

An Arbitrator's Perspective: Online hearings in Arbitration: the taking of Evidence

Pilar Perales Viscasillas *

Table of Content

A. Introduction	107
B. Soft Law, the new Arbitration Rules and Practices	109
C. Witness and Expert Testimony	116
D. Other Evidence: Signature Recognition and On-site Visual Inspections	127
E. Conclusions	128
Bibliography	129

A. Introduction

It is an indisputable fact that the pandemic situation caused by Covid-19 has led to an unprecedented increase in the use of technologies for all facets of human life and our society¹ and also, as concerns us here, in the world of arbitration, both national and international; undoubtedly

* Professor of Commercial Law at Carlos III University of Madrid. Work carried out under the Research Project: Company and Markets: (R) Digital evolution, Integrity and Sustainability and its assimilation by Private, Regulatory and Competition Law. Reference: PID2020-114549RB-I00.

1 According to United Nations Conference on Trade and Development (UNCTAD), *Digital Economy Report 2021, Cross-border data flows and development: For whom the data flow*, 17: 'Global For Internet bandwidth use rose by 35 per cent in 2020, a substantial increase over the 26 per cent growth of the previous year. Driven largely by the response to the pandemic, this represented the largest one-year increase since 2013'. Available at: https://unctad.org/system/files/official-document/der2021_en.pdf.

the pandemic has changed the face of arbitration forever². Covid-19 has subjected society as a whole to a stress test, and in an unprecedented altruistic movement, before which the arbitration world has not remained impassive, arbitration operators have taken action both collectively and individually³. What can we learn from this? This is a question that Cherie Blair pertinently asked in the 2020 *Roebuck Lecture of the Chartered Institute of Arbitrators* in June 2020, and that she rightly answered with a desideratum by stating that: “the arbitration community can change and adapt quickly, to help protect and enhance the effectiveness and efficiency of the arbitral process. I hope this spirit of co-operation and willingness to change will endure long after lockdown has ended and penetrate other areas of arbitral practice”⁴.

From this perspective, the use of remote means of communication has become standard (telephone, videoconference and virtual platforms (video-link⁵)) for meetings between the arbitrators (for example, to deliber-

2 See Benton, ‘How Will the Coronavirus Impact International Arbitration?’ (2020) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2020/03/13/how-will-the-coronavirus-impact-international-arbitration/>; and Walker, ‘Virtual Hearings: An Arbitrator's Perspective’ (2020), available at <https://www.tribunal.arbitraldesporto.pt/noticias/virtual-hearings-an-arbitrator-s-perspective>.

3 For example, the Stockholm Chamber of Commerce (SCC) made its virtual platform available to users free of charge for both arbitrations under their management and *ad hoc* arbitrations. <https://sccinstitute.com/scc-platform/ad-hoc-platform/>

In another instance, a group of arbitration institutions and arbitration associations issued a joint statement (16 April 2020) with the aim of showing unity and reassuring arbitration users that proceedings would continue in cases pending. See: <https://sccinstitute.com/media/1658123/covid-19-joint-statement.pdf>.

4 Blair, ‘Getting ahead of the curve: how arbitration can better meet the needs of parties, people and planet’ (2020) *Chartered Institute of Arbitrators 2020 Roebuck Lecture*, available at: <https://ciarb.org/media/10078/20200611-ciarb-2020-roebuck-lecture-by-cherie-blair-cbe-qc-mciarb.pdf>.

5 The term *video-link* is used as a generic term in the Guide to Good Practice on the Use of Video-Link under the Convention of 18 March 1970 on the Taking of Evidence Abroad in Civil or Commercial Matters (Evidence Convention), footnote no. 2, published in November 2019, defining it as “the technology which allows two or more locations to interact simultaneously by two-way video and audio transmission, facilitating communication and personal interaction between these locations (...). Other terms commonly used to describe this practice, when used for the purpose of taking evidence, include “videoconferencing”, “remote appearance” or “video presence” (id., no. 10).

The recent edition of the International Bar Association (IBA) Rules on The Taking of Evidence in International Commercial Arbitration (2020) has introduced a new definition for remote hearings: “Remote Hearing 'means a hearing conducted, for

ate) meetings between arbitrators and parties for settlement of procedural issues, as well as for full-blown virtual hearings, even in complex procedures⁶. This has led not only to a change in attitude in the global arbitration community, in which has been plunged into this new dynamic of holding hearings and procedural meetings in virtual format, with almost no time to digest the phenomenon, but also to a new language, facts, practices and usages that have been reflected and accommodated in the area of soft law. Far from knocking out the system, this change, prompted, undoubtedly, by the extreme circumstances that the whole world was suddenly and unexpectedly forced to confront, has clearly demonstrated the adaptability of international commercial arbitration to the needs of the arbitration industry, and its capacity for innovation, reinvention and flexibility.

B. Soft Law, the new Arbitration Rules and Practices

Rapid digitisation is one of the phenomena and trends that have undoubtedly marked arbitration during the pandemic, and has gone hand in hand with another of the two trends that will also be a feature of arbitration in the years ahead, soft law, digitalization and sustainability⁷, while confirming that arbitration is a global institution by nature.

The globalisation of arbitration is part of its DNA as demonstrated by the international uniformity of rules achieved thanks to the

the entire hearing or parts thereof, or only with respect to certain participants, using teleconference, videoconference or other communication technology by which persons in more than one location simultaneously participate". This rule is accompanied by a provision establishing the general framework for conducting such hearings (Article 8.2).

In this article we will use the terms remote, online or virtual hearings interchangeably.

- 6 See two examples at: Fung, 'Personal Takeaway from the Warzone: Organizing, Preparing and Attending a Two-Week Virtual Hearing' (2020) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2020/08/02/personal-takeaway-from-the-warzone-organizing-preparing-and-attending-a-two-week-virtual-hearing/>; Cesmarc, 'A pandemia na maior arbitragem societária do país, a disputa pela Eldorado' (2020), available at <https://exame.com/negocios/a-pandemia-na-maior-arbitragem-societaria-do-pais-a-disputa-pela-eldorado/>.
- 7 Perales Viscasillas, "El arbitraje internacional durante la pandemia y más allá: soft law, audiencias virtuales y sostenibilidad" in Menéndez Arias (ed), *Anuario de Arbitraje* (2022) (forthcoming).

1985 UNCITRAL Model Law on International Commercial Arbitration, amended in 2006 (MAL) and the 1958 New York Convention on the recognition and enforcement of foreign arbitral awards (NYC) and the full recognition of transnational principles in arbitration, such as the international and uniform interpretation of the *lex arbitri* rules, the separation between the legal seat and the place where the hearings are held and the standard transnational practice of the legal profession in international arbitrations where a party is not necessarily represented by lawyers from their own country, who do not have to practice at the seat of arbitration. From this perspective, there should be no legal problems concerning the place of arbitration even if proceedings are conducted entirely online⁸.

