miscellaneous Provisions) Act 1958 (Vic), s 42C; Evidence Act 1977 (Qld), Sch 3; Evidence Act 1929 (SA), s 59IA; Evidence (Audio and Visual Links) Act 1999 (Tas), s 3; Evidence Act 1939 (NT), s 49; Evidence (Miscellaneous Provisions) Act 1991 (ACT), Dictionary.
31 Federal Court of Australia Act 1976 (Cth), s 4; Evidence Act 1906 (WA), s 120; Family Law Act 1975 (Cth), s 4; Federal Circuit Court of Australia Act 1999 (Cth), s 5.
32 Evidence (Audio and Audio Visual Links) Act 1998 (NSW), s 3; Evidence (Miscellaneous Provisions) Act 1958 (Vic), s 42C; Evidence Act 1977 (Qld), Sch 3; Evidence Act 1929 (SA), s 59IA; Evidence (Audio and Visual Links) Act 1999 (Tas), s 3; Evidence Act 1939 (NT), s 49; Evidence (Miscellaneous Provisions) Act 1991 (ACT), Dictionary; Federal Court of Australia Act 1976 (Cth), s 4; Evidence Act 1906 (WA), s 120; Family Law Act 1975 (Cth), s 4; Federal Circuit Court of Australia Act 1999 (Cth), s 5.
33 Evidence (Audio and Audio Visual Links) Act 1998 (NSW), s 3.
34 Rowden, n 10 at 32.
These attributes could also apply to Skype, due to the similarities between Skype and videoconferencing that this article will describe in section four.

Some witnesses testify by videoconference at remote locations in Australia.35 There are problems with several of these remote locations. For example, the videoconference locations do not lessen participants’ apprehension and possible anxiety.36 The locations are also ‘small, bland, anonymous and sometimes crowded’.37 The witnesses are usually very close to the videoconference equipment.38 They are normally only able to see the judicial officer and the bar table and no other part of the courtroom.39 When witnesses testify by Skype, they can testify at any location that they choose with an internet connection. They may not need to worry about testifying in a crowded location with potential detrimental effects upon their mental health. This supports Australian courts permitting witnesses to testify over Skype as an alternative to videoconference. Skype can also overcome the limitations of ISDN technology in circumstances such as bedside court hearings, isolated locations, witnesses confined to their homes due to illness or frailty or witnesses who are subpoenaed to testify in two locations that are far from each other within a short time period. This is because less equipment is necessary to run Skype than videoconferencing and the basic version of Skype is free to use. Admittedly, court officials may also want to fix the current problems at videoconference locations in remote Australia so that they would be a better alternative for witnesses than testifying by Skype. However, financial constraints could pose a challenge to correcting these problems.

III SKYPE AND HOW AUSTRALIAN COURTS USE IT

One needs to have a general understanding of Voice over Internet Protocol (VoIP) to understand Skype. People can use VoIP to call other people in ‘real time’ through data networks over the internet.40 VoIP involves breaking down audio into ‘packets’. The audio then travels through various devices and reassembles at the destination.41 The faster the internet connection, the better VoIP works.42 Skype is a form of VoIP43 and is a social medium.44

Skype was created in 2003,45 and Microsoft currently owns it.46 It is a software application that allows users to make voice and audio calls through the internet. One can download Skype from the internet.47 After one downloads Skype, they must create a Skype account with a username

35 Wallace, n 13 at 6.
36 Rowden, n 10 at 30.
37 Rowden, n 10 at 30.
38 Rowden, n 10 at 30.
39 Rowden, n 10 at 30.
42 Booth, n 41 at 9.
43 Booth, n 41 at 9.
44 For a definition of social media, see Krawitz M, An Examination of Social Media’s Impact on the Courts in Australia (PhD (Law) Thesis, Murdoch University, 2014) 11–14.
47 Champ-Blackwell and Hartman, n 6 at 276.
and password.⁴⁸ Skype users can log into any technological device that has Skype installed on it by entering their Skype username and password.⁴⁹ When using Skype in court, the initiator of the conversation calls the other participant. The other participant accepts the request on the Skype software installed on their computer. The Skype software then establishes an encrypted connection between the court and the witness. The participants can choose to see each other because of a video camera attached to each computer. The witness can see inside the courtroom. The participants can also choose to talk without seeing each other. Alternatively, the video camera can be mounted externally on a tripod and pointed in any direction in the courtroom. The court and the witness then conduct the Skype conversation. At its conclusion, either participant can terminate the Skype session by ending the call.⁵⁰

One can use Skype on their computer, telephone, television or tablet, provided that Skype is downloaded and installed onto it.⁵¹ These devices require a high speed internet connection to use Skype, because a slow connection can cause delays in the conversation.⁵²

It is free to download the basic version of Skype.⁵³ Basic version users can call other Skype users, exchange files and instant message with other Skype users.⁵⁴ Skype can save a transcript of users’ conversations, but it cannot record them.⁵⁵ People who use Skype can type messages to other Skype users, who see their message immediately.⁵⁶

The paid version of Skype permits users to send text messages, call traditional telephone numbers and mobile telephone numbers and access the internet in over two million places.⁵⁷ Skype also offers ‘group calls’, which allow users to speak to up to 25 people at the same time. It is free to call and speak to Skype users, but there is a fee to call and speak to people who do not use Skype.⁵⁸ Skype users can purchase a ‘Skype number’.⁵⁹ A ‘Skype number’ is a telephone number (with an area code from any number of countries that the user chooses) that people can call.⁶⁰ The owner of the telephone number can accept the telephone calls over Skype.⁶¹

IV SIMILARITIES AND DIFFERENCES BETWEEN VIDEOCONFERENCING AND SKYPE

⁴⁹ Champ-Blackwell and Hartman, n 6 at 276.
⁵⁰ Widder, B, How Skype Works: What’s Behind the Premiere Online Calling Service (Digital Trends) [http://www.digitaltrends.com/web/how-does-skype-work/].
⁵² Champ-Blackwell and Hartman, n 6 at 276.
⁵⁶ Champ-Blackwell and Hartman, n 6 at 276.
⁵⁸ Microsoft, Features, [http://www.skype.com/en/features/].
⁵⁹ Microsoft, n 58.
⁶⁰ Microsoft, n 58.
⁶¹ Microsoft, n 58.
A Similarities Between Videoconferencing and Skype

Both traditional videoconferencing and Skype are relatively new technologies that give witnesses the opportunity to testify in the courtroom from outside the courtroom where the relevant court proceeding takes place. Both enable the court and the external witness to see and hear each other. Both can assist the justice system by allowing witnesses to testify who may not otherwise be able to. As previously stated in section two, a judicial officer decides whether or not to permit a witness to testify by videoconferencing or Skype.

