DOCTRINE / STUDIES

COURTS IN LOCKDOWN: LESSONS FROM INTERNATIONAL ARBITRATION

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Abstract

As the pandemic has closed courthouses around the world, civil justice systems have had to find alternatives to in-person hearings to avoid indeterminate delays in resolving disputes. International arbitration practitioners, driven by the commercial interests of the parties, have pioneered the techniques and technologies for virtual hearings, identifying the challenges and developing the best practices needed to support the core procedural values of civil dispute resolution. This article looks at these advances from the perspective of the participants – counsel, judges, arbitrators, witnesses, parties and the public – and considers the options that are emerging and that hold the promise to provide lasting benefits for civil justice systems.

La pandémie ayant fermé la porte des salles d'audiences partout dans le monde, la justice civile a dû trouver des solutions alternatives aux audiences en personne afin d'éviter les délais indéterminés pour résoudre les litiges. Les praticiens d'arbitrage international, motivés par les intérêts commerciaux des parties, ont inauguré des techniques et ont recouru à des technologies pour organiser des audiences virtuelles, en identifiant ainsi de nouveaux défis et en développant les meilleures pratiques nécessaires pour promouvoir les valeurs procédurales essentielles à la résolution des litiges civils. Cet article examine ces avancées du point de vue des participants au procès – avocats, juges, arbitres, témoins, parties et le public – et étudie les options qui émergent et qui promettent de fournir des avantages durables pour les systèmes de justice civile.

Während Gerichtsgebäude auf der ganzen Welt durch die Pandemie geschlossen blieben, mussten Ziviljustizsysteme weltweit nach Alternativen für Anhörungen suchen, um Zeitverzögerungen bei der Streitbeilegung zu vermeiden. Angetrieben von den kommerziellen

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Interessen der Parteien, haben Experten der internationalen Schiedsgerichtsbarkeit Pionierarbeit im Bereich der Methoden und Technologien für virtuelle Anhörungen geleistet. Sie erreichten dies, indem sie die Herausforderungen identifizierten und bewährte Praktiken entwickelten, die für die Unterstützung der verfahrensrechtlichen Prinzipien der zivilrechtlichen Streitbeilegung erforderlich sind. Der Aufsatz betrachtet diese Entwicklungen aus der Perspektive der Beteiligten – Anwälte, Richter, Schiedsrichter, Zeugen, Parteien und der Öffentlichkeit – und prüft die Möglichkeiten, die sich abzeichnen und dauerhafte Vorteile für Ziviljustizsysteme versprechen.

Avendo la pandemia chiuso i palazzi di giustizia a livello mondiale, tutti i sistemi di giustizia civile hanno dovuto trovare alternative alle udienze in presenza, per evitare ritardi a tempo indeterminato nella risoluzione delle controversie. Gli operatori dell'arbitrato internazionale, spinti dagli interessi commerciali delle parti, sono stati pionieri nell'utilizzo di tecniche e tecnologie per le udienza virtuali, identificando le sfide e sviluppando le migliori pratiche necessarie per supportare i valori processuali fondamentali della risoluzione delle controversie civili. Questo articolo guarda a tali sviluppi dalla prospettiva dei partecipanti – avvocati, giudici, arbitri, testimoni, parti e pubblico – e considera le opzioni emergenti e che promettono di fornire benefici duraturi per i sistemi di giusizia civile.

En la medida en que la pandemia ha obligado a cerrar tribunales alrededor del mundo, los sistemas de justicia civil han tenido que encontrar alternativas a las audiencias presenciales para evitar un retraso indeterminado en la resolución de las controversias. Los profesionales dedicados al arbitraje internacional, dirigidos por los intereses de las partes, han identificado los retos y desarrollado aquellas mejores prácticas que permitan promover los valores procesales nucleares en la resolución de litigios civiles. Este artículo analiza estos avances desde la perspectiva de los operadores jurídicos – abogados, jueces, árbitros, testigos, partes y público – y examina las opciones que están apareciendo y que pueden suponer beneficios a largo plazo para los sistemas de justicia civil.

Keywords: virtual hearings; international arbitration; new technologies; pandemic; lockdown; remote testimony; remote advocacy

Mots-clefs: audiences virtuelles; arbitrage international; nouvelles technologies; pandémie; confinement; témoignage à distance; plaidoiries à distance

Stichwörter: virtuelle Anhörungen; internationale Schiedsgerichtsbarkeit; neue Technologien; Pandemie; Ausgangssperre; fernmündliche Aussage; Fernberatung von Mandanten

Parole chiave: udienze virtuali; arbitrato internazionale; nuove tecnologie; pandemia; quarantena; udienze telematiche; testimonianza da remoto; difesa tecnica a distanza

Palabras clave: audiencias virtuales; arbitraje internacional; nuevas tecnologías; pandemia; confinamiento; audiencias en línea; testimonio en remoto; abogacía en remoto

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I. INTRODUCTION

The pandemic has wrought havoc with civil justice systems around the world, closing physical courthouses, consigning court staff, judges and counsel to isolated workplaces, and causing the wheels of justice to grind to a halt. Postponements of hearings, extensions of time limits and other makeshift measures have all served to stave off the need to face the challenge of operating remotely, but resurgences of the virus and a receding horizon for an end to the pandemic have made it urgent to address this challenge now. This article looks at the current issues faced by participants in litigating and arbitrating in virtual hearings – counsel, judges, arbitrators, witnesses, parties and the public – and considers some of the options that are emerging in international commercial arbitration for resolving the challenges faced in in national courts. Noting the differences in some of the core procedural values between litigation arbitration, the article then looks critically at the merits of adopting some of these "lessons learned" and offers some concluding observations on the long-term impact of these developments on the civil justice system.

II. BACKGROUND

For as long as any of us can remember, the in-person procedural and evidentiary hearing has been an important feature of the civil justice process. In the common law, the evidentiary hearing has been the culmination of the process, but it has been an important, although episodic, feature of the process in the civil law as well. Courtrooms were busy with lawyers, witnesses and litigants, and many, many documents filled trolleys and further crowded the room. Then, the pandemic hit, and it all but eliminated this critical feature of the process. In a way that is unprecedented in our experience, this development has compelled courts around the world to re-think their approach to managing and resolving civil disputes. Not all court systems, however, have moved at the same pace or adopted the same measures.

In many places there has been an increased emphasis on facilitating electronic notice and the filing, storage and management of documents,[1] and to this has been added the electronic witnessing of affidavits and witness statements. These steps have enabled litigation to continue even during periods when lawyers and parties are required to remain isolated in their homes. While some of these initiatives have been spurred on by the pandemic, they have been in progress for many years in many places.[2] The pandemic has merely provided fresh incentive to pursue them with vigour.