The frequent use of virtual hearings during the pandemic has created a need to adapt the usage and practices of face-to-face arbitration to virtual arbitration, so as to establish a framework for these hearings (Protocols on remote or virtual hearings, *Cybernetic Protocol*⁹); the emergence of new practices (the 'test run' or technical tests carried out prior to virtual hearings); the need to create new rules that better accommodate the virtual scenario (guides, notes and recommendations issued by arbitration institutions, including innovation through the creation of a sort of *Redfern Schedule* in the virtual scenario, the "Covid-19 Schedule"¹⁰; creating model clauses¹¹, or models of procedural orders for the virtual environment¹²);

8 However, the Note by the UNCITRAL Secretariat: *Legal Issues Related to the Digital Economy: Dispute Resolution in the Digital Economy*. A/CN.9/1064/Add.4, May 5, 2021, no. 55, seems to suggest that it would be necessary to develop *ad hoc* rules for determining the place of arbitration when the procedure is conducted entirely online.

9 This is the term used in Asociación Latinoamericana de Arbitraje (Latin American Arbitration Association; ALARB), Observatorio Permanente sobre el estado del arbitraje en América Latina. Protocolo para la celebración de audiencias arbitrales en forma remota o virtual, 10 May 2021.

10 By way of example, Annex III on technical requirements to be agreed by the parties in ICC, ICC *Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic*, 9 April, 2020.

11 Model clauses to enable virtual hearings (Both in: Scherer, 'Remote Hearings in, International Arbitration: An Analytical Framework' (2020), 37-4 *Journal of International Arbitration*, 1 (online version).

And a model clause by which the parties undertake not to contest the validity of the award, in ALARB, Observatorio Permanente sobre el estado del arbitraje en América Latina. Protocolo para la celebración de audiencias arbitrales en forma remota o virtual, 10 May 2021, Annex 2.

12 International Institute for Conflict Prevention and Resolution (CPR), *Annotated Model Procedural Order for Remote Video Arbitration Proceedings*, 26 August 2021.

new *guests* in hearings ("Tech Secretary"), proceedings ("Remote Technology Specialist"¹³) or in arbitration in general (technology companies that offer products and services adapted to the new needs of electronic arbitration)¹⁴; the need for lawyers and arbitrators capable of dealing with new technologies¹⁵; the introduction of a new language (virtual or online etiquette, for example); the need to innovate and be imaginative both in the use of tools that facilitate the taking of evidence (use of drones for visual inspections), and in persuading the court (how to present the case and examine witnesses in the virtual environment); and even the emergence of new pathologies associated with the use (and abuse) of the new platforms (physical and mental fatigue, leading even to the identification of

A list of model procedural orders for virtual hearings can be viewed at: <https://delosdr.org/index.php/2020/05/12/resources-on-virtual-hearings/>

In practice: *Gran Colombia Gold Corp. v. Republic of Colombia*, ICSID Case No. ARB/18/23), Procedural Order No. 7 (27 September 2020).

Both for the hearing and for the previous conference on the matter: Bassiri, 'Chapter 5. Conducting Remote Hearings: Issues of Planning, Preparation and Sample, Procedural Orders' in Scherer et al (eds), *International Arbitration and the COVID-19 Revolution* (2021), 105 (108).

- 13 Member of the Secretariat made available to arbitration proceedings by Singapore International Arbitration Centre (SIAC), basically a technology assistant working via a chat function. See: Shaughnessy, 'Chapter 2. Initiating and Administering Arbitration Remotely', in Scherer et al (eds), *International Arbitration and the COVID-19 Revolution* (2021), 27 (32), with a detailed analysis of how arbitration institutions had to adapt to the pandemic for the remote administration of arbitrations.

Refers to the presence of the technician: Netherlands Arbitration Institute (NAI)/ Dutch Arbitration Association (DAA), *The Hague Video Conferencing and Virtual Hearing Guidelines*, section 1 e), November 2020.

- 14 <https://virtualarbitration.info/directory/technical-providers.htm>.
- 15 Without of course going as far as requiring formal cybersecurity qualifications, as noted, among other attributes of the "Tech-Savvy Arbitrator" by: Zimmerman, 'International Arbitration 2.0. Strategies for Tech-Savvy Proceedings' in González Bueno (ed.), *40 Under 40 International Arbitration* (2021), 185 (196).
More realistically: Rogers and Brodlija, 'Chapter 3. Arbitrator Appointments in the Age of COVID-19', in Scherer et al (ed), *International Arbitration and the COVID-19 Revolution* (2021), 49 (57-58), indicating how digitisation can lead to greater diversity in the appointment of arbitrators because geographical distance would no longer be a barrier both in relation to the nationality/location of those arbitrators and regarding their age. In this regard also: Gojkovic and McIlwrath, 'International Arbitration and the COVID-19 Revolution', in Scherer et al (eds), *International Arbitration and the COVID-19 Revolution* (2021), 191 (198-199).

a new disorder: *Zoom fatigue*¹⁶, also called ‘screen fatigue’¹⁷ or ‘streaming fatigue’¹⁸), potentially causing the proprietary name to enter common usage¹⁹. And all this without forgetting the legal questions raised during the pandemic about the legal validity and the violation of due process if virtual hearings are adopted²⁰.

The arbitration institutions were the first to react to this new scenario, aware of the importance of providing their users with procedural adaptations in line with the requirements of arbitration (speed and security), given the health restrictions that affected practically the whole world (total lockdown, restricted mobility and social distancing), including the main international arbitration venues.

Arbitration operators and in particular arbitration institutions were catalysts for this process of adaptation, even before the Covid, especially in matters related to the security of new technologies²¹, and have strongly

16 *Zoom fatigue* has already been the subject of studies, see: <https://news.stanford.edu/2021/02/23/four-causes-zoom-fatigue-solutions>. Obviously the same happens with any other platform: Webex or Teams, for example. In any case, it is also subjective. In an optimistic tone: Nappert and Apostol, ‘Healthy Virtual Hearings’ (2020) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2020/07/17/healthy-virtual-hearings/>.

It has even been proposed that, in order to mitigate the consequences of this new pathology, opening statements could be pre-recorded on video: Scherer, ‘Asynchronous Hearings: The Next New Normal?’ (2020) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2020/09/09/asynchronous-hearings-the-next-new-normal/>.

17 White & Case and The School of International Arbitration of Queen Mary University, 2021 *International Arbitration Survey: Adapting arbitration to a changing world*, 2021, 3.

18 Miles, ‘Chapter 6. Remote Advocacy, Witness Preparation & Cross-Examination: Practical Tips & Challenges’ in Scherer et al. (eds), *International Arbitration and the COVID-19 Revolution* (2021), 130.

19 Kim, ‘Audiovisual Evidence in International Arbitration: Would ‘seeing is believing’ still work?’ in González Bueno (ed.) *40 Under 40 International Arbitration*, (2021), 211.