If a witness testifies from outside the courtroom by Skype or videoconferencing, then there may be challenges regarding time differences, depending on where the external witness is located. There can be issues regarding the credibility of witnesses who testify by Skype and videoconferencing, which this article will discuss in section six. Either product can break down, which can interrupt a court proceeding and may require the court proceeding to be rescheduled. However, videoconferencing is more dependable than Skype.62 This is one of the differences between the two that the next section will examine.

B Differences Between Videoconferencing and Skype

Videoconferencing often requires equipment to operate that the average person is unlikely to own. Consequently, more people may have access to Skype than traditional videoconferencing equipment.63 Skype use allows courts to have greater access to witnesses in locations that were previously unavailable or inaccessible by videoconferencing. If one party uses videoconferencing, then the other party will usually need to use the same (as opposed to using Skype or a different type of videoconferencing that does not involve ISDN).64 This requirement restricts the availability of appropriate videoconferencing locations.

Charges to use ISDN telephone lines can be expensive,65 as opposed to the basic version of Skype, which is free.66 Using Skype can decrease a party’s costs at trial. It can also assist to decrease an unsuccessful litigant’s costs order. This enhances an individual’s ability to access the courts within their financial means. If witnesses for the prosecution testify by Skype, this can save the Australian judicial system considerable money because it would not have to pay the costs associated with using ISDN telephone lines.

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63 Knight J, What are the Differences between Skype and Videoconferencing?, https://www.youtube.com/watch?v=-DIW1CctDUo.
64 Chow, n 62.
65 Chow, n 62. For example, at the Federal Court of Australia, the minimum cost to set up the video conference, test it and for a court employee to attend, is $150 per Federal Court location for the first 15 minutes. It costs an additional $50 for each extra 15 minute time period to use the equipment and for a court employee to attend. There are additional transmission fees for overseas locations. See, Federal Court of Australia, Charging for Use of Videoconferencing, http://www.fedcourt.gov.au/__data/assets/pdf_file/0019/21871/VCFchargesheet-June-2013.pdf.
66 Microsoft, n 58.
Videoconferencing ‘is dedicated and more stable’ than Skype.\(^67\) Skype can suffer from ‘distortions with video and voice quality’.\(^68\) Resolution means ‘a measure of the sharpness of an image or of the fineness with which a device (such as a video display, printer, or scanner) can produce or record such an image usually expressed as the total number or density of pixels in the image’.\(^69\) The picture on videoconferencing normally has a higher resolution than Skype.\(^70\) This is a reason why it is preferable for Australian courts to try to use videoconferencing before considering Skype use. Admittedly, Skype’s resolution may improve in the future. Skype also requires more bandwidth than videoconferencing.\(^71\) Nevertheless, witnesses have testified by Skype in some Australian and overseas court proceedings, which the next section will examine.

V AUSTRALIAN AND OVERSEAS CASES INVOLVING WITNESSES TESTIFYING OVER SKYPE

Videoconferencing is the predominant method of remotely speaking to witnesses in Australian courts.\(^72\) There have been isolated documented instances of Australian judicial officers permitting witnesses and police officers to testify by Skype. There have also been instances of the same occurring overseas. This further illustrates the potential use of Skype by Australian courts. Witnesses have testified by Skype in criminal, civil and family court proceedings.

A Criminal

Witnesses for the prosecution and the defence have testified by Skype. In 2014 the New South Wales police announced that certain witnesses (including police officers and expert witnesses) at the New South Wales Local Court could testify by Skype in criminal trials.\(^73\) Witnesses could only testify by Skype if their evidence was uncontentious.\(^74\) Deputy New South Wales Police Commissioner Catherine Burn stated that ‘the initiative was introduced to end the hours wasted by officers sitting outside a court, waiting to give evidence, when they could be performing frontline duties’.\(^75\) Some of the locations where the witnesses testified from

\(^{67}\) Chow, n 62.
\(^{70}\) Knight J, What are the Differences between Skype and Videoconferencing? https://www.youtube.com/watch?v=DIW1CctDUo.
\(^{72}\) Wallace, n 13 at 2. As previously stated, some Australian courts use videoconferencing over an IP network. For example, the Supreme Court of New South Wales permits videoconferencing over an IP network in some civil matters, see Supreme Court of New South Wales, Video and Telephone Conferencing http://www.supremecourt.justice.nsw.gov.au/supremecourt/sco2_courtroomtechnology/sco2_videoconferencingteleconferening.html?s=1001.
\(^{74}\) Ralston, n 74. The authors note that they could not find that the NSW Courts provided a definition or explanation for the word ‘contentious’ in this article or on their website.
\(^{75}\) Ralston, n 74.
include: Ireland, England, Macedonia and interstate. A police officer based in Liverpool, New South Wales, testified by Skype at a trial in Albury, New South Wales. The police officer would have had to travel for many hours to reach Albury if he had to testify personally. Information from the witnesses regarding testifying by Skype can help researchers learn about whether concerns regarding Skype use in Australian courts were realised. Some considerations that researchers may want to consider regarding the Skype use in the New South Wales Local Court could be: whether witnesses who may not otherwise have been able to testify could testify, whether the technology worked in the majority of cases with few problems, whether there were any issues involving security or assessing the credibility of witnesses and whether any successful appeals were made due to the witness who testified by Skype.

Overseas, a lawyer examined a witness by Skype in a criminal trial involving drug trafficking in Georgia. The accused did not have sufficient money to pay for the witness to travel to Georgia. The accused’s counsel first tried to apply for a subpoena to compel the witness from out of State to appear at Court in Georgia, but the application was unsuccessful. The prosecutors in the case argued against the witness testifying by Skype. They said that prosecutors should be able to ‘confront witnesses’ in person. Douglas County Superior Court Chief Judge David T. Emerson sided with the accused. His Honour said that he was generally happy with the witness’ testimony over Skype and accepted it, notwithstanding some ‘brief disconnections in service’. This article will address the issue of disconnections in service in section six. The accused was convicted and sentenced to 30 years imprisonment. Information that the authors of this article found regarding this case did not state who the witness who testified by Skype was or what their testimony was about. Since the accused’s counsel first tried to subpoena the witness, one can infer that the witness was important to the case. A judicial officer permitted an important witness to testify by Skype in a case involving a serious charge (drug trafficking) - this supports permitting witnesses to testify by Skype in certain situations.

In People v. Novak, the defendant was charged with murder, burglary and other crimes. The defendant requested that one of the defence witnesses, Deputy Wiggins, testify by Skype. The Court found that there was a ‘necessity’ that Deputy Wiggins testify by Skype for several reasons, including: the length of the trial, the hardship that he would experience travelling from Florida to New York for the trial and the delay in the trial. The Court also found it relevant that

76 Ralston, n 74.
77 Ralston, n 74. The authors of this article tried to obtain information regarding the success of witnesses testifying by Skype in New South Wales that they were able to use in this article, but they were unable to successfully do so.
78 Rossiter, n 78.
79 Rossiter, n 78.
80 Rossiter, n 78.
81 Rossiter, n 78.
82 Rossiter, n 78.
84 41 Misc. 3d 733, 971 N.Y.S.2d 197 (2013).
it was the defendant making the request and not the prosecution and that the jury could watch the cross examination. This raises the issue of whether a judicial officer should put more weight on a request for a witness to testify by Skype if it comes from the accused. It should not matter whether the accused or the prosecution makes the request.