The primary change, and the one that will occupy much of the focus of this article, has been the rapid adoption and deployment of new technologies to facilitate virtual hearings. As an initial reaction to the unpredictability of the crisis, courts in many jurisdictions sought to suspend all physical hearings and court appearances. Gradually, however, this ceased to be a viable option. If, as has often been remarked in the study of procedural law, justice delayed is justice denied, then accepting a lengthy delay for all cases in the civil justice system is unthinkable. As a result, many courts have begun to develop robust measures to accommodate remote hearings in ways that enable the wheels of justice to continue to turn in an efficient, fair and effective manner.

Some court systems realised this early in the lockdown. The civil courts in England and Wales were able to adapt quickly to this new norm as a result of the longstanding use of remote hearing capabilities in appropriate circumstances.[3] Similarly, in Australia,

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1 For example, in Australia, China, England and Wales, Germany and Italy, among other countries. However, some jurisdictions, such as Hong Kong, have yet to implement an electronic filing system: IBA Litigation Committee, "Impact of COVID-19 on Court Operations & Litigation Practice" (Report, 22 June 2020).

2 Michael Griese, "Electronic Litigation Filing in the USA, Australia and Germany: A Comparison" (2002) 9(4) *Murdoch University Electronic Journal of Law* 1.

3 Civil Procedure Rules, Part 32: Evidence, Rule 32.3.

as a means of moving forward during the pandemic, all hearings before the Federal Court were promptly designated to be conducted remotely, except in truly exceptional circumstances.[4] Other jurisdictions that were less familiar with remote hearings, such as France, have been slower to implement them in civil proceedings with the same regularity. Further, even while adopting virtual hearing technology, many courts still suspended hearings for all cases other those that were deemed essential or urgent.[5]

However, around the world, the trend towards an increasingly electronic world of dispute resolution has been accelerated by the crisis brought on by the pandemic. Many of the technologies that were merely foreseen or in their infancy when the International Association of Procedural Law addressed the topic of technology on previous occasions[6] are now commonplace and widely available.

The issues that arise for virtual hearings, therefore, concern the implications for the efficacy, the efficiency and the integrity of the process. As helpful as virtual hearings might be for ensuring that hearings in civil disputes are not postponed indefinitely, they present a range of challenges for the participants. In international arbitration, where the interests of commercial parties have made it cost-efficient to press forward with the development of virtual hearings, there is an increasing understanding of the techniques for managing these hearings that produce the best results. The following four parts of this article consider the experience of virtual hearings from the perspectives of each of these various participants, the challenges they face and techniques that are being developed in international commercial arbitration to help them meet the challenges, as well as the benefits that they are discovering in the new environment.

III. COUNSEL

The first of the participants to be considered are counsel. The new reality of remote working and virtual hearings requires dramatic changes to the way they must prepare for the hearing and the approach that they must take to advocacy during the hearing. The changes being adopted by counsel in international arbitration in cases proceeding by way of party prosecution are clearly relevant for the role of counsel

4 Federal Court of Australia, Special Measures in Response to COVID-19 (SMIN-1) para. 1.1 (updated 31 March 2020).

5 Including Germany, Ireland, Italy, Spain, Canada, Argentina, Brazil, Mexico, Hong Kong and South Africa: <https://rpr.org.ua/en/news/how-covid-19-forces-courts-to-operate-creatively-under-new-circumstances/>.

6 International Association of Procedural Law, "The Challenge of the Information Society: The Application of Advanced Technologies in Civil Litigation and Other Procedures" (1999); Janet Walker and Garry Watson, "New Trends in Procedural Law: New Technologies and the Civil

in the common law, but they are also applicable to counsel operating in the civil law tradition. These include changes to the way that counsel manage files and documents; collaborate with other team members; adjust their advocacy style for the new medium; and examine witnesses remotely. Each of these will be considered in the following sections.

A. MANAGING FILES AND DOCUMENTS

A significant challenge for counsel arises from the document-heavy context of modern litigation and arbitration. In the past, a "big" case might have involved a few hundred documents. Today, a "big" case could involve a few hundred thousand or millions of documents. There has long existed a broadly based movement to contain the volume of documents disclosed and considered in civil dispute resolution, particularly as a means of containing the cost of managing documents and ensuring that it is proportional to the size and complexity of the matter;[7] and, indeed, not all cases require a great many documents. Despite this, the general rate of documentary inflation seems to show little sign of abating.

In response to this ongoing trend, there have emerged techniques and services[8] to assist counsel in the electronic management of documents. In addition to the exchange of documents, this has included the efficient organising, sharing and presenting of documents at the hearing. Although the electronic hearing bundle is not itself a technological innovation brought about by the pandemic, the use of electronic documents in document-intensive disputes entirely without hard copy hearing bundles was relatively uncommon before the pandemic.

The paperless hearing – one in which the tribunal does not receive a hard copy hearing bundle – is a fresh challenge for many counsel and arbitrators alike. Typically, in the past, counsel would have their own personal set of the documents marked up in addition to the ones to be displayed. Similarly, arbitrators and judges would have a hard copy set of documents to peruse while counsel presented

Litigation Process" (2008) 31 *Hastings International & Comparative Law Review* 251; Miklós Kengyel and Zoltán Nemessányi, eds. *Electronic Technology and Civil Procedure: New Paths to Justice from Around the World* (Springer, 2012).

7 The Sedona Conference, a US non-partisan, non-governmental body dedicated to the reasoned advancement of procedural issues, has established principles for disclosure that support a proportionate approach to the pre-hearing exchange of documents and information between the parties. See <https://thesedonaconference.org/>.

8 For example, hearing service providers such as Epiq <https://www.epiqglobal.com/en-ca/experience/ediscovery> and Opus2 <https://www.opus2.com/en-us/home> assist parties during hearings with the creation of databases and hearing bundles as well as the locating and viewing of the right documents at the right time during the hearing and hyperlinking the documents in the transcript during the hearing.

a document to a witness or referred to one in making submissions. This enabled the tribunal, when shown a particular passage on the document screen, to see it and assess it in context and, possibly, to make their own markings on it. A critical feature of efficiency during the hearing involves both displaying the passage and enabling the tribunal to locate it in their own copies promptly. Previously, this was facilitated by giving the tribunal members their own hard copy bundles to use, but during the pandemic, when counsel were required to work from home, and without access to printing services, compiling and shipping a hard copy bundle to the tribunal has been impractical.