20 See Perales Viscasillas, ‘Audiencias virtuales y debido proceso’ (2021) 42 *Spain Arbitration Review*, 9.

21 International Chamber of Commerce (ICC) Commission, *Report on Information Technology in International Arbitration*, 2017; IBA, *Cybersecurity Guidelines, by the IBA’s Presidential Task Force on Cyber Security*, October 2018; and International Council for Commercial Arbitration (ICCA), New York City Bar Association and International Institute for Conflict Prevention and Resolution, *ICCA-NYC Bar-CPR Cybersecurity Protocol for International Arbitration*, 2020.

Arbitration is clearly not safe from malicious and unwanted intrusions such as that which occurred in 2015 at the Permanent Court of Arbitration (PCA), dur-

supported the virtual option²², sending from the outset a message of solidarity and reassurance to users, promoting the creation and adaptation of procedural rules to the virtual world either by modifying arbitration regulations, such as in the case of the ICC²³, the LCIA²⁴, or the ICDR²⁵, to name a few. This trend has continued, with the recent modification of the

ing the third day of the arbitration hearing between the Philippines and China. See: Pastore, 'Practical Approaches to Cybersecurity in Arbitration' (2017) 40-3 *Fordham International Law Journal*, 1023; and Rebeca Mosquera, 'Cybersecurity in times of virtual hearings' in González Bueno (ed), 40 *Under 40 International Arbitration* (2021), 201, with references to other similar situations. Also of interest is the recent inclusion in article 2 of the IBA Rules on Evidence (2020) in relation to inquiries about: (e) *the treatment of any issues of cybersecurity and data protection*.

- 22 Arbitration Institute of the Stockholm Chamber of Commerce (SCC), *Guidelines for Arbitrators*, June 2020, p.6, in which, for the sake of efficiency and speed, arbitration tribunals are encouraged to use resources such as videoconferencing.
- 23 ICC, *Arbitration Rules*, 2021, Art. 26 para. 1, which has clarified issues concerning the possible holding of virtual hearings. See also, earlier: ICC, *ICC Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic*, April 2020, para. 8, which suggested that arbitrators use "either audioconference or videoconference for conferences and hearings where possible and appropriate", and also nos. 22-23, interpreting pre-existing arbitration rules to mean that the arbitral tribunal may order a virtual hearing despite opposition from one of the parties.
- 24 London Court of International Arbitration (LCIA), *Arbitration Rules*, 2020, prior to Covid-19, Arts. 26 and 29.
- 25 International Centre for Dispute Resolution (ICDR), *International Dispute Resolution Procedures (Including Mediation and Arbitration Rules)*, 1 March 2021, expressly providing that issues related to technology are addressed in Article 22 para. 2 relative to the first procedural order: 'in establishing procedures for the case, the court and the parties may consider how technology, including video, audio, or other electronic means, could be used to increase the efficiency and economy of the proceedings' and, in particular, allowing virtual hearings in Art. 26 para. 2: 'A hearing or a portion of a hearing may be held by video, audio, or other electronic means when: (a) the parties so agree; or (b) the tribunal determines, after allowing the parties to comment, that doing so would be appropriate and would not compromise the rights of any party to a fair process. The tribunal may at any hearing direct that witnesses be examined through means that do not require their physical presence'. These provisions are complemented by the use of electronic signatures for the award and procedural orders (Art. 32), and cybersecurity issues (Art. 22 para. 3).

Swiss Arbitration Rules²⁶, VIAC Rules²⁷, clarifying that the provisions of its regulations allow virtual hearings despite their silence on the matter²⁸, and the new UNCITRAL Expedited Arbitration Rules (2021, Art. 3.3).

Arbitral institutions have been also very active in creating guidelines, notes, guides, protocols and models designed to help parties, lawyers and arbitral tribunals and to facilitate the holding of virtual hearings; soft law precipitated by the Covid-19 crisis, but which is clearly here to stay, without prejudice to any subsequent revision or modifications in the light of the experience currently being acquired during the pandemic situation. Some of the most significant of these soft law instruments are (in chronological order, and without seeking to be exhaustive):²⁹

- Delos Hearings in times of Covid-19. Delos checklist on holding arbitration and mediation hearings in times of COVID-19, first version dated 8 March 2020 and second version dated 20 March 2020; broader in scope due to inclusion of detailed guidelines for face-to-face hearings during Covid.

26 In force since 1 June 2021, Art. 27 para. 2: ‘Any hearings may be held in person or remotely by videoconference or other appropriate means, as decided by the arbitral tribunal after consulting with the parties’. The possibility of witnesses testifying by videoconference is also maintained (Article 27 para. 5).

27 Vienna International Arbitral Centre (VIAC), *Arbitration Rules* (1 July 2021), Art. 30.

See also: Asian International Arbitration Center (AIAC), *Arbitration Rules*, 1 August 2021, which introduce virtual hearings, i.e. the use of technology to remotely participate in the arbitration procedure (Art. 2 para. 4). Provision is also made for using remote means for holding meetings, conferences and deliberations remotely (Art. 14 para. 3), for procedures before the emergency arbitrator (Art. 18 para. 4) and for the examination of witnesses (Art. 28 para. 7).

28 VIAC, *The Vienna Protocol. A Practical Checklist for Remote Hearings*, June 2020, 2: ‘The Vienna Rules are currently silent on the permissibility of conducting hearings remotely rather than in person. Article 30 (1) of the Vienna Rules only requires an “oral hearing”, if a party so requests, but not a hearing “in person”: a remote hearing that allows parties to orally present their case satisfies this provision in principle’. In view of the broad powers of arbitral tribunals under the Rules, it is emphasised that the decision can be adopted by the arbitrators, and for this purpose a list of issues to be considered is indicated, as well as technical issues and the platforms that could be used (id., at 3-4).

29 For further details: Santabaya and Fernández, ‘The holding of virtual hearings in arbitration: main action protocols issued by national and international institutions’ (2021) 8 *La Ley Arbitraje y Mediación*, 1-19; Perales Viscasillas, ‘El arbitraje internacional durante la pandemia y más allá: *soft law*, audiencias virtuales y sostenibilidad’ in Menéndez Arias (ed), *Anuario de Arbitraje* (2022) (forthcoming).

– Seoul Protocol on video conference in international arbitration, 18 March 2020.

– Chartered Institute of Arbitrators (CIArb) Guidance Note on Remote Dispute Resolution Proceedings, 8 April 2020, which expressly also indicates that this can be used for other ADRs (Alternative Dispute Resolution), such as mediation, negotiation, etc.

– ICC Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic, April 2020, possibly published on April 9, especially Annex I containing the Protocol of issues to consider for a virtual hearing.

– Corte de Arbitraje de Madrid (Court of Arbitration of Madrid; CAM), *Nota sobre organización de audiencias virtuales* (Note on organisation of virtual hearings), 21 April 2020.

– Protocol on Virtual Hearings, Africa Arbitration Academy, April 2020,

– Hong Kong International Arbitration Centre (HKIAC) Guidelines on Virtual Hearings, May 2020.

– VIAC, The Vienna Protocol. A Practical Checklist for Remote Hearings, June 2020.