Four State witnesses in a murder trial were permitted to testify by Skype at the Eighth Judicial District-North Circuit Court in Arkansas, United States. If the witnesses did not testify by Skype, then the State of Arkansas would have had to pay for their travel to Arkansas, from Missouri and Michigan. The witnesses were: an evidence custodian, a sheriff, a sheriff’s deputy and a forensic psychologist. ‘I prefer to have each of the State's witnesses physically present in our courtroom when they testify before the jurors,’ stated Christi McQueen, a prosecutor in the case. ‘However, when timing and circumstances prevent this, or there are economic issues that cannot be ignored, Skype is a very viable alternative.' This case is another example of a court proceeding involving serious charges in which Skype testimony was used. McQueen’s comments support some of the reasons why the authors of this article recommend that judicial officers permit witnesses to testify by Skype if videoconferencing is unavailable, such as cost.

When police officers arrive at crime scenes, they may realise that they require search warrants to obtain further evidence. When police in Palm Bay, Florida, United States, arrive at a crime scene, they can email documents to court to request search warrants. A judge authorises the search warrants over Skype. Consequently, police do not have to travel to court to obtain the search warrants. This Skype use by police is very innovative. However, the authors of this article do not recommend that Australian courts permit police to use Skype this way. Additional research is required to ensure Skype’s security and quality in this context. This is particularly important given the security and privacy concerns search warrants raise.

B Civil

Witnesses have testified by Skype in civil matters in courts and tribunals. A witness in an estate dispute who lives in the United Arab Emirates requested permission to testify over Skype or by telephone because she had two children, aged six and eight, with her. She also stated that she could not afford to pay to travel to Australia to testify. Justice Paul Cronin rejected the witness’ request because his Honour needed to assess the witness’ credit. His Honour stated that ‘it would make my task so much more difficult if I was not able to assess their demeanour where credit is the issue’. His Honour also stated that he ‘would be disadvantaged’ if the

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87 McLemore K, Skype Used as a Courtroom Tool (Hope Star) http://www.hopestar.com/article/20130401/News/130409969.
88 McLemore K, Skype Used as a Courtroom Tool (Hope Star) http://www.hopestar.com/article/20130401/News/130409969.
89 2014 Florida Statutes, Criminal Procedure and Corrections, Chapter 933.
91 Brown v Murdoch and Ors (No 2) [2014] FAMCA 618, [21] Cronin J.
92 Brown v Murdoch and Ors (No 2) [2014] FAMCA 618, [23] Cronin J.
witness did not sit in the courtroom throughout the court proceeding.93 One of the counsel in the case argued against the witness testifying by Skype because documents would need to be put to the witness. However, His Honour did not find this a problem and stated that the documents could be provided to the witness by email or fax.94 This case is significant because it is the only case that the authors of this article could find95 in which an Australian judicial officer provided reasoning to explain a decision to refuse to permit a witness to testify by Skype. This case also demonstrates that the ability to assess the credibility of a witness over Skype is a live and important issue. This article will consider it in section six.

The Civil and Administrative Tribunal of NSW - Occupational Division permitted two witnesses to testify by Skype. The matter involved disciplining a nurse who also worked as a midwife. The nurse/midwife worked with an unregistered former medical practitioner to give patients alternative medical treatment for cancer, when ‘she knew, or was recklessly indifferent to the fact, that the former medical practitioner was not registered’.96 One witness lived in Japan and could not attend the tribunal proceeding for medical reasons. The other witness was ‘undergoing medical testing’.97 In another matter, an applicant who had served in the Royal Air Force sought a review of a decision to deny him a service pension testified by Skype at the Administrative Appeals Tribunal (Adelaide).98 The applicant resided in the Philippines at the time of the hearing.99 Neither of judgments stated the reasons why the witnesses were permitted to testify by Skype. It is possible that the witness’ locations and medical issues were highly relevant. In another civil trial in Australia, Besanko J refused to grant a witness the ability to testify by Skype.100 The witness was located in China. Besanko J stated that the witness being in China ‘was a matter for him’101 and ‘[t]here was no proper reason to grant the request’.102

A Federal Court of Australia case concerned an adjournment application of the substantive hearing by the second respondent.103 This case concerned primary claims for misleading purchasers and untrue representations concerning particular sale items. The second respondent sought to have the hearing adjourned because of financial constraints and because his witness (Mr Reichelt) was unavailable. Mr Reichelt was unavailable because he was incarcerated in the United Kingdom.104 Yates J’s reasons stated that Mr Reichelt was due to be released from prison on 7 December 2012. The hearing was due to commence on 3 September 2012.105 The

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93 Brown v Murdoch and Ors (No 2) [2014] FAMCA 618, [23] Cronin J.
94 Brown v Murdoch and Ors (No 2) [2014] FAMCA 618, [22] Cronin J.
95 The authors of this article note that they searched for judgments involving Skype in June 2015.
96 Health Care Complaints Commission v Fraser [2014] NSWCATOD 29, [6], [7].
97 Health Care Complaints Commission v Fraser [2014] NSWCATOD 29, [41].
100 Bob Jane Corporation Pty Ltd (ACN 005 870 431) v ACN 149 801 141 Pty Ltd and Others (2013) 97 ACSR 127, 134.
101 Bob Jane Corporation Pty Ltd (ACN 005 870 431) v ACN 149 801 141 Pty Ltd and Others (2013) 97 ACSR 127, 134.
102 Bob Jane Corporation Pty Ltd (ACN 005 870 431) v ACN 149 801 141 Pty Ltd and Others (2013) 97 ACSR 127, 134.
103 Australian Competition and Consumer Commission v SensaSlim Australia Pty Ltd (in liquidation) (No 3) [2012] FCA 939.
104 Australian Competition and Consumer Commission v SensaSlim Australia Pty Ltd (in liquidation) (No 3) [2012] FCA 939, [24].
applicant (the ACCC) opposed the second respondent’s application. The applicant noted the availability of Mr Reichelt on 2 October 2012 to give evidence. The applicant further noted Mr Reichelt ‘is otherwise available to appear by Skype’. His Honour directed that ‘Mr Reichelt’s evidence was to be given by videolink on 2 October 2012 while he was on day release. He is not able to give evidence by videolink from prison’. His Honour conceded that despite his constraints, Mr Reichelt would ‘likely to be able to give evidence, by arrangement’. His Honour held, inter alia, that Mr Reichelt’s unavailability was an inadequate reason to postpone the hearing. Accordingly, he dismissed the second respondent’s application. The final hearing proceeded and judgment was delivered. Since the second respondent did not appear at that hearing Mr Reichelt was not required to testify via videolink.