A variety of techniques have emerged to meet this challenge. They include the early establishment of standardised document naming and file organisation protocols and the lodging of documents on a secure centrally located database accessible to the participants at the hearing. Although many courts around the world have implemented online "drop box" systems for uploading electronic files,[9] the sophistication of these systems, both in organisation and in security of access, is rapidly improving. Such a system has the added benefit of enabling counsel to hyperlink with relative ease the references to documents in witness statements and in their submissions, to create customised bundles for the examination of particular witnesses. It also ensures a greater measure of data security for proprietary and for privacy needs. It has been no small challenge to replace the trolleys of documents that once occupied the aisles of courtrooms with their electronic equivalents, but this is an area in which significant progress is being made.

Once the hearing is underway, counsel's preparations are put to the test. In some cases, it will be a junior member of the team that locates the document to be presented and displays it via a screen-share or a separate video link. In other cases, it will be the staff of a virtual hearing provider engaged to manage the hearing, who will serve the function of "document jockey". In either case, it is not uncommon for the counsel team to prepare for a hearing by practising the process of locating and displaying each of the relevant documents in sequence to ensure that nothing is left to chance.

As mentioned, data security and confidentiality are other important issues about which the participants in litigation and arbitration are becoming more aware. Establishing the necessary protocols to ensure that sensitive documents are accessible only to those permitted to see them, particularly when the documents

9 For example, JEDS (Judiciary Electronic Document Submission) in New Jersey, TrueFiling in California, CE-File in the UK and eLodgment in the Australian Federal Court: "Judiciary Electronic Document Submission (JEDS)", New Jersey Courts <https://www.njcourts.gov/selfhelp/jeds.html> (New Jersey); "e-Filing", California Courts: The Judicial Branch of California <https://www.courts.ca.gov/37423.htm> (California); "E Filing", Courts and Tribunals Judiciary <https://www.judiciary.uk/you-and-the-judiciary/going-to-court/high-court/the-rolls-building/e-filing/> (UK); "COVID-19 Frequently Asked Questions", Federal Court of Australia <https://www.fedcourt.gov.au/covid19/faqs#filing> (Australia).

are presented in the hearing, can be a complex challenge. Consider, for example, documents that are restricted to "attorneys' eyes only". Ensuring that the court or tribunal can see such documents at the correct time without them being visible to the parties attending the hearing presents logistical, technical and procedural challenges that require bespoke arrangements.

Furthermore, in international arbitration, some institutions have published cyber-security guidance, which outline principles of cyber-security and recommendations to assist parties and the tribunal.[10] These protocols ask participants to consider the security risk factor of the arbitration, including the nature and subject matter of the proceedings, and particular categories of information security, including asset management, encryption and access controls.[11]

B. COLLABORATING WITH OTHER TEAM MEMBERS AND OPPOSING COUNSEL

Another challenge for counsel has been presented by the inability of the counsel team under lockdown to work together in the same office to prepare and present the evidence and submissions. During the preparation stage, the absence of a centralised physical space means senior members of the team may find it difficult to maintain the day-to-day oversight over the progress of junior members of the team in their assigned tasks. This can create workflow issues.

More pronounced though may be the challenges encountered during the hearing itself. The lack of physical proximity between members of the team in remote hearings can create new barriers to urgent communications and collaboration. In complex cases, it is unlikely that any one individual will have complete knowledge of the entire file, and the inability to lean over to whisper some assistance to a colleague can be very inconvenient. Further, the inability of lawyers simply to hand a key document to the advocate who is presenting the case can be frustrating and can hinder the counsel's performance.

It can be critical, therefore, for counsel teams to open a separate channel for their own communications from that of the main video call. The risk of unintended

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10 ICCA-NYC Bar-CPR Protocol on Cybersecurity in International Arbitration (2020); IBA Presidential Task Force on Cybersecurity, "Cybersecurity Guidelines" (October 2018). The draft protocol published by the Working Group on LegalTech Adoption in International Arbitration includes a questionnaire that participants of a virtual hearing can use to discuss data security measures with platform providers and determine whether the platform provides the requisite cybersecurity: Working Group on LegalTech Adoption in International Arbitration, "Protocol for Online Case Management in International Arbitration" (July 2020) <https://sites-herbertsmithfreehills.vuturevx.com/20/21553/landing-pages/platforms-protocol-consultation-draft-01072020.pdf> 32.

11 ICCA-NYC Bar-CPR Protocol on Cybersecurity in International Arbitration (2020) 17–20.

disclosure of communications made through chat functions in virtual hearing platforms makes it unwise to use them for confidential discussions between members of the counsel team. Accordingly, these additional channels will often involve instant messaging or other electronic chat lines that enable timely access to other team members during the hearing.

In contrast with the challenges of re-structuring the collaboration among team members at the hearing, some teams are finding real benefits in the fact that hasty efforts to locate documents or to find answers to unforeseen questions can proceed off-camera while the counsel who is presenting maintains an air of calm and confidence.

Additionally, collaboration *between* counsel teams on opposing sides has become increasingly important in maintaining efficient progress in organising remote hearings. Early engagement with one's counterparty, for example regarding the virtual platform to be used or the sequestration policy of witnesses, can lead to timely identification and resolution of potential issues. More than ever in international arbitration where hearings are to be held virtually, party agreement on procedural issues increases efficiency and reduces the risk of procedural challenges to a final award. In litigation, similar flexibility in the approach to virtual hearings may be afforded to parties by courts if they have agreed on critical procedural elements. For example, courts may be more inclined to grant leave for a hearing to be conducted by videoconference if it is apparent that the parties have carefully considered and agreed upon key issues of presenting documentary evidence, and managing interpretation and the logistics generally of witness examination, especially if such agreement indicates that the virtual hearing will be a fair and efficient means to resolve the dispute.[12]

As leading counsel teams in international arbitration discover innovative ways to address these challenges, the constant feature is that virtual hearings require more careful preparation than in-person hearings. When everyone is in the same location, it is easier to pause to look for a misplaced document, or to wait a moment or two when a hearing participant is briefly delayed in arriving, or generally to find solutions to practical hurdles. In the virtual environment, a pause in the proceedings temporarily returns all the participants to their own environments breaking the collective focus on the hearing. Nevertheless, the planning and discipline involved in avoiding the need for minor delays can increase significantly the efficiency of the hearing.