– SIAC, Guides, Taking your Arbitration Remote, 31 August 2020.

– CIAM, *Nota sobre organización de audiencias virtuales* (Note on organisation of virtual hearings), October 2020, which in Annex I also offers a model Virtual Hearing Protocol.

– NAI/DAA, The Hague Video Conferencing and Virtual Hearing Guidelines (November 2020).

– Protocol for Online Case Management in International Arbitration, November 2020, by the Working Group on LegalTech Adoption in International Arbitration (Group formed by the law firms: Ashurst, CMS, DLA Piper, Herbert Smith Freehills, Latham & Watkins, and Hogan Lovells).

– IBA Rules on the Taking of Evidence in International Commercial Arbitration, 17 December 2020 (definition of remote hearings and new article 8.2), halfway between the provisions of a regulation and a protocol.

– ALARB, Observatorio Permanente sobre el estado del arbitraje en América Latina. Protocolo para la celebración de audiencias arbitrales en forma remota o virtual (Permanent Observatory on the state of arbitration in Latin America. Protocol for holding arbitration hearings remotely or virtually), 10 May 2021.

– Protocol for Remote Hearings (June 2021) of the Abu Dhabi Global Market Arbitration Center.

It will not be surprising that, precisely in the pandemic situation in which the 2021 International Arbitration Survey was conducted, it asked

what adaptations would make other institutions or arbitration rules more attractive to users, and 38% of respondents chose administrative/logistical support for virtual hearings. As the Report pointed out in this regard, the need for adaptation in response to changing circumstances is further underlined by the fact that the regulations were also required to include a 'provision for arbitrators to order virtual and face-to-face hearings' (23%), along with 'the establishment of secure electronic platforms for the presentation and exchange of documents'³⁰.

It is therefore evident that what was an exceptional situation in pre-Covid times, although gradually becoming more common, albeit held back by a lack of experience and adequate guidelines, has become the norm since the outbreak of the pandemic³¹. It is true that, in the pre-Covid era, arbitration institutions had already focused on the use of new technologies as a way to promote swifter and more efficient arbitrations and to reduce the costs of the process, and that now the use of electronic means to initiate an arbitration, present briefs and handle communications between the participants and others, has become absolutely normal³².

C. Witness and Expert Testimony

In the face-to-face world, which was the rule in the pre-Covid era, hearings were undoubtedly of fundamental importance as the key moment at which to listen to the *actors* directly involved in the facts of the case, or to question the authors of expert reports. So much so that hearings are generally restricted to obtaining this evidence directly, without the need for the parties to present initial arguments or conclusions³³, although this can ob-

30 White & Case and The School of International Arbitration of Queen Mary University, 2021 *International Arbitration Survey: Adapting arbitration to a changing world*, 2021, 11.

31 Martín, 'The use of Technology in International Arbitration', in González Bueno (ed), 40 *Under 40 International Arbitration* (2021), 337 (339).

32 For all: Scherer, 'Remote Hearings in International Arbitration: An Analytical Framework' (2020) 37-4 *Journal of International Arbitration* 1-2. Also in: Queen Mary University of London, School of Law Legal Studies Research Paper No. 333/2020.

33 Note the wording of some of the laws based on Art. 24 para. 1 MAL referring to 'hearings for the presentation of evidence or for oral arguments' (using the conjunction 'or'); Art. 30 para. 1 Spanish Arbitration Act: 'the arbitrators will decide whether to hold hearings for the presentation of allegations, the taking of evidence and the issuance of conclusions', which uses the conjunction 'and'. And

viously take place. Without going into issues related to the violation of due process that will be dealt with in other chapters of this book³⁴, it is necessary to point out that whilst the right of either of the parties to the holding of a hearing can be considered fundamental in arbitration (Art. 24 para. 1 MAL)³⁵, hearings can be held remotely and so there is no absolute right to have a physical hearing³⁶. Remote hearings pose certain challenges, when compared to the traditional face-to-face format, but, in my opinion, these are not generally insurmountable³⁷. It can even be said that experience of virtual hearings should lead us to higher standards of efficiency, accountability and self-discipline, and to redefine the focus of hearings irrespective

Art. 34 para. 1 Portuguese Arbitration Law that only refers to the possible holding of evidential hearings, which has led to the understanding in accordance with its literal wording that this provision is restricted only to evidential hearings (Hoyos and Botelho, 'Portugal' (2021), *The ICCA Reports: Does a Right to a Physical Hearing Exist in International Arbitration?*, 1 (5)).

34 See also Perales Viscasillas, 'Audiencias virtuales y debido proceso' (2021) 42 *Spain Arbitration Review*, 9-30.

35 This is illustrated by Singapore Court of Appeal, Case 30/ 2020, 20.1.2021, *CBS v CBP*, where an arbitration award was annulled as the arbitrator's decision to reject the oral evidence of witnesses proposed by one of the parties without presenting prior written statements from the witnesses was considered a violation of the right to be heard (Art. 18 MAL), the hearing being held later by telephone. One comment: Hardy and Yeap, 'How Sacred is the Right to be Heard in Arbitration?' (2021) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2021/06/14/how-sacred-is-the-right-to-be-heard-in-arbitration/>.

In the case in hand, the provision under discussion under the applicable rules (Singapore Chamber of Maritime Arbitration (SCMA) Rules), was Art. 28 para. 1, stating that: *Unless the parties have agreed on a documents-only arbitration or that no hearing should be held, the Tribunal shall hold a hearing for the presentation of evidence by witnesses, including expert witnesses, or for oral submissions*. The interpretation made was (para. 35): "When read holistically, r 28.1 did not mean that oral submissions were an alternative to the presentation of witness evidence. Rather, where parties have not agreed to a documents-only arbitration, they must be allowed to call witnesses to give evidence, if they wish to do so".

36 See Perales Viscasillas, 'Audiencias virtuales y debido proceso' (2021) 42 *Spain Arbitration Review*, 15. Of interest: *The ICCA Reports: Does a Right to a Physical Hearing Exist in International Arbitration?* (2021), for the situation in more than 80 jurisdictions.

37 Federal Court of Australia, 15.4.2020, *Capic v Ford Motor Company of Australia Limited* (Adjournment) 486, where the judge decided not to suspend the trial scheduled for 15 June 2020 and took into due consideration the following elements to decide on the virtual holding of the hearing despite the refusal of one of the parties: technological limitations; physical separation of legal teams; expert witnesses; lay witnesses, and in particular cross-examination; document management; future issues; and trial length and expense.

of the environment. Witnesses can be better prepared, lawyers can be more selective about the documents and witnesses they present, and the examination and cross-examination of witnesses can take less time, by asking brief and simple questions that are more concise and coherent³⁸. Actors can be given practical tips, such as to avoid reading from a script, especially if there are opening statements, or to speak more slowly.