Overseas, Justice Martin Ritholz of the Queens Supreme Court in New York State, United States, permitted a plaintiff in India to testify over Skype in a civil trial. This saved thousands of dollars and many hours of the plaintiff’s time. It is difficult to envisage an opposing party consenting to the plaintiff (or defendant) testifying over Skype. The plaintiff and defendant are critical witnesses in any trial whom the opposing party may wish to cross-examine in person. Judicial officers may be more likely to permit witnesses to testify over Skype in a civil trial, as opposed to in a criminal trial, in which the judicial officer must consider an accused’s right to a fair trial.

The Victorian Civil and Administrative Tribunal’s (VCAT) Practice Note PNVCAT outlines the standard procedure for directions hearings and urgent hearings. The Practice Note applies to all Court Lists, except for specific proceedings at the Tribunal’s discretion. The Practice Note provides for a party or their representative to attend the hearing by videoconferencing and also Skype ‘in exceptional cases’, notwithstanding that the Tribunal’s possession or provision of the required equipment may be restricted. Since one can download Skype from any technological device that accesses the internet, one might assume that VCAT possesses the relevant equipment for Skype use. VCAT maintains that it has discretion regarding such access. The discretion is subject to the nature of the proceedings, relevant availability and the appropriateness of such a request. If VCAT has Skype availability on the relevant date and time that the hearing will take place, this would support

107 Australian Competition and Consumer Commission v SensaSlim Australia Pty Ltd (in liquidation) (No 3) [2012] FCA 939, [5].
108 Australian Competition and Consumer Commission v SensaSlim Australia Pty Ltd (in liquidation) (No 3) [2012] FCA 939, [36]. It is not clear from his Honour’s reasons whether the Court was open to Skype being used in the proceedings.
110 Australian Competition and Consumer Commission v SensaSlim Australia Pty Ltd (in liquidation) (No 3) [2012] FCA 939, [40].
113 Victorian Civil and Administrative Tribunal Practice Note–PNVCAT 5 “Directions Hearings and Urgent Hearings”.
114 Victorian Civil and Administrative Tribunal, n 113 at [2].
115 Victorian Civil and Administrative Tribunal, n 113 at [29].
116 Victorian Civil and Administrative Tribunal, n 113 at [30].
permitting the witness to testify by Skype. There are some situations which might favour permitting a witness to testify by Skype, which this article has already mentioned, such as when the witness is located in an area that is very far from a courtroom with videoconference capability and the relevant party cannot afford to pay for their travel or who experiences ill health or other hardship. If both parties consent to the witness testifying by Skype, this can support the Tribunal granting permission. VCAT’s acceptance of witnesses testifying by Skype supports Australian courts permitting witnesses to testify by Skype if videoconferencing is unavailable.

C Family

A witness in the American military who was located overseas was permitted to testify over Skype in the United States in a family law matter.\textsuperscript{117} If the relevant witness is in the Australian military, this may be a factor for Australian judicial officers to consider when they receive a request for a witness to testify over Skype. It may be difficult to leave an overseas post to testify in Australia. It is noted that judicial officers may have concerns over revealing defence locations, national security and witness safety if the Australian military testifies over Skype.

Oamaru Court in New Zealand commenced a trial in which witnesses could testify by Skype in Family Court matters in 2012.\textsuperscript{118} Judges and lawyers supported the trial.\textsuperscript{119} The authors of this article were unable to find any publicly available information regarding the length of the trial or its success.\textsuperscript{120} Information about the Oamaru Court trial could be helpful to research in this area, similar to the information about witnesses testifying by Skype at the New South Wales Local Court. In particular, researchers could examine the differences in Skype use in criminal matters in the New South Wales Local Court and family matters in the Oamaru Court. Any comparison of the two jurisdictions would need to consider that the Oamaru Court trial was two years before the New South Wales Local Court commenced using Skype, so Skype’s quality may have improved during that time.

There are also cases from the United Kingdom which considered Skype use in family court proceedings. Justice Peter Jackson of the High Court of Justice of England and Wales permitted Skype to be used ‘by means of the court’s video link facilities’ in \textit{S (Relocation: Parental Responsibility)}.\textsuperscript{121} The case concerned a mother’s application to relocate a child to Columbia from the United Kingdom after she separated from the child’s father. The mother’s sister testified over Skype, with an interpreter.\textsuperscript{122} His Honour accepted the sister’s evidence. He stated that while ‘[m]aking allowances for the limitations of technology and language’, she was authentic and responsive.\textsuperscript{123} This case illustrates that witnesses can testify by Skype, even


\textsuperscript{118} Ashton A, “Skype to be used for first time in NZ court” \textit{Otago Daily Times} (online), 4 August 2012, \url{http://www.odt.co.nz/regions/north-otago/220123/skype-be-used-first-time-nz-court}.

\textsuperscript{119} Ashton, n 118.

\textsuperscript{120} The authors searched the website for the Oamaru Court, the internet, and common legal databases on 2 June 2015.

\textsuperscript{121} [2013] 2 FLR 1453; [2013] EWHC 1295 (Fam), [44]. Please note this case is also referred to as \textit{R (mother) v C (father), S (through his Children’s Guardian)}.

\textsuperscript{122} \textit{S (Relocation: Parental Responsibility)} [2013] 2 FLR 1453; [2013] EWHC 1295 (Fam), [44].

\textsuperscript{123} \textit{S (Relocation: Parental Responsibility)} [2013] 2 FLR 1453; [2013] EWHC 1295 (Fam), [45].
though they use an interpreter. This permits even more witnesses to be able to testify by Skype because needing an interpreter is not a barrier.

In *Re ML (Use of Skype Technology)* [2013] EWHC 2091 (Fam) Peter Jackson J documented Skype use in two separate cases. In the first described case, Skype was used to obtain parental consent to an adoption order. The natural parents in Nepal had to sign consent forms. The relevant court documents were translated and sent to a Nepalese lawyer. The guardian and the child’s lawyer viewed the natural parents separately attending the Nepalese lawyer’s office and signing, via thumbprint, the relevant consent documents over Skype, from England. Although the judgment does not make it clear, it appears that this Skype exchange did not occur in open court. It seemed to occur outside of the proceedings. His Honour indicated that he was content the parents had freely and unconditionally consented to the adoption, and also that they had received no financial inducement. It has also provided a record for the child of her parents’ participation and support for an adoption that she very much wants.