C. ADVOCACY STYLE

A further challenge, one that causes considerable apprehension for gifted advocates, is that of adapting their advocacy style to the new medium. Many of the methods

12 See e.g. Federal Court of Australia, "Guide to Videoconferencing" cl 1.7–1.9.

that counsel have come to deploy for in-person hearings must be modified to suit the constraints of web presentations. Almost like actors shifting from the stage to television, counsel must become adept at conveying the same range and variety of meaning and emphasis under far more restrictive circumstances. Dramatic gestures and changes in tone of voice and volume, variations in the pace of speaking and in the distance from the audience must all be discarded in favour of more subtle techniques. Under the additional pressures that can arise from poor quality video and audio transmission, the objective can shift from commanding the tribunal's or the court's attention for long periods of time, to communicating one's points simply and clearly. All of this militates against bombast and in favour of more concise and specific presentations.

Furthermore, a transmission delay, however brief, between what is said by counsel and what is heard on the other end can be disconcerting and confusing. It is a common mistake for participants to believe prematurely that a speaker has finished, resulting in inadvertent interruptions and participants speaking over one another. This is especially problematic during witness examination; and it is exacerbated by hearing platforms that shut down under such conditions, silencing everyone. From the advocate's perspective, the lack of real-time response to their submissions may also create awkward silences prompting them to fill perceived gaps and pauses by rambling, and it can inhibit the tribunal or opposing counsel from interjecting as needed. Of course, these challenges are mitigated by fast and reliable internet connections, but they require a level of discipline and patience to be overcome, when they occur.

Finally, the challenge of mastering effective oral presentation techniques over virtual platforms can encourage counsel and tribunals to rely more on written advocacy than they might in traditional in-person hearings. The inclination to do so is increased where the technological challenges of participation are such as to make the virtual hearing more taxing than an in-person hearing. The phenomenon dubbed "Zoom fatigue" can reduce concentration spans for all but the most active participants.[13] The general consequence of this is that counsel must tailor their oral presentations to be more concise and direct in order to retain the impact of in-person presentations.

Having said that, many advocates whose skills were previously less appreciated, including those with softer voices and more refined presentation styles, are coming to benefit from the equalising effect of virtual hearings. In a setting in which everyone appears to be of similar size and to have a voice of similar strength, and where everyone has a front-row seat and can clearly be seen from the waist up, it can be easier for smaller or more softly spoken counsel to gain the tribunal's or the court's undivided attention and to be heard well in carefully planned and well-structured presentations.

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13 Meredith Rossner and Martha McCurdy, "Video Hearings Process Evaluation (Phase 2)" (Final Report, HM Courts & Tribunals Service, July 2020) 41 [9.4].

Beyond this, virtual hearings provide opportunities for counsel to develop creative approaches to their advocacy. For example, the parties might agree that carefully produced pre-recorded opening or closing submissions will be forwarded to tribunal members to review at a convenient time and at their own pace before a scheduled hearing with follow-up questions to be posed at the hearing. Similarly, brief tutorials on the fundamentals of a technical subject to be addressed at the hearing might be forwarded by the experts to ensure that the tribunal is well prepared to understand their evidence.

A further dimension of the opportunity for more members of the team to gain experience as advocates comes from the elimination of the need to travel. Where competing professional and family pressures might otherwise prevent a counsel team member from participating in an important hearing, a virtual hearing will readily accommodate it. Virtual hearings eliminate the need to be excused of other responsibilities for whole days, and the need to travel to distant hearing destinations. Whether it is the more senior or the more junior colleagues who cannot be present at a hearing for an entire day or week for a hearing, it may be feasible in a virtual hearing for their participation to be limited to the time in which they appear and, provided that they have an adequate internet connection, for them to do so from the location where they are otherwise needed. This flexibility in participation promises to increase greatly the opportunities for advancing diversity and for managing efficiently a team's advocacy resources.

D. WITNESS EXAMINATION

Perhaps the most daunting set of challenges faced by counsel relates to witness examination. These challenges commence at the very beginning: it can be considerably more difficult to prepare to take evidence from a witness who is not physically in front of you. At the actual hearing, there are, of course, technological difficulties with internet connections and camera and microphone quality that are shared by all virtual participants. Other common logistical hurdles, such as location and time zone differences, must also be overcome. The specific challenges for counsel, however, in witness examination lie in preparing a witness for testifying in the virtual environment and in perceiving the subtleties of the witness's and the tribunal's non-verbal reactions to that examination as it proceeds.

One challenge in a virtual hearing arises from the inability to pass documents to a witness, thereby ensuring that the witness is looking at the correct document. The risk is that a long line of questioning might progress before it is realised that the witness is reviewing the wrong document. As such, counsel must ensure that the witness has access to the relevant electronic documents and understands how to navigate the bundle. Some hearing providers conduct technical rehearsals and individual tutoring to prepare witnesses on the logistics of the virtual platform and

the means of accessing documents. Conducting practices and test runs using the virtual platform prior to the actual hearing is a critical step to overcome technical issues prior to the event and to ensure that the witnesses and counsel are proficient in using the electronic filing system.

Another perceived challenge is that the witness in a remote location might be coached in one of a number of ways: having access to a marked-up document in hard copy or on a screen; or communicating with an unseen person in the room, or on an open chat line on a computer or hand-held device. To address the issue of surreptitious witness coaching, some bar associations and arbitral institutions have published guidelines and protocols with suggestions to mitigate, if not eliminate, the concern. For example, the Commercial Bar Association in England and Wales (COMBAR) have recommended that more than one camera be placed in the room with the witness giving testimony to ensure that there is no one else present and that the witness is not impermissibly referring to notes.[14] Other institutions, such as the Hong Kong International Arbitration Centre (HKIAC), suggest that a hearing invigilator attend the same premises as the witness, where permitted by social distancing guidelines.[15] Another option where local travel is possible is to ask the witness give testimony at a neutral physical location, for example at an arbitral institution's facilities. In most cases, though, it is sufficient for counsel introducing the witness to ask the witness to display and describe for the tribunal the immediate environment in which they are located.

A further perceived challenge is that it may be more difficult to gauge accurately the witness's non-verbal cues and overall credibility when viewed on a screen. The concern is that cues such as sweating, fidgeting and changes in complexion will be less visible. Counsel may also be concerned about how their witnesses can convey truthfulness. Further, counsel may wonder how they might detect dishonesty in other witnesses, how they might assess the reactions of the tribunal to lines of questioning and ensure that the tribunal is paying close attention, and how they can maintain a rhythm of questioning in the face of frequent transmission delays or dropouts.