The starting point is that, in essence, examining experts or witnesses remotely is no different from doing this face-to-face, however much the detractors seek to highlight the potential negative aspects. The drawbacks commonly cited relate to technical issues, the relatively impaired perception of witness or expert testimony and the loss of human interaction³⁹. It is argued that the *quality* of the witness evidence is negligible in remote hearings; quality here refers not only to possible technical issues but also to the lack of physical proximity, meaning that the arbitral tribunal is not in a position to appreciate the reactions or the body language of the witness or expert, and it is contended that this may undermine the arbitration. Another argument is that the deliberations of the arbitral tribunal can be affected in a virtual scenario. Possible interference by third parties is also added to the list, either because the technical security of the virtual environment can be violated or because experts or witnesses can more easily be influenced in this format. All this may impair rights of the parties and the principle of equality, all the more so because some witnesses may testify remotely and others in person⁴⁰.

38 Miles, 'Chapter 6. Remote Advocacy, Witness Preparation & Cross-Examination: Practical Tips & Challenges', in Sherer et al. (eds), *International Arbitration and the COVID-19 Revolution* (2021), 121 (124-127).

39 Arbitration Institute of the Stockholm Chamber of Commerce, *SCC Virtual Hearing Survey*, October 2020, 8-9. Born, Day and Virjee, 'Chapter 7. Empirical Study of Experiences with Remote Hearings: A Survey of User's Views', in Scherer et al (ed), *International Arbitration and the COVID-19 Revolution* (2021), 137 (146), state that these negative perceptions have to be weighed against two pieces of information: that the questions of the arbitral tribunal are more numerous in the virtual environment and that virtual hearings do not present disadvantages compared to face-to-face techniques in relation to calibrating the evidence presented by witnesses and experts, techniques of oratory during the arguments or the arbitrators' understanding of case. They also point out (pp. 140-141) that: 'fully remote hearings were eleven times more common after 15 March 2020 than they had been at any time previously'.

40 In a clearly alarmist tone: Fietta, 'Client Alert: The impact of COVID-19 on arbitration proceedings and due process', 9 April 2020, available at: <https://www.voltterrafietta.com/voltterra-fietta-client-alert-the-impact-of-covid-19-on-arbitration-proceedings-and-due-process/>

Detractors point to several shortcomings in remote depositions that could undermine the right of defence⁴¹, such as incorrect interpretation of the expressions and reactions of witnesses and experts due to the close focus on the face, or the silences that can occur in the virtual environment. Mention is also made of possible inconveniences resulting from audio/video failures/image freezing/delays, which can cause distortions during the deposition and especially when this causes the connection to be lost during the examination, which can generate a loss of procedural momentum and allow witnesses to reassess their answers in the extra time, or lastly when testimony is unbalanced because some witnesses appear in person and others by videoconference.

Clearly, in a virtual hearing, the image projected differs from that when proceedings are conducted in person⁴², but this is not fatal⁴³, besides which the fact that the quality of the direct facial image of the witness or expert (incidentally, in the case of the arbitrators, this is also what makes them more focused on the course of the hearing) means that their features or reactions can be more closely scrutinised, while current technology can

41 See Perales Viscasillas, 'Audiencias virtuales y debido proceso' (2021) 42 *Spain Arbitration Review*, 14.

42 In the 2021 International Arbitration Survey Report, p.25, users pointed precisely to this type of concern.

43 See Federal Court of Australia, 15.4.2020, *Capic v Ford Motor Company of Australia Limited* (Adjournment) 486, in relation to a case where 50 witnesses were to testify: para. 14: 'the Respondent raised issues specific to the expert witnesses briefed in this matter. Counsel must understand this evidence in the lead up to the trial and there is no doubt in my mind that by far and away the best way to do that is by means of conferring with the witness in person. Sometimes this process can take days. I accept that doing this on a virtual platform will be slower, more tedious for all concerned and therefore more expensive. I do not, however, accept that it will result in a process which is unfair or unjust'. And para. 16: 'there are a number of issues said to be relevant to lay witnesses. In the case of witnesses who are remotely located in their homes (which I am assuming will be all of them) there are practical problems. For example, it will not be possible to see whether there is somebody in the (upstairs bed) room coaching the witness or suggesting answers out of earshot. My impression of that problem is that in this case it will not be acute. To begin with this is a class action about allegedly defective gear boxes, not a fraud trial. In addition, although some of the class members may have a motive to exaggerate how defective their vehicles are I doubt that in that process anyone will be able to help very much. Then there is the problem that the putative coacher will need to brave the health regulations and situate themselves in the same room off camera. Although there may be cases where a person desires to assist another person giving evidence so much that they are willing to risk life and limb to do so, I doubt that this is one of those cases'.

also provide an image of the entire room (360° view)⁴⁴ from which the witness speaks, ensuring that no external interference or pressure is applied. This is one of the issues that seems to concern lawyers the most, i.e., that the witness or expert may be subject to external influence whilst testifying, since the online format can facilitate the covert use of communication devices during the hearing: phone messages, WhatsApp, emails, etc.⁴⁵.

In addition to the 360° vision, more expensive but technologically advanced methods can be used such as software applications that block web pages or that prevent consultation of documents while the hearing is in progress. Provision could be made for the a third party to be present during the testimony of the witness or experts⁴⁶, or even the presence of a neutral third party (arbitration court personnel or a notary) or of a member of the opposing party's legal team⁴⁷. More rudimentary and less expensive methods can also be used such as asking the witness to show the room where he is with his camera or having two cameras: one that focuses directly on the witness in a short shot and another that offers an overview of the room⁴⁸. Likewise, some of the protocols recommend that

the witness or expert: (i) appear from a room specifically arranged for the occasion, only with the technological devices and the documentation and materials authorized to participate in the Hearing; (ii) reasonably certify that, regardless of the exchanges that his statement requires with the

44 HKISC, *Guidelines on Virtual Hearings*, May 2020, para. 11; CIAM, *Nota sobre organización de audiencias virtuales*, paras. 13-17; CAM, *Nota sobre organización de audiencias virtuales*, April 21, 2020, paras. 32-34; ICC, ICC Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic, April 9, 2020, Annex I, Letter E, section iii; NAI/DAA, *The Hague Video Conferencing and Virtual Hearing Guidelines*, November 2020, section 2 h).

45 In ICC *Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic*, 9 April 2020, Annex I Letter E, section iii), the ICC recommends that the Protocol address 'the permission/prohibition of synchronous or asynchronous communications between witnesses and parties/counsel in chat rooms or through concealed channels of communications, interaction between the examiner and the witness/expert in an online environment' and 'whether the witness/expert will be sitting at their location together with anyone else and if he/she will be assisted by someone while giving his/her testimony'. It also refers to the possible 'sequestration' of witnesses as an issue to be addressed in the protocol.

46 HKIAC *Guidelines on Virtual Hearings*, May 2020, para. 11; and CIAM, *Nota sobre organización de audiencias virtuales*, para. 14.

47 CIAM, *Nota sobre organización de audiencias virtuales*, para. 14.

48 CIAM, *Nota sobre organización de audiencias virtuales*, para. 14.

Participants who ask him questions, he does not communicate with other people during the testimony, without authorization from the court⁴⁹.