This case concerns whether courts can use Skype for purposes other than testimony. This involves several other considerations, such as the appropriate scope for Skype use outside of courtroom proceedings. It considers whether the judicial officer must be present when Skype is used for that testimony to be acceptable. It raises the issue of whether courts need to stipulate relevant parameters of acceptable extra-judicial Skype use in practice directions permitting Skype use.

In an American family court judgment, an appeal court upheld the trial judge’s decision to let a mother testify by Skype from Spain. The mother moved to Spain with her children to study abroad. She then applied to stay there permanently and commenced proceedings so that her children could stay with her. The appeal court found that the trial judge did not abuse its discretion to let the mother testify by Skype because it would have been a hardship for the mother to travel internationally. She would have had to take her kids out of school or else leave them in a foreign country with someone not related to them. One of the children also had a skin condition that air travel made worse. If the mother travelled to the United States, her parents might have tried to interfere with her custody issues. This case shows one of the ways in which family law cases are different from other types of cases – the need to take into consideration how permitting a witness to testify by Skype may impact upon the children involved.

The majority of the judgments in the court proceedings that this section discussed, in criminal, civil and family proceedings, did not state the reasons why the judicial officers permitted the relevant witnesses to testify by Skype. It would be helpful to learn why the judicial officers

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124 [2013] EWHC 2091 (Fam).
125 *Re ML (Use of Skype Technology)* [2013] EWHC 2091 (Fam), [1].
126 *Re ML (Use of Skype Technology)* [2013] EWHC 2091 (Fam), [7].
127 *Re ML (Use of Skype Technology)* [2013] EWHC 2091 (Fam), [8].
132 Some additional Australian judgments which state that witnesses testified by Skype but do not state the reasons why the judicial officers permitted this to occur are: *Health Care Complaints Commission v Black (No 2)*
permitted the witnesses to testify by Skype. For example, their Honours may believe that
witnesses should only be permitted to testify by Skype in certain trials or with certain caveats
(e.g., whether there was a type of court proceeding in which Skype should not be used or should
be used, whether the witness’ testimony was not particularly contentious or if it was necessary
to see the witness in person to see their demeanour). Observing a witness’ demeanour is one of
the challenges that may be experienced when witnesses testify over Skype that the next section
of this article will consider.

VI CHALLENGES OF SKYPE USE

A Current Security - Is Encryption Enough?

Concerns have been raised regarding the security of VoIP in the area of psychoanalysis. Psychoanalysis is clearly different from court proceedings, but it still requires confidentiality. Scharff argues due to a lack of protection (encryption), VoIP is not as secure as videotechnology.\footnote{Scharff JS, “Clinical Issues in analyses over the telephone and the internet” (2012) 93(1) Int J Psychoanal 81, 83.}\footnote{Microsoft, \textit{Skype Security}, \url{www.skype.com/en/security/#encryption}.} Skype features in-built encryption.\footnote{Microsoft, n 134.} Encryption is the method of changing data to allow only those who are part of the conversation to access it.\footnote{Clarke P, “VOIP security matters?” (2005) 8(8) ILB (newsletter) 177, 177. It is noted that in Clarke’s article, he refers to the relevant legislation as: \textit{Telecommunications (Interception and Access) Act 1979} (Cth). The current name of the legislation is \textit{Telecommunications (Interception and Access) Act 1979} (Cth).} This may initially appear to overcome Scharff’s reservation regarding VoIP. There are laws in place designed to prevent these kinds of actions. Clarke,\footnote{Clarke P, n 136 at 117.} a lawyer at Maddocks in Sydney, contends that the \textit{Telecommunications (Interception and Access) Act 1979} (Cth) and the \textit{Criminal Code Act 1995} (Cth) provide users with protection from criminal exploitation arising from VoIP technological vulnerabilities.

Clarke asserts that the \textit{Telecommunications (Interception and Access) Act 1979} (Cth)\footnote{Clarke P, n 136 at 117.} makes unauthorised interception of another’s VoIP call illegal. The \textit{Criminal Code Act 1995} (Cth) also makes it illegal for others to break into another’s system and make unauthorised changes. Such changes would include a reduction in the VoIP call’s quality.\footnote{Scott v Scott [1913] AC 417, cited in \textit{McIannett v Daley} [No 2] WASC 386 (S) (25 October 2012), [4] LeMiere J.} Just because these laws exist, it does not mean that people will follow them. The authors of this paper assert that in-built encryption is an inadequate safeguard; stronger measures are needed. Most judicial proceedings in Australia are held in open court. Members of the public and the press may enter the court and listen.\footnote{Scott v Scott [1913] AC 417, cited in \textit{McIannett v Daley} [No 2] WASC 386 (S) (25 October 2012), [4] LeMiere J.} The witnesses and judicial officers are also aware of the public’s presence in the courtroom. When Skype is used, the Court may not know if any third party is eavesdropping on the evidence. If suppression orders are made, then it would be a significant issue that an unknown third party could eavesdrop on that evidence and inform the world about it.

B Is it Safe – Doubts Emerge

Schneier, CTO of Counterpane Internet Security, argues that the protection (encryption) of VoIP is vital. VoIP calls are susceptible to attacks that are not an issue for telephones or ISDN. Encryption helps to secure VoIP. Given Skype is encrypted, this may lead some people to believe that Skype has sufficient security measures to protect people who use it. Schneier asserts that encryption is not a universal cure for VoIP’s security issues. Encryption cannot prevent others listening into internet calls.

In addition, Churcher, in the *International Journal of Psychoanalysis*, highlights that it is not widely known how Skype is encrypted, so one cannot objectively critique it. Dupasquier et al., from the Centre for Secure Information Technologies at Queen’s University of Belfast, indicate that just because a VoIP discussion is encrypted, it will not completely stop a hacker from listening in on a Skype call. On an online forum, Spector observes that while encryption improves a person’s security, it does not assure it. If a person’s computer is already infected by malicious software such as viruses, the individual ultimately controlling the malicious software could potentially eavesdrop on that person’s telephone calls. Additionally, the other VoIP user who that person communicates with will also be subject to the same VoIP security concerns. If the other user utilises a mobile or fixed telephone, then those telephones can still be tapped.

*Re ML (Use of Skype Technology) [2013] EWHC 2091 (Fam)* discusses the security concerns regarding Skype. It provides insight into Peter Jackson J’s reasoning in *S (Relocation: Parental Responsibility) [2013] EWHC 1295 (Fam)*. The judgment in *S (Relocation: Parental Responsibility) [2013] EWHC 1295 (Fam)* stated that the witness gave evidence via Skype with an interpreter’s help. In *Re ML (Use of Skype Technology) [2013] EWHC 2091 (Fam)* his Honour explained that in *S (Relocation: Parental Responsibility) [2013] EWHC 1295 (Fam)* the initial application to take evidence via Skype was refused. His Honour stated that while Skype is appropriate for regular usage, it ‘does not lend itself to the court environment.’ His Honour stated ‘[t]here are problems in everyone seeing and hearing the picture and in the evidence being recorded. There are also issues about security. I would not be willing to use this method if there was any alternative’. His Honour permitted the

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141 Schneier, n 140.