These concerns may be valid when the quality of the transmission or the system on which the testimony is being viewed are particularly poor. However, as the virtual hearing technology improves, these concerns are beginning to fade. The positioning of the camera and of the videos on the screen have allowed for greater clarity in viewing participants' faces. Moreover, on virtual hearing platforms, all participants appear at the same distance from everyone else. In contrast, in courtrooms, the witness usually faces counsel and is seen only obliquely by the judge; and the camera is usually closer to the witness's face than a viewer would be in any in-person conversation. All of this means that facial expressions can be seen more clearly than they might be in many

14 COMBAR Guidance Note on Remote Hearings (12 May 2020) rule 35.

15 HKIAC, Guidelines for Virtual Hearings (2020) cl 11.

courtrooms. Additionally, some virtual platforms, enable a participant's image to be viewed in the centre of the screen in a larger size. This enables the witnesses' or other participants' facial expressions and reactions to be placed prominently on the screen even when they are not being questioned.

Advancements in modern video and audio technology have made affordable to many consumers the cameras, displays and microphones that can transmit image and sound clearly enough to show facial expressions and movements and make readily apparent the subtleties of changes in voice. Transmission quality can remain a limiting factor in some locations, but where access to good internet connections or affordable high-quality equipment continues to be of concern, hearing centres are now offering services to bridge the gap.

In any event, the practical challenges of assessing witness demeanour are now highlighting for common lawyers the reservations with this kind of evidence long held by civilian lawyers. The recent research casting doubt on the ability to determine the reliability of witness testimony[16] is encouraging tribunals to place greater reliance on the words that are used by witnesses and the consistency of their evidence with the documents to which they are referred. In this way, virtual hearings are prompting subtle changes in the approach to the creation of the factual record suggesting a convergence between the common law and civil law in this aspect of evidentiary hearings.

IV. ARBITRATORS AND JUDGES

The main challenges faced by judges and arbitrators in the new virtual environment are similar to those experienced in traditional hearing room settings, but the new technologies have added a further layer of complexity. Judges and arbitrators continue to be concerned with two issues: first, ensuring that they see and hear all that is necessary to be seen and heard in the hearing; and, secondly, ensuring that it is clear to the parties and counsel that they are doing so. In the context of virtual hearings, this involves mastering the technology needed to engage fully in the proceedings and to maintain open lines of communication between them and the other participants. Judges must give the parties and the public the confidence that the parties are not being prejudiced by the virtual medium and that they continue to be afforded their procedural rights. A further unexpected benefit, that of flexibility in scheduling, a benefit that redounds to all those involved in the dispute resolution process, will also be considered.

16 See, Peter McClellan, "Who Is Telling the Truth? Psychology, Common Sense and the Law" (2006) 80 *Australian Law Journal* 655; Jeremy A Blumenthal, "A Wipe of the Hands, A Lick of the Lips: The Validity of Demeanor Evidence in Assessing Witness Credibility" (1993) 72 *Nebraska Law Review* 1157.

A. MASTERING THE TECHNOLOGY

Prior to the pandemic, the experience of most judges and arbitrators extended only to the occasional use of remote testimony from a witness and did not include wholly virtual hearings. Courts around the world had been adopting technology into their hearings for a number of years, but there is a marked difference between using videoconferencing for the cross-examination of a single remote witness and conducting the entire hearing over a virtual platform.

Obvious issues for judges concern the adequacy and reliability of their own internet connection and the ability, within the limits of the space available on their screens, to see all the key participants, the relevant documents and, where provided, the real-time transcript. Proactive judges and arbitrators are acquiring screens of sufficient size and number to ensure that all the necessary elements appear as large and clear as they would in a physical hearing room. However, even where this is the case, it is necessary to have a good internet connection and a computer capable of displaying images of sufficient quality to make it easy to see subtle changes in expression or complexion of the participants.

Other issues involve ensuring that the judge's or arbitrator's own camera is of a good quality and positioned in a way that is not distracting or unnatural to those addressing the court or tribunal. Audio issues can arise – from the unwanted echo emitted by an unmuted participant to the loss of sound entirely. Electronic files and documents may be difficult to view and follow along in real-time during an advocate's submissions. Finally, a judge or arbitrator who is trying to take in all the sights and sounds that are critical to a live hearing through a single small screen with poor video and audio quality may find it exhausting. Fortunately, many of these issues can be mitigated for most arbitrators and judges. The challenge has been for the more senior members of the dispute resolution community, who often comprise the cohort of those who serve as judges and arbitrators in the most important cases, to embrace the necessary technologies and accept the need to invest in making themselves comfortable in the new environment.

Numerous articles and protocols have been published on the technological set-up required to engage smoothly and successfully in virtual hearings.[17] Some arbitral institutions have published model procedural orders that contain provisions regarding

[17] See e.g. Janet Walker, "Lights, Camera, Action – A Checklist for Virtual Hearing Participants", *Global Arbitration Review* (14 May 2020) <https://globalarbitrationreview.com/lights-camera-action-checklist-virtual-hearing-participants>; CIArb, "Guidance Note on Remote Dispute Resolution Proceedings" (2020) <https://www.ciarb.org/media/8967/remote-hearings-guidance-note.pdf>; HKIAC, Guidelines for Virtual Hearings (2020) <https://www.hkiac.org/sites/default/files/ck_filebrowser/HKIAC%20Guidelines%20for%20Virtual%20Hearings_0.pdf>; ICC, "ICC Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic" (9 April 2020) <https://iccwbo.org/content/uploads/sites/3/2020/04/guidance-note-possible-measures-mitigating-effects-covid-19-english.pdf>.

the technical and logistical set-up, for the tribunal members and other participants.[18] Some recommendations require simple changes but make a world of difference during a hearing. For example, connecting to the internet by way of ethernet cable, rather than over Wi-Fi, dramatically increase the quality and reliability of the signal; and using a separate webcam and a tripod to place it in the middle of the participant screen, allows judges and arbitrators to look directly at the participants when they are listening and speaking.

Other changes are more extensive but are commensurately effective. Consideration must be given to contingency plans, including back-up platforms to be used in case of technological failure, and ensuring the requisite proficiency in operating them, or continuing the meeting by telephone where necessary and appropriate. In international arbitration, well-known service providers[19] and several of the leading commercial hearing centres[20] provide assistance in facilitating all the logistical aspects of virtual hearings, including IT support, document viewing and transcription. Enlisting external companies to provide IT assistance, as many domestic courts are already doing,[21] alleviates the burden on the court or tribunal and results in a more efficient hearing process.