While these issues are a legitimate concern to counsel, and are those that involve the greatest risks during virtual hearings⁵⁰, we have seen that security measures such as those indicated above can be implemented and that, in practice, interference with the witness or expert during the hearing, whilst possible, is very difficult. In the first place, because this would amount to bad faith⁵¹ and good faith is presumed to be the normal behavior of all parties concerned; secondly, because of the serious consequences that this might entail for the outcome of the case once the infringement is detected. Lastly, and following on from this, the other participants may detect that the witness or expert is acting suspiciously, just as in physical hearings they can notice when a witness glances at lawyers to seek approval through eye contact.

A recent example may serve to illustrate this point. The Ontario Superior Court of Justice decision in *Kaushal v. Vasudeva et al.* (2021 ONSC 440) shows that inappropriate behaviour during a virtual examination can be sanctioned to the point of determining the exclusion of the witness's testimony from the procedure. This decision, although in the judicial sphere, describes a situation that might equally occur in the course of an arbitration procedure. In the case in question⁵², the defendant, Mr. Vasudeva, was questioned on Zoom, having sworn an affidavit prior to questioning.

Mr. Vasudeva, his attorney and an interpreter were all in the same meeting room at the attorney's office. Each of Mr. Kaushal's lawyers, the claimant himself and the court reporter were at separate locations. At the beginning of the cross-examination, Mr. Kaushal's attorney asked and Mr. Vasudeva's attorney confirmed in the record that the only parties present in the room were Mr. Vasudeva, his attorney, and the interpreter.

49 CIAM, *Nota sobre organización de audiencias virtuales*, para. 15.

50 Miles, 'Chapter 6. Remote Advocacy, Witness Preparation & Cross-Examination: Practical Tips & Challenges', in Sherer et al. (eds), *International Arbitration and the COVID-19 Revolution* (2021), 121 (127-128).

For the purposes of online examination of witnesses or experts, it is our view that identification will rarely be the subject of discussion.

51 As a standard of conduct, see Guideline 21 of the *IBA Rules on Party Representation in International Arbitration* (2013): 'A Party Representative should seek to ensure that a Witness Statement reflects the Witness's own account of relevant facts, events and circumstances'.

52 For what follows see: Selby, Hellrung and Mills, 'Canada: Crossing The Line: Misconduct During Virtual Examinations' (Cassels, 2021).

However, the Zoom link remained active after the examination was completed and Mr. Kaushal heard the voices of Mr. Vasudeva's wife and son, apparently discussing what had occurred during the cross-examination. Mr. Kaushal recorded the discussion on his cell phone and shared what he had heard with his attorney. Mr. Kaushal's attorney rejoined the Zoom meeting to claim that Mr. Vasudeva's wife and son appeared to have been present during Mr. Vasudeva's questioning, which Mr. Vasudeva's attorney denied. The interpreter stated that Mr. Vasudeva's wife and son were in the room during the examination. This was contradicted by Mr. Vasudeva who swore that his wife and son remained in the reception area of the law firm. In an attempt to undermine the interpreter's evidence, Mr. Vasudeva also swore that his lawyer had informed him that Mr. Kaushal's lawyer had threatened the interpreter if he did not testify that Mr. Vasudeva's wife and son were present during the testimony.

Ultimately, the Court granted a motion to annul Mr. Vasudeva's affidavit, on the grounds that his conduct amounted to an abuse of judicial process. The Court preferred independent evidence from the court interpreter and held that the suggestion that Mr. Kaushal's lawyer had threatened the interpreter was unfounded.

Leaving aside potential abuses and returning to the decision on the type of hearing, the fact that interaction between arbitration participants may be different in the virtual world has no impact on due process, insofar that, in our opinion, the credibility of the witness is not affected by the online setting. Indeed, one might speak of different nuances or degrees of perception, which might also vary depending on how the use of new technologies is perceived by their users. As already mentioned, new technologies make for improved scrutiny of facial features in comparison with face-to-face hearings, although the wider picture may be lost⁵³. If remote

53 Federal Court of Australia, 15.4.2020, *Capic v Ford Motor Company of Australia Limited* (Adjournment) 486, para. 19: 'The Respondent then submitted that the cross-examination of witnesses over video-link is unacceptable. I accept the Respondent's submission that there are many authorities in this Court which underscore the unsatisfactory nature of cross-examination by video-link: see, eg, *Hanson-Young v Leyonhjelm* (No 3) [2019] FCA 645 at [2]; *Campaign Master (UK) Ltd v Forty Two International Pty Ltd* (No 3) [2009] FCA 1306; 181 FCR 152 at 171 [78]. However, those statements were not made in the present climate, nor were they made with the benefit of seeing cross-examination on platforms such as Microsoft Teams, Zoom or Webex. My impression of those platforms has been that I am staring at the witness from about one metre away and my perception of the witness' facial expressions is much greater than it is in Court. What is different—and significant—is that the video-link technology tends to

hearings mean fewer questions can be asked by arbitrators, we believe it will be up to the arbitrators not to be pressured by technology.

Other possible drawbacks, such as that the hearing could be slowed down if the technique of displaying documents on the screen is abused, are by no means insurmountable⁵⁴. It is just a question of planning and organizing in advance, and for that great help is offered by the numerous Protocols for online hearings.

It is possible that virtual hearings require more preparation by lawyers when preparing the interrogation or cross-examination, and the documents to be presented, particularly if they go beyond the written text and deal with other elements such as diagrams, plans or photographs, since in this case their exhibition should be properly planned and assured⁵⁵. Here, the online medium itself points to opportunities for innovation through more visual forms of presentation, such as *PowerPoint* slides or the use of virtual or augmented reality⁵⁶. The virtual world has considerable potential

reduce the chemistry which may develop between counsel and the witness. This is allied with the general sense that there has been a reduction in formality in the proceedings. This is certainly so and is undesirable. To those problems may be added the difficulties that can arise when dealing with objections’.

54 In more detail: Scherer, “Remote Hearings” (2020) 8-9.

See also: Federal Court of Australia, 15.4.2020, *Capic v Ford Motor Company of Australia Limited* (Adjournment) 486, para. 20: ‘the Respondent also submitted that this case will involve a large number of documents and that document management in a virtual courtroom will make that much more difficult. I do not accept this submission. Whilst I cannot speak for other Judges, I have been operating using a digital court book for some time now and the use of a virtual courtroom has had no impact on that aspect of the hearing. The problem of witness and cross-examination bundles is readily soluble with a service such as Dropbox. I have conducted a trial this way already. It is not ideal, but I do not think this result in an unfair or unjust trial. Further, the use of a third party operator may carry with it enhanced document management procedures’.

55 A good guide is found in Africa Arbitration Academy, *Protocol on Virtual Hearings*, Principle 3.3 (Documents), April 2020. See also: ICC, *ICC Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic*, April 2020, para. 28 et seq.