142 Schneier, n 140.

143 Microsoft, n 134.

144 Schneier, n 140.

145 Schneier, n 140.


149 Spector, n 148.

150 Spector, n 148.

151 Spector, n 148.

152 Spector, n 148.

153 *Re ML (Use of Skype Technology) [2013] EWHC 2091 (Fam)*.

154 *S (Relocation: Parental Responsibility) [2013] 2 FLR 1453; [2013] EWHC 1295 (Fam)*.

155 *S (Relocation: Parental Responsibility) [2013] 2 FLR 1453; [2013] EWHC 1295 (Fam), [44].

156 *Re ML (Use of Skype Technology) [2013] EWHC 2091 (Fam)*.

157 *Re ML (Use of Skype Technology) [2013] EWHC 2091 (Fam) [11].

158 *Re ML (Use of Skype Technology) [2013] EWHC 2091 (Fam) [11].
witness to testify over an amended scheme from eyenetwork.com\(^{159}\), allowing a connection between Skype and the ISDN line to be used.\(^{160}\) Acting as a go-between, this scheme gave ‘some protection against hacking’.\(^{161}\) His Honour noted that the calibre of the connection was sufficient. He added that there was a clear opportunity for witnesses in isolated areas to use the aforementioned amended arrangement and to decrease the elevated costs associated with ISDN coverage.\(^{162}\) His Honour noted the fee was £150 for one hour rather than approximately £1,200, the amount of an ISDN line.\(^{163}\) His Honour’s view of Skype is important. It is one of the few judgments, of those considered, that explains a judicial officer’s negative opinion of it. It is the only judgment that the authors of this article found in which a judicial officer considered the security implications of Skype use.

The authors of this article disagree that Skype ‘does not lend itself to the court environment’. Notwithstanding potential security and witness demeanour issues that need to be considered, Skype can still be useful in several situations that this article discussed because it is cheap, easily accessible and permits audio and visual communication with witnesses worldwide.

The Royal Australian College of General Practitioners (RACGP) advises its members not to share clinical information, such as ‘still images’ or ‘desktop screen shots’ when using Skype for clinical consultations.\(^{164}\) The RACGP advises that this information should not be revealed during Skype conversations, due to privacy concerns.\(^{165}\) The authors of this article agree with this approach. Sensitive financial or security information should not be disclosed during Skype testimony in court. This could include passwords, dates of birth, bank account details and the like. This is because of the possibility for third parties to hack into Skype and eavesdrop. This is as opposed to in a courtroom, where a judicial officer controls who is able to enter and stay. The RACGP permitting clinical consultations over Skype supports Australian courts permitting witnesses to testify over Skype when videoconferencing is unavailable. Both clinical consultations and testifying in court are sensitive and important matters that involve significant issues of ethics, privacy and public confidence in the integrity of the process.

C Hacking

Hacking means to obtain unauthorised access to someone’s computer system to seek information or perform an illegal activity.\(^{166}\) In Proceedings of the 12\(^{th}\) ACM Conference on Computer and Communications Security, Wang et al observe that hacking encrypted VoIP calls

\(^{159}\) Eyenetwork.com is a private company that offers videoconferencing. It has over 3,500 videoconferencing locations in the UK. It has worked with courts in the United Kingdom to assist with witnesses who testify over videoconferencing. See Eyenetwork, Video Link for Courts and the Legal Profession, http://www.eyenetwork.com/specialist-expertise/video-conferencing-legal/.


\(^{162}\) Re ML (Use of Skype Technology) [2013] EWHC 2091 (Fam), [13].

\(^{163}\) Re ML (Use of Skype Technology) [2013] EWHC 2091 (Fam), [13].

\(^{164}\) The Royal Australian College of General Practitioners, “RACGP advice on Skype” RACGP Policy, Practice and Innovation Department, 27 June 2012, 1, 2.

\(^{165}\) The Royal Australian College of General Practitioners, n 164 at 2.

is thought to be ‘impossible’, particularly when VoIP discussions are anonymous. They work highlights that following anonymous VoIP calls over the internet is possible. Such anonymity is vulnerable to attack by interception of the VoIP call.

Wang et al were able to monitor such anonymous VoIP calls by intercepting the timing of those VoIP calls. They did this by implanting a watermark into the encrypted VoIP conversation by altering the ‘timing of selected packets’ by three milliseconds. Such a timing alteration is comfortably within the span of regular network ‘delay jitters’ with VoIP conversations. Of concern, they argue that their ‘watermark-based tracking technique’ can be productively employed to ‘any peer-to-peer VoIP calls’ of a 90 second or greater length. Clearly, this hacking technique could be used in other VoIP applications, not just Skype.

Chen et al of George Mason University, Virginia, contend that if the VoIP conversations from one person to another are encrypted and anonymous many people would believe it is not possible to monitor those conversations. Their paper demonstrates that the safeguards of encryption and anonymity fail to guarantee the degree of anonymity to VOIP the public would expect. By embedding watermarks into relevant VoIP calls, Chen et al were able to monitor the VoIP calls accurately. Their research shows that it is possible to monitor VoIP communications over the internet, notwithstanding that they are anonymous and encrypted.

Dupasquier et al examined how a person can identify the substance of encrypted VoIP conversations. The paper highlighted that Skype conveys a false sense of privacy. Dupasquier et al reviewed encrypted Skype conversations and could determine that isolated phonemes (speech sounds) can be sorted and ‘given sentences identified’, determined with a success rate of more than 60 percent, with a success rate of 83 percent under particular circumstances. Clearly, if hackers can decipher what is said, then a person hacking into a Skype conversation can make out the substance of conversations. Dupasquier et al contend their research proves that encrypted Skype is not completely safe and that leakage of data can permit the contents to be determined.