The issue of virtual hearings also raises a number of new questions of procedure that courts may have to determine. What, for example, is a court to do where one party insists that its right to a fair hearing will be prejudiced by a virtual hearing? What should a tribunal do where there is a technological inequality of arms? Questions such as these require the balancing of competing rights, and the court or tribunal must have sufficient understanding of the technology to appreciate the implications of the stated concerns and make the correct decision. Being aware of the capabilities of the technology and the knowing the basic terminology so that one can discuss the issues may be important to maintaining the confidence of the parties in the virtual system. A judge or an arbitrator well versed in technology, or at least in virtual hearing technology, is better able to understand a party's concerns, for example, regarding the operation of the virtual platform in their location. Being able to comprehend a party's technological concerns enables the judge or arbitrator to respond quickly and

18 See e.g. AAA-ICDR, "AAA-ICDR Model Order and Procedures for a Virtual Hearing via Videoconference" (9 May 2020); ACICA, "Draft Procedural Order for Use of Online Dispute Resolution Technologies in ACICA Rules Arbitrations" (16 August 2016); ICC, "ICC Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic" (9 April 2020) annex II; CPR Dispute Resolution, "CPR's Annotated Model Procedural Order for Remote Arbitration Proceedings" (April 2020).

19 Such as Epiq and Opus, see above at note 8.

20 Such as those comprising IACA, an alliance between Arbitration Place Virtual in Toronto, Maxwell Chambers in Singapore and the International Centre for Dispute Resolution in London, <https://www.iacaglobal.com/partners>.

21 See e.g. Meredith Rossner and Martha McCurdy, "Video Hearings Process Evaluation (Phase 2)" (Final Report, HM Courts & Tribunals Service, July 2020) 42 [9.5].

consider appropriate solutions, carefully weighing the considerations of procedural fairness.

Some arbitral institutional guidelines also provide technological advice, which can assist tribunals with determining whether a party will be prejudiced because of a lack of technological capacity. The Seoul Protocol on Video Conferencing in International Arbitration (Seoul Protocol) provides guidance as to the minimum technical requirements for a hearing venue (or home office) with which to conduct a virtual hearing.[22] It includes a host of technical specifications, said to be common industry standards recommended by the United Nations International Telecommunications Union.[23] Whether or not the complexity of the technical specifications listed in the Seoul Protocol limits its usefulness for "lay" arbitrators and judges, the point is that such protocols give arbitrators and judges objective guidance on the technological requirements that ought to be met. If a witness or party representative is unable to procure a set-up that meets these requirements, the guidelines assist tribunals and judges in determining whether it would be unfair to continue the proceedings virtually.[24] In international arbitration, adherence to such protocols also reduces the risk of the final award being challenged due to allegations of procedural unfairness.

B. MAINTAINING THE APPEARANCE OF IMPARTIALITY

It is equally important, given the virtual nature of the hearing, for judges and arbitrators to *appear* to be fair to the parties. They must ensure that the counsel and parties are confident that appearing virtually does not hinder the presentation of the case in their eyes. This is especially important in litigation, where parties may not be afforded a choice in determining the procedure. Being required to appear in a virtual hearing can lead to perceived unfairness if a virtual presentation is thought likely to be detrimental to their case. Judges must maintain the confidence of the parties by ensuring open communication with them and counsel, especially where technical or logistical difficulties arise.

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22 KCAB International, "Seoul Protocol on Video Conferencing in International Arbitration" (2020) article 5.

23 Ibid Annex 1.

24 For example, Annex II of the ICC's Guidance Note contains model clauses, including on "Technical Issues, Specifications, Requirements and Support Staff". This clause includes provisions that the parties are to consult and seek to agree on technical specifications and also that the parties may make submissions to the tribunal regarding the reasonable technical specifications to be adopted for the hearing. The tribunal is also able to consult with the parties to ascertain their technological position before issuing any protocol: ICC, "ICC Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic" (9 April 2020) annex II. This approach may assist tribunals and parties to come to a negotiated solution regarding technical requirements, taking into account each party's individual circumstances. This may avoid the situation of a party alleging unfairness due to limits in their technological capabilities.

Furthermore, the perceived impartiality of a judge in a virtual hearing can be affected by the way in which he or she is presented on camera. It has been said that the layout of a courtroom, with the judicial officer seated on a raised platform, symbolises the judge's "removal from the fray", which "promote[s] both the appearance and actuality of neutrality and independence of the parties which are the hallmarks of the judicial office".[25] The symbolism conveyed by the physical layout is removed in the virtual context. Professor Michael Legg refers to a recent case in England and Wales in the Court of Protection, in which the judge appeared by video framed in the same way as the rest of the participants and engaged in casual conversation with counsel while technical issues were being resolved.[26] Legg observes that when the otherwise private conversation was broadcast to all participants, including observers from the public, it gave the judge an appearance of a lack of professionalism and independence.[27]

Finally, imagine the disquiet that would be engendered if the private deliberations or "whispers" of the court/tribunal members were inadvertently published in the main "chat" function of the video call. It is not difficult to imagine such an incident prompting an appeal, depending on what is said. These considerations impose additional challenges on the conduct and set-up of a virtual hearing. As with communications within the counsel team, it is important for communications between members of the court or tribunal to be sent through secure channels on a separate platform, or ideally on a different device, to avoid the risk of accidental publication through a misaddressed chat, an unintended screen share, or a pop-up message of an incoming communication.

C. SCHEDULING FLEXIBILITY

A basic logistical obstacle to the efficient scheduling of hearings is the need for all participants to gather in one place. Before the pandemic, for counsel participating in brief hearings, for example on interlocutory matters, this entailed the cumbersome process of securing a date and then being prepared to spend half a day or more waiting their turn to present. For international arbitrations, where the issue for the hearing, whether procedural or otherwise, could not readily be resolved in writing

25 *Council of the Municipality of Burwood v Harvey* (1995) 86 LGERA 389, 396 (Kirby P) citing *Jones v National Coal Board* [1957] 2 QB 55.

26 Michael Legg, "The COVID-19 Pandemic, the Courts and Online Hearings: Maintaining Open Justice, Procedural Fairness and Impartiality" [2020] *UNSWLRS* 46, 20, citing *A Clinical Commissioning Group v AF & Ors* [2020] EWCOP 16.

27 Michael Legg, "The COVID-19 Pandemic, the Courts and Online Hearings: Maintaining Open Justice, Procedural Fairness and Impartiality" [2020] *UNSWLRS* 46, 20, citing Celia Kitzinger, "Remote justice: a family perspective", *Transparency Project Blog* (29 March 2020) <www.transparencyproject.org.uk/remote-justice-a-family-perspective/>.

or a teleconference, this meant securing the several days or weeks when the tribunal, often three members, was available and able to travel to a single location. All of this has militated against the scheduling of brief meetings as needed as the case is progressing.