56 Although not only in the virtual environment, virtual and augmented reality is a tool that possibly has the potential to be applied in virtual hearings virtual and augmented reality. See: Olmos, ‘Uso de realidad virtual y realidad aumentada en el arbitraje internacional’ (2020) 7 *Latin American Journal of Trade Policy*, 39: “New technologies have also brought about significant methodological changes in how to present a case persuasively to an arbitral tribunal. One of the best examples is the use of virtual reality and augmented reality in arbitration, because it not only makes it possible to bring the arbitrator closer to events he did not witness

for gaining the attention of the Arbitral Tribunal⁵⁷. For instance, multiple screens⁵⁸ can facilitate the work of the arbitrators, as can the screen sharing function that allows experts, for example, to present complex ideas from their area of expertise in visual form, in a way that greatly facilitates these presentations when compared to face-to-face hearings. It should also be noted that virtual hearings present lawyers with the challenge of preparing more direct and concise questions in order not to overload the hearing, which much improves the efficiency of the procedure, lawyers seek to be persuasive and select those questions that are really important to the case⁵⁹.

The Protocols address issues such as time differences and measures to avoid the possible manipulation of the witnesses. It is precisely in relation to these two issues that the Austrian Supreme Court (OGH) rendered an important judgement on 23 July 2020.

Starting with the time differences, the claimants for annulment of the arbitration award issued under the VIAC Arbitration Rules argued that the court's decision to begin the virtual hearing at 3:00 pm Vienna (Claimants' time zone) and 6:00 am Los Angeles time (the time zone of the claimant's attorneys and witnesses) amounted to unequal treatment of the parties. The OGH found that the time difference between Vienna and Los Angeles meant that the hearing could not take place during usual business hours for all of the hearing participants. The OGH held that because Vienna was the seat of the arbitration, the parties accepted, in principle, the disadvantages resulting from the geographical distance from their place of business

occurring, but also because it allows the presenter to explain how the alleged facts unfolded”.

- 57 See: Ashton, Langley and Davidson, ‘Creating Compelling Expert Testimony in International Arbitration Using Visual Aids’ (2019) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2019/11/23/creating-compelling-expert-testimony-in-international-arbitration-using-visual-aids/>: ‘In today's busy and increasingly digitized world, pictures are the new words’, commenting on the pros and cons of experts using these new techniques when being questioned.
- 58 For example, ICC, *ICC Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic*, April 9, 2020, refers in annex I, Letter E, section ii) refers to the issues that must be addressed in advance in relation to the presentation of evidence and the examination of witnesses and experts, in particular: (ii) Identify whether lawyers will use multiple screens for online pleadings, presentation of evidence and agree on the modalities to present and display exhibits of evidence in a virtual environment.
- 59 See: In arbitration in general, but with references also to virtual hearings: Vargas, *Comunicación persuasiva para el litigio arbitral* (2020), 1.

and work, including the substantial time differences⁶⁰. Furthermore, the court noted that these disadvantages were not compounded by a remote hearing. On the contrary, the court considered that starting a hearing at 6:00 am local time was less onerous than having to travel from Los Angeles to Vienna for an in-person hearing, and therefore rejected that the award could be annulled⁶¹.

Similarly, the Austrian Supreme Court rejected the consideration that holding a remote hearing amounted to a violation of the court's duty to treat the parties fairly and equitably because the court took no steps to prevent witness tampering. Specifically, the Defendants alleged that neither the court nor the parties could determine what documents the witnesses would have access to; if there were other people present in the witness's room; and whether witnesses might have received chat messages while being questioned. The Supreme Court held that blanket allegations about the possible misuse of videoconferencing technology to question witnesses could not by themselves make them inappropriate. As a preliminary matter, OGH determined that the risk of witness tampering also existed in face-to-face hearings (for example, by influencing the testimony of a witness prior to the hearing or by providing the witness with information on other alleged evidence during the course of the procedure). The court then added that remote hearings allow for measures to control witness tampering that 'in part go beyond those available at a conventional hearing'. Such specific measures for remote witness testimony include: i) the (technical) ability of all participants to observe the person to be examined closely and head-on; ii) the possibility of recording the hearing; iii) the option of instructing the witness to look directly at the camera and to keep their hands visible on the screen at all times (which makes it impossible to read chat messages); and iv) showing the room in which you are testifying (making sure there is no other person present).

60 Critical of this position taken by the *Oberster Gerichtshof* (OGH), 23 July 2020 (Austria): Scherer et al., 'In a 'First' Worldwide, Austrian Supreme Court Confirms Arbitral Tribunal's Power to Hold Remote Hearings Over One Party's Objection and Rejects Due Process Concerns' (2020) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2020/10/24/in-a-first-worldwide-austrian-supreme-court-confirms-arbitral-tribunals-power-to-hold-remote-hearings-over-one-partys-objection-and-rejects-due-process-concerns/>.

61 See: The commentary on the judgment cited above: *Oberster Gerichtshof* (OGH), 23 July 2020 (Austria) by Scherer, et al. What follows in the text is by reference to this commentary.

Again, it is a question of an adequate preparation of the technical or organizational details necessary for an online hearing. In the Protocol that is to be prepared for this purpose, it would be convenient for the arbitrators to consider alternative measures that might impair the testimony of the witnesses or experts either because of the poor quality of the transmission, the breach of confidentiality or security during hearings, their interruption or any other reason that prevents the continuation of the hearing. This should include the possibility that the arbitration tribunal has the possibility to suspend or conclude the hearing and locate the testimony on another alternative day or on the same day if possible⁶².

From this perspective, the technical arguments against virtual hearings are side issues in relation to the procedure, and although they must also be addressed, they are not seen as being central, except on rare occasions where the violation of due process is manifest and real, such as in the decision of 25 January 2021 of the Chilean Court of Concepción, annulling a judgment adopted in default of one of the parties when what happened in reality is that the lawyer tried several times to access the hearing using the link provided but was left on hold⁶³.

In the situation where some participants are present physically while others take part remotely, it is a matter of organisation. Pre-Covid, online participation by a witness or expert was exceptional, and so all the participants - court, parties, witnesses and experts -were physically present during the hearing. During the Covid-19 pandemic, online participation by all the parties involved has been the general rule, although it should be clarified that, as far as possible teams of lawyers tend to be present in the same room. In domestic arbitration, it is easier for them to come together in person. What we do believe should be considered exceptional is the situation where the arbitrators decide to be present in the same room with only one of the parties. Unless the parties have expressly agreed otherwise, it is not recommended that one of the parties physically attend the hearing in the same place as the arbitrator or arbitral tribunal if the other party can

62 See, for example, Africa Arbitration Academy, *Protocol on Virtual Hearings*, Principle 3.2.5, April 2020; CAM, *Nota sobre organización de audiencias virtuales*, 21 April 2020, para. 24; and CIAM, *Nota sobre organización de audiencias virtuales*, para. 11, and Annex I, section 6 (Protocolo en caso de fallo técnico), paras. 23-26.