168 Wang, Chen, Jajodia, n 167 at 81.
169 Wang, Chen, Jajodia, n 167 at 81.
170 Wang, Chen, Jajodia, n 167 at 89.
171 Wang, Chen, Jajodia, n 167 at 89.
172 Wang, Chen, Jajodia, n 167 at 89.
174 Chen, Wang, Jajodia, n 173 at 32.
175 Chen, Wang, Jajodia, n 173 at 36 - 37.
176 Chen, Wang, Jajodia, n 173 at 37.
178 Dupasquier et al, n 177 at 313.
179 ‘[O]ne of the smallest units of speech that make one word different from another word’: Cambridge Dictionaries Online, English Definition of “Phoneme”, http://dictionary.cambridge.org/dictionary/british/phoneme.
180 Dupasquier et al, n 177 at 325.
181 Dupasquier et al, n 177 at 325.
Subsequently, White et al.\textsuperscript{182} of the University of North Carolina at Chapel Hill examined the capability of a person to reconstruct parts of encrypted VoIP discussions.\textsuperscript{183} Their research indicated the calibre of their results were often far superior than would have been anticipated,\textsuperscript{184} prompting them to declare ‘the threat is more serious than previously thought’.\textsuperscript{185} The outcome highlights matters for attention: specifically, judicial officers would want such results to be impossible, given that VoIP audio is encrypted to foil hackers.\textsuperscript{186} They consider that the ability to reconstruct encrypted VoIP discussions will only increase.\textsuperscript{187}

Skype was used in the Zimmerman murder trial in Florida, United States. George Scott Pleasants, a professor at Seminole State College in the United States, where the accused studied, testified by Skype. Many people called Pleasants on Skype while he testified. This caused noises that were louder than his voice and popups to appear that covered his face. The judge was unsure whether or not this was a prank. The Court then had to switch the method that Professor Pleasants used to testify.\textsuperscript{188} The public could see Pleasants’ Skype handle (or telephone number) on television.\textsuperscript{189} It is unlikely that this would be a problem in Australia, because television programs do not air footage of court proceedings often.\textsuperscript{190} The Zimmerman trial was also high profile. However, given the Australian principle of open justice, it is possible that people sitting in the courtroom could inform the public of a witness’ Skype handle. The public could then contact the witness so a similar problem to the one in the Zimmerman trial could occur.

D Skype and Witness Demeanour

Another challenge that judicial officers may experience when a witness testifies by Skype is whether they can sufficiently observe the witness’ demeanour. It is an ancient concept that fact finders should observe witness’ demeanour.\textsuperscript{191} This is based on two important principles. The first is that a witness must testify in court orally.\textsuperscript{192} The second is that appeals based on fact finding should be limited.\textsuperscript{193} Observing a witness’ demeanour is important to a judge or a jury’s decision making\textsuperscript{194} and to assessing a witness’ credibility.\textsuperscript{195} A party may make specific submissions about a witness’ demeanour, such as whether their answers were delayed and if

\begin{footnotesize}
\begin{enumerate}
\item White et al, n 182 at 17.
\item White et al, n 182 at 17.
\item White et al, n 182 at 3.
\item White et al, n 182 at 17.
\item White et al, n 182 at 17.
\item White et al, n 182 at 17.
\item White et al, n 182 at 17.
\item Nicolson, n 191 at 255–256.
\item Nicolson, n 191 at 256.
\item Owners of Steamship Hontestroom v Owners of Steamship Sagaporack [1927] AC 37 at 47; Jones v Hyde (1989) 63 ALJR 349 at 351; 85 ALR 23 at 27.
\item Fox v Percy [2003] 214 CLR 118, 161 - 162 (Callinan J).
\end{enumerate}
\end{footnotesize}
they laughed, fidgeted, or looked uncomfortable. Judges may, rarely, make decisions about a witness’ credit while observing the witness watching other witnesses testify. If a judge makes such a decision and the relevant counsel did not see the witness’ behaviour, the judge must inform the relevant counsel. An appellate court must be cautious when overturning a finding of fact that a trial judge based on a witness’ demeanour.

Australian judges decided several times that videoconferencing is sufficient to assess a witness’ demeanour. Hunt CJ stated that videoconferencing is ‘very successful’ to see the demeanour of children who are sexual assault victims. Since Australian judicial officers commend videoconferencing for the ability to see a witness’ demeanour, then aspects of this analysis may apply to the credibility of witnesses who testify by Skype. However, the differences between the two should be taken into consideration. The resolution on videoconferencing is better than on Skype. Skype’s resolution is critical for assessing witness demeanour and credibility. The judge and jury’s ability to meaningfully interpret and weigh contentious evidence delivered by Skype could be compromised due to its lower resolution. This supports the argument that witnesses should testify by videoconferencing if possible, and only testify on Skype if they cannot testify by videoconferencing.

In some cases problems with videoconferencing transmission could mean that the videoconferencing evidence should not be admitted. A judge may choose to admit videoconference evidence notwithstanding that there is ‘[a] short delay between the receipt of the picture image and the words’. Similarly, a judicial officer may decide to admit testimony from a witness over Skype even though there is a short delay. The judicial officer would apply their discretion depending on the specific nature of the delay and any other technical problems. This occurred with the testimony over Skype of four witnesses in a murder trial in Arkansas, United States, previously described in section five. Providing the testimony ‘took some smoothing out of glitches’, but nevertheless, the witnesses could provide their testimony. This was shown in S (Relocation: Parental Responsibility) [2013] EWHC 1295 (Fam) where evidence over Skype was received after adjustments were made to its use and delivery, as described in the case of Re ML (Use of Skype Technology).

A 2013 Australian study of 61 judicial officers, lawyers, court staff, expert witnesses and others involved with the justice system discussed in section two found that the participants had different views regarding whether it is possible to assess a witness’ credibility by

196 R v Li [2003] NSWCCA 386, [43] Dunford J.
197 Catalano v Managing Australia Destinations Pty Ltd (No 2) [2013] FCA 672, [64], Flick J.
200 See Sunstate Airlines (Qld) Pty Ltd v First Chicago Australia Securities Ltd (unreported, 11 March 1997); R v Wilkie, R v Burroughs, R v Mainprize [2005] NSWSC 794, [32].
201 Director of Public Prosecutions v Alexander (1993) 33 NSWLR 482, 498.
202 Knight J, What are the Differences between Skype and Videoconferencing? https://www.youtube.com/watch?v=-DIW1CctDUo.
203 Knight J, What are the Differences between Skype and Videoconferencing? https://www.youtube.com/watch?v=-DIW1CctDUo.
204 Derbas v R [2007] NSWCCA 118, [39], McIellen CJ.
205 [2013] EWHC 2091 (Fam).
videoconference. Some believed that it was possible, whereas others were doubtful. The paper that discussed the study did not provide any numerical information regarding how many stakeholders believed that it was possible to assess the credibility of the witnesses and how many did not. As a result, it is arguable whether the findings can be extrapolated to Australian fact finders generally, particularly given the study’s small sample size. Similarly, it is difficult to draw conclusions on the efficacy of Skype in assessing witness credibility, given the small response rate and the lack of precise statistical information concerning the participants’ responses.

Some Australian judicial officers found the testimony from witnesses over Skype credible. For example, in a New South Wales District Court case a witness testified by Skype and Sidis ADCJ stated that their testimony was ‘credible’. In the Administrative Appeals Tribunal hearing also previously mentioned in section five, Deputy President Jarvis said the following about the witness who testified from the Philippines

> While there were some difficulties with communication, I am satisfied that the relevant issues were fully canvassed during the hearing, and also in relevant documents provided to the tribunal prior to the hearing. I found Mr Meller to be a patently honest witness, and accept the veracity of his evidence.