Just as common lawyers have come to recognise the benefits of case management as tool for advancing the case efficiently, so too is it coming to be recognised in international arbitration that proactive engagement on the part of the tribunal can ease the progress of the matter toward its resolution. The capacity of courts and tribunals to schedule brief appearances as needed may not be quite as efficient as summoning before them one after another counsel who are all waiting in the courtroom or corridor to be heard. However, the elimination of the need to travel, whether to the court or to another country, affords the opportunity for far greater flexibility on the part of the tribunal in terms of its availability, and it relieves counsel of the need to spend long periods of time away from their offices, sitting and waiting to be heard. All of this bodes well for the increased engagement between the counsel and the tribunal that is now well recognised as a salutary means of advancing the case without compromising procedural fairness.

V. WITNESSES

Many of the challenges faced by witnesses in virtual hearings are integrally related to those faced by the counsel who are examining them. These include the same technological and logistical considerations to ensure that the witness's testimony is heard and its presentation is as effective as it would have been if delivered in person. Witnesses also need to ensure that they have the requisite technical knowledge and ability to navigate the filing system and locate the right documents at the right time. Addressing these logistical challenges involves similar resources and techniques as those discussed earlier for counsel. Technical rehearsals are important means for identifying and overcoming issues, both technological and practical, at an early stage.

As previously discussed, one of the key problems with virtual witness testimony is in maintaining confidence in the integrity of the process and the environment, that is, in ensuring that the witness is not being coached or the evidence otherwise tampered with during their examination. Judicial officers surveyed in the United Kingdom on their experience of virtual hearings noted their concerns that in viewing only the "head-and-shoulders" of the witness it was difficult to assess whether the witness was being assisted by a coach or guide while giving testimony.[28] It can

[28] Meredith Rossner and Martha McCurdy, "Video Hearings Process Evaluation (Phase 2)" (Final Report, HM Courts & Tribunals Service, July 2020) 42 [9.4].

be difficult to monitor what the witness is viewing on a computer screen and, in particular, whether the witness is following a chat from counsel through a discreet instant message. These concerns are addressed by the various protocols published by arbitral institutions and associations already mentioned;[29] so too have the concerns about witness demeanour considered earlier.

One special challenge for witness examination that has proved more difficult to address in a virtual setting is that of witness conferencing. Traditionally, "hot-tubbing" involves expert witnesses giving evidence concurrently in the same room before the tribunal. This enables the issues to be ventilated in a setting in which each witness can comment directly on other witnesses' statements. This saves time and cost, and it ensures a higher quality of evidence by reducing the prospect of an expert making unsubstantiated points that could easily be corrected by the other expert. When witnesses testify at the same time from different locations and time zones, practical difficulties, particularly in longer examinations, can emerge. Where the internet connection or audio-visual capabilities are poor, this may limit the effectiveness of the exchanges between the witnesses.

Further, where there is a need for interpretation to bridge linguistic gaps, clear audio and visual presentation is critical for the evidence to be well understood and appreciated. A particular challenge arises with simultaneous interpretation in that virtual platforms generally accommodate only one audio transmission line. As a result, the audio feed must be limited to one language or a moderated combination of both languages. Some systems seek to provide the original audio feed at 20% volume and the translated feed at 80%. However, including the direct audio from the witness in the background of the interpretation can be confusing, and where it is not possible to hear the inflection of the witness testimony because it is reduced in volume or replaced by the interpreter's feed, nuances in the tone of the witness's responses to questions may be lost.

Finally, in rare cases, witnesses in international disputes, particularly disputes involving state parties, may face intimidation or risks to their personal safety if they testify from their own location. Similarly, witnesses may be located in regions in which access to a reliable internet connection is simply unavailable. Unusual situations such as these are not unique to virtual hearings and call upon counsel and the tribunal to make bespoke arrangements for receiving their evidence. In a less dramatic way, the unfamiliarity to many witnesses of a courtroom setting is replaced in the virtual hearing with an environment that is also unfamiliar. Where many witnesses have found the traditional courtroom to be a difficult and uncomfortable

[29] COMBAR Guidance Note on Remote Hearings (12 May 2020); HKIAC, Guidelines for Virtual Hearings (2020); ICC, "ICC Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic" (9 April 2020) annex II; KCAB International, "Seoul Protocol on Video Conferencing in International Arbitration" (2020) article 1.

setting, some may now find sitting alone in an empty room also to be unnerving. Alternatively, where witnesses can now appear from within their own homes, there may be a concern on the part of counsel or the tribunal that the setting does not sufficiently impress upon them the gravity of the occasion and that the importance of attending carefully to the testimony that they provide.[30] All of these considerations form part of the learning curve that we are collectively climbing in the adoption of virtual hearings.

VI. PARTIES AND THE PUBLIC

Finally, virtual hearings pose challenges for the parties and for the public in relation to due process, access to justice and publicity.

A. DUE PROCESS

Due process concerns can arise in relation to various facets of a virtual hearing. Where one party can join a virtual hearing only from a location with unreliable internet connectivity or inadequate equipment, there may be concerns about the reception of the evidence and submissions presented on their behalf. Will it have the same impact as that of the opposing party? Similarly, can it be said that the parties have been afforded an equal or full opportunity to present their claims and defences where the intelligibility of the submissions were affected by technological faults?

This is particularly pronounced in situations in which one party, or one witness, is able to attend a hearing in person, while others must appear virtually. This issue may become more prevalent when travel resumes in some parts of the world but not others. In these circumstances, there may be concerns about inequality of treatment between parties and effect on judges of the presentations of the party and witnesses who can participate in the hearing in person. Due process considerations may also arise where the court opts to continue with a virtual hearing, rather than adjourn the proceedings until an in-person hearing can be held, despite the objection of one party. These are difficult "equality of arms" issues that courts and tribunals must learn to navigate. Even today, some tribunals are starting to insist that witnesses or counsel appear remotely from other parts of the same hearing centre to preserve an equality between the parties where this will secure a situation in which everyone is presenting virtually.

30 Penelope Gibbs, "Defendants on Video: Conveyor Belt Justice or a Revolution in Access?" (Report, Transform Justice, October 2017) 28.

As each scenario arises, procedures and protocols will be developed to give guidance on best practice. Ultimately, it will become easier for tribunals and courts to recognise the difference between strategic objections, genuine but misplaced reservations, and concerns with a real foundation. It will also become more feasible to balance the competing interests of a party that objects to holding the hearing virtually and the prejudice that might arise from a delay in the resolution of the dispute, particularly as the feasibility of in-person hearings remains uncertain. Courts and tribunals are rightly concerned about enforcement issues and appeals if a hearing was to proceed virtually despite party objection. Some national courts have recognised the importance of striking an appropriate balance between these concerns,[31] but others, especially in jurisdictions which have less readily adopted virtual technologies in the first place, are only now beginning to address the issues. Similarly, and significantly, the ICC's Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic also expressly states that, under the right circumstances, a tribunal may proceed with an online hearing even if one party has objected to doing so.[32]

B. ACCESS TO JUSTICE

The virtual dispute resolution environment gives rise to novel considerations relating to access to justice. On the one hand, virtual hearings offer a convenient solution to litigants who would otherwise be forced to commute long distances to a courtroom or would be required to take leave from work.[33] On the other hand, online dispute resolution also requires that parties have both digital access and digital literacy.[34] Furthermore, the digital requirements for engaging in online dispute resolution can exclude large regions, detrimentally affecting those living in rural or remote areas. This is particularly concerning in view of the strong correlation between digital access and literacy, and socioeconomic status. Not having in-person hearings may therefore further seem likely to entrench the exclusion from the legal system of these demographics.

There is also a need to guard against other vulnerable demographics being excluded from participation in virtual hearings. For example, "disabled people with

31 E.g. in Australia: *Capic v Ford Motor Company of Australia Ltd* [2020] FCA 486; and the United States: *Trico Ltd v Buckingham* [2020] JRC 106.

32 ICC, "ICC Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic" (9 April 2020) [22].

33 Meredith Rossner and Martha McCurdy, "Video Hearings Process Evaluation (Phase 2)" (Final Report, HM Courts & Tribunals Service, July 2020) [8.1].

34 Peter Cashman and Eliza Ginnivan, "Digital Justice: Online Resolution of Minor Civil Disputes and the Use of Digital Technology in Complex Litigation and Class Actions" (2019) 19 *Macquarie Law Journal* 39, 54.

cognitive impairments, mental health conditions and neuro-diverse conditions" may face different challenges in participating in remote hearings, leading to the need for specialised protocols to ensure fairness and due process for those participants.[35]

Furthermore, justice must not only be done, but also be seen to be done. It has been famously said that "sunlight is the best disinfectant" – open justice is the path to ensuring that the power of courts is not abused.[36] The advent of virtual hearings and use of technology has had both positive and negative effects on the maintenance of open justice and public access to judicial hearings. The closure of physical courtrooms has meant that the press and public observers cannot attend hearings simply by coming to the building. The sudden transition to online hearings had left courts scrambling to adjust their digital hearing practices to accommodate public viewing. There are technological challenges in adding members of the public into hearings on virtual platforms, for example issues with ensuring that only those who are involved in the matter have use of the camera and microphone functions to avoid rogue audio-visual interruptions, while also safeguarding confidential documents and maintaining digital security. As mentioned, the inability of those without digital access to observe proceedings is another issue.

It must be observed, however, that courts have been rising to the challenge in this respect and public access to virtual hearings is readily available in most cases. The remote nature of virtual hearings can create opportunities for reporters and the general public to observe proceedings more readily than they might otherwise do if they needed to attend in person. Whereas in the past a reporter or observer would need to physically move from building to building to observe a case, now it is a simple matter of clicking on a link to a virtual platform. This has enabled journalists to report on a much wider variety of cases.[37] Additionally, the newly prevalent practice of livestreaming hearings has made access to proceedings far easier for the broader public, who might not otherwise be inclined to attend court in person.

VII. CONCLUDING OBSERVATIONS

The lockdowns around the world made necessary by the pandemic have propelled the dispute resolution community forward in its progress to adopting new technologies.

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35 Oireachtas Library & Research Service, 2020, *L&RS Note: Remote Court Hearings*, 16.

36 Louis Brandeis, "What Publicity Can Do", in *Other People's Money and How the Bankers Use It* (1914).

37 See Claire Meadows, "Remote Access to Court Hearings Should Continue Post-pandemic, Says Courts Correspondent", *Society of Editors* (9 September 2020) <https://www.societyofeditors.org/soe_news/remote-access-to-court-hearings-should-continue-post-pandemic-says-courts-correspondent/>.

As is clear from initiatives over the years, such as the "Next Generation Court System",[38] including a single portal for judges to track the progress of their cases and the materials filed, and a requirement that counsel be responsive to the court through electronic communications, the range of facets of the dispute resolution process that might be improved by technological advances is far greater than that spurred on by the pandemic. Nevertheless, the move from an in-person hearing to a virtual hearing represents a critical feature of this advance – one that has not progressed as significantly as might be imagined.

It is remarkable to think how different the situation might have been had the pandemic arrived just a few years earlier and these adjustments had needed to be made at that time. As it happens, arriving as it did, at the current state of technological development and adoption, the transition to virtual hearings has been a manageable task for many regions and socioeconomic groups. The moment has been propitious as a result of the existing state of technological knowledge in the field, and the current state of consumer and individual adoption, which has brought the necessary equipment and expertise within reach of sufficient numbers of individual participants to facilitate its widespread use. The aspirations of domestic courts to establish "smart courtrooms" and related digital or electronic features has long been hampered by the need to invest public funds in advances that did not seem sufficiently urgent to the general public to warrant the expenditure. In this way, international commercial arbitration practice has provided a timely service to national courts. Having been engaged in the effort to produce cost-effective means of providing support for dispute resolution in remote locations, international arbitration hearing centres and hearing providers have been available to support litigation that cannot be postponed. This has been an important means of addressing the shortfall while national courts obtain the necessary equipment and training to conduct virtual hearings themselves. Moreover, by pioneering the techniques, testing the technology, identifying the challenges and establishing best practices, the international arbitration community has brought virtual hearings within reach of national courts far sooner than might otherwise have occurred. It is a laudable example of the way in which commercial advances can provide useful benefits for the public as a whole.

The unprecedented effort in which we are all engaged in addressing the enormous health and economic challenges posed by the pandemic may, at times, seem overwhelming and endless. However, in areas such as civil justice, it is generating remarkable advances and revealing surprising resources, such as the introduction into regular use of the virtual hearing, as pioneered in international arbitration. As great a challenge as it is for us in the legal community to make the move from the

[38] Protocol, Knesset Committee on Constitution, Law and Justice Session, 16th Knesset (28 February 2005).

courthouse to the video screen, virtual hearings have the prospect of becoming a mainstay of support to hearings conducted in the traditional courtroom setting for many matters, reducing the time and cost of litigation and making it more accessible to so many in so many ways. As the dark clouds of the pandemic recede and the benefits of virtual hearings begin to be enjoyed more broadly, the future is bright.