It is clear from the above reasoning that Deputy President Jarvis could make relevant determinations of the applicant’s character, demeanour or the truthfulness of his evidence, notwithstanding that there were ‘some difficulties with communication’.

As previously stated, Cronin J rejected the request of a witness who lives in the United Arab Emirates and has two small children to testify by Skype. His Honour prohibited the request because he needed to assess the witness’ credit and did not feel that he could assess their demeanour through Skype. His Honour did not state the reasons why he believed that he could not assess the witness’ credit through Skype (for example, he would not be able to see the witness well enough or there could be a problem with the Skype connection which could interfere). This information would be helpful to assess whether these issues could potentially be fixed.

In the United States, in the *People v. Novak* case previously discussed in section five, LaBuda J stated ‘[t]his Court also finds that Internet Skype communication is reliable, accurate and widely used in society and commerce.’ His Honour did not state why he found Skype to be reliable. In the family court case *In the Marriage of Swaka* also discussed in section five, Maxa J stated that a witness’ demeanour may be affected if the witness testifies remotely. However, a judge may be better able than a jury to assess the credibility of a witness who testifies remotely. In that case, the witness was permitted to testify remotely. This case raises an interesting issue: if a judicial officer decides whether to permit a witness to testify by Skype,
should they take into consideration who the factfinder is? Assessing the abilities of a judge to make decisions regarding demeanour and credibility in comparison to a juror making such decisions is outside the scope of this article.

This article notes that there are criticisms regarding assessing witness’ credibility based on their demeanour in the courtroom;\(^\text{213}\) therefore, assessing credibility or demeanour through technology would not pose an obstacle to a witness testifying by Skype.\(^\text{214}\) A discussion of this issue is also outside the scope of this article.

Notwithstanding the above, this article recommends that Australian judicial officers permit witnesses to testify by Skype in certain situations when videoconferencing is unavailable. The next section of this article will provide recommendations that help facilitate this to happen.

VII RECOMMENDATIONS

The authors of this paper have argued that additional Australian courts could consider using Skype more often than they currently do when videoconferencing is not available or impracticable, given its convenience, low cost and accessibility. However, security concerns (for example, hacking) can impact Skype when it is used in a courtroom context. Skype can affect witness demeanour and credibility, particularly when visibility and connectivity are compromised. It is recommended that practice directions are amended and training for judicial officers is provided to help facilitate increasing opportunities for witnesses to testify by Skype in Australia.

A Amend Practice Directions

Courts can amend their current practice directions regarding videoconferencing to include Skype. Considerable material in existing practice directions that applies to videoconferencing can apply to Skype. For example, parties who want one of their witnesses to testify by videoconferencing must file documentation in advance of the court hearing to request a court order. They must also file administrative documents to ensure that the court can arrange for the connection to occur. Court staff can test that the videoconference connection with the witness works in advance of the witness testifying.\(^\text{215}\) Courts can also apply some of the requirements to use videoconferencing in legislation to Skype use in the practice directions. For example, the practice direction can state a minimum standard for Skype and its associated equipment (e.g. computer screen) both in the courtroom and in the area that the witness is located.\(^\text{216}\) The amended practice directions can provide information about what witnesses should wear so that

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\(^{216}\) See, for example, Family Law Act 1975 (Cth), s 102F.
people in the courtroom can see them best.\textsuperscript{217} Counsel preparing Skype witnesses should direct those witnesses to this information.

The amended practice directions can also give guidance regarding what should occur if there are problems with the Skype connection or service. This article discussed cases in which there were problems with the Skype connection or service. Yet, in each case, the evidence was eventually provided to the satisfaction of the judicial officer. Consequently, it appears that Australian judges may have to deal with these issues and some guidance could be helpful. For example, the amended practice directions could state a guideline for how long a judicial officer should wait after a problem with a Skype connection occurs prior to ordering that the witness should continue testifying on a different date, etc.

Judicial officers could carefully instruct counsel within a trial never to ask questions of a witness on Skype that would lead the witness to disclose passwords, date of birth, bank account details, etc. Such sensitive information should only ever be disclosed in documentary form (prepared prior to the hearing) and tendered in court. Counsel should also inform Skype witnesses prior to trial that they should never disclose such information over Skype. This would be in case a member of the public eavesdrops on the call.

The practice direction can also state that counsel and parties should be careful not to inform anyone outside of the proceedings of the Skype handle of the court or the witness. This could help to avoid members of the public dialling either Skype handle while the witness testifies and disrupting the testimony (which occurred during the previously mentioned Zimmerman trial). The administration of justice would be disturbed if the Skype handles were made public.

B \textit{Training}

Training could be offered to judicial officers regarding how Skype works, and the benefits and challenges that it provides. The training could include showing the judicial officers someone using Skype, or involving the judicial officers as participants in a Skype conversation. The National Judicial College of Australia is ideally placed to develop a Skype training and education programme for judicial officers. The National Judicial College of Australia has already provided social media training to some Australian judicial officers,\textsuperscript{218} so offering Skype training may not be a major imposition.

The recommendations that this article makes do not appear to require a considerable amount of the court’s time or resources. They are practical and can be of benefit.

VIII CONCLUSION

The introduction of this article discussed Skype use 20 years from now. There are no limits to what may occur. Perhaps people who are located in different parts of Australia (e.g., one partner is fly in/fly out) may get married over Skype. Marilyn Warren CJ highlights other potential Skype uses in the future. For example, she states that judges and jurors could be ‘taken by the prosecution on a virtual tour of a crime scene, as if they were actually there, standing in the

\textsuperscript{217} Rowden, n 10 at 54.

accused’s shoes’. The Lord Chief Justice states that the accused could appear at court by Skype from their home. This would save courts great expense regarding pre-trial hearings. Lawyers could appear by Skype for pre-trial criminal hearings. Using Skype could permit lawyers to appear in several courts in different locations in one day. It could also improve access to justice because parties could have easier access to lawyers. Perhaps more lawyers would be willing to participate in pro bono work if they can appear at court by Skype from their office because it would decrease the overall amount of their time required.

Presently, this article concludes that Australian courts should consider using Skype when videoconferencing is not available. However, this article has considered the security problems that need to be considered if witnesses testify over Skype. Skype can also make it harder for judicial officers to assess a witness’ credibility by not being able to fully observe their demeanour.

There are also ethical considerations to consider regarding the impact of witnesses testifying by Skype in Australia. Is it of ethical significance if the technology supporting Skype use provides those individuals with a product that may not be of the same quality that videoconferencing or testifying in person would (e.g. consider the quality of the Skype resolution against the quality of videoconferencing)? This is even though Skype may make it easier for people to testify who could not otherwise. This article raises this issue to encourage discussion and not to provide answers. Perhaps this could serve as an idea for future research in this area, in addition to research about the challenges and successes of witness testifying by Skype.

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221 Grierson, n 220.