63 Delivered by the Fifth Chamber of Concepción by Minister Claudio Gutierrez G., Alternate Minister Waldemar Augusto Koch S. and Member Attorney Gonzalo Alonso Cortez M. Concepcion, 25 January. 2021.

only attend remotely⁶⁴. The same rule can be applied to arbitral tribunals, but not to the Secretary⁶⁵.

Finally, in relation to the possibility of witness conferencing, more popularly known among the experts as 'hot-tubbing'⁶⁶, there is nothing to prevent this happening online⁶⁷. The way in which the different windows can be arranged on the screen undoubtedly makes it easier to do so.

D. Other Evidence: Signature Recognition and On-site Visual Inspections

As well as the examination of witnesses and experts as considered above, there are some other types of evidence which, due to their complexity, might inevitably appear to require the physical presence of the parties, as for example in verifying signatures, where the original has to be inspected so that the witness or expert is in a position to confirm that a signature is attributable to its signatory. Another example is when a document has to be examined by an expert during the hearing in order to rule out manipulation. The same might be said in cases concerning technical defects in a specific object -for example, a machine or a commodity - or more frequently where works need to be inspected on site.

Without ruling out that in these cases the evidence must be obtained in person and *in situ*, it is nevertheless the case that the most recent, increas-

64 See Africa Arbitration Academy, *Protocol on Virtual Hearings*, Principle 2.1.6, April 2020; and CAM, *Nota sobre organización de audiencias virtuales*, 21 April 2020, para. 14.

65 CAM, *Nota sobre organización de audiencias virtuales*, 21 April 2020, para. 14. A similar but not identical position: NAI/DAA, *The Hague Video Conferencing and Virtual Hearing Guidelines*, November 2020, section 1, sub-para. i) and j).

66 See: CIArb, *Guidelines for Witness Conferencing in International Arbitration*, April 2019, 41-41.

67 See *Federal Court of Australia*, 15.4.2020, *Capic v Ford Motor Company of Australia Limited (Adjournment)* 486, no. 15: 'Additionally, the fact that the witnesses involved in the expert hot tubs are in different jurisdictions may make it difficult for them to confer to prepare a joint report or to give their evidence concurrently. I do not, however, see this problem as insurmountable. The experts can confer beforehand on virtual platforms. This will be tedious and far from satisfactory but it is not impossible. The time zone problem can be solved by the Court sitting at different times (which I have done in matters heard before the days of this pandemic involving witnesses who for whatever reason were unable to travel to the courtroom in which I was sitting). The idea of two witnesses being examined at the same time in a virtual platform is no doubt challenging but, again, I do not think that it cannot be attempted or that it will be unfair or unjust'.

ingly sophisticated, high-quality and complex technologies, such as drones that can live stream images, scanners or high-resolution digital cameras offer a substitute for in-person inspections, avoiding the need to travel. In particular, as regards on-site inspections, the ICC Guide for proceedings during the pandemic⁶⁸ suggests that arbitration tribunals should consider whether on-site visits or inspections by experts can be replaced by video presentations or joint expert reports. The CIAM Note also refers to the use of drones for inspections of this type⁶⁹.

E. Conclusions

During the Covid-19 pandemic, arbitration has been subjected to a stress test that has normalised the use of remote means of communication, in particular the use of virtual platforms on which hearings are held online in their entirety, even in complex procedures. In fact, reports published since March 2020 tell of several complex international cases in which large numbers of witnesses and experts were held over many days, with participants from far afield.

Technological advances and the experience that we have acquired of remote hearings during Covid-19 have changed the perceptions of arbitration users regarding online hearings.

The large number of soft law instruments and protocols on virtual hearings, brought out hurriedly in response to the Covid-19 crisis, are clearly here to stay and will be of use once the pandemic situation ends.

Arbitration institutions have been an important part of the process of normalizing virtual hearings by creating soft law instruments and amending Arbitration Rules in order to expressly grant the arbitrators the power to decide the format of the hearing when parties disagree.

Any negative perceptions that arbitration operators might have had about virtual hearings in the pre-Covid era, to the effect that personal interaction between and with witnesses, experts, parties and co-arbitrators is inevitably more limited than when the hearing is held is face-to-face, has changed. An online hearing fulfills the same function, role and purpose as a face-to-face hearing.

68 ICC, ICC Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic, April 2020, para. 8.

69 CIAM, *Nota sobre organización de audiencias virtuales*, fn 6.

Bibliography

- Neil Ashton, Daniel Langley, and Elizabeth Davidson, 'Creating Compelling Expert Testimony in International Arbitration Using Visual Aids' (2019) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2019/11/23/creating-compelling-expert-testimony-in-international-arbitration-using-visual-aids/>.
- Niuscha Bassiri, 'Chapter 5. Conducting Remote Hearings: Issues of Planning, Preparation and Sample, Procedural Orders' in Maxi Sherer, Mohamed Wahab and Niuscha Bassiri (eds), *International Arbitration and the COVID-19 Revolution* (Wolters Kluwer, Alphen aan den Rijn, 2021), 105.
- Gary Benton, 'How Will the Coronavirus Impact International Arbitration?' (2020) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2020/03/13/how-will-the-coronavirus-impact-international-arbitration/>;
- Cherie Blair, 'Getting ahead of the curve: how arbitration can better meet the needs of parties, people and planet' (2020) *Chartered Institute of Arbitrators 2020 Roebuck Lecture*, available at: <https://ciarb.org/media/10078/20200611-ciarb-2020-roebuck-lecture-by-cherie-blair-cbe-qc-mciarb.pdf>.
- Gary Born, Annliese Day and Hafez Virjee, 'Chapter 7. Empirical Study of Experiences with Remote Hearings: A Survey of User's Views', in Maxi Sherer, Mohamed Wahab and Niuscha Bassiri (eds), *International Arbitration and the COVID-19 Revolution* (Wolters Kluwer, Alphen aan den Rijn, 2021), 137.
- Cesmarc, 'A pandemia na maior arbitragem societária do país, a disputa pela Eldorado' (2020), available at <https://exame.com/negocios/a-pandemia-na-maior-arbitragem-societaria-do-pais-a-disputa-pela-eldorado/>.
- Volterra Fietta, 'Client Alert: The impact of COVID-19 on arbitration proceedings and due process', 9 April 2020, available at: <https://www.volterrafiatta.com/volterrafiatta-client-alert-the-impact-of-covid-19-on-arbitration-proceedings-and-due-process/>
- Jacky Fung, 'Personal Takeaway from the Warzone: Organizing, Preparing and Attending a Two-Week Virtual Hearing' (2020), *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2020/08/02/personal-takeaway-from-the-warzone-organizing-preparing-and-attending-a-two-week-virtual-hearing/>.
- Ema Gojkovic and Michael McIlwrath, 'International Arbitration and the COVID-19 Revolution', in Maxi Sherer, Mohamed Abdel Wahab and Niuscha Bassiri (eds), *International Arbitration and the COVID-19 Revolution* (Wolters Kluwer, Alphen aan den Rijn, 2021), 191.
- Sean Hardy and Jeremy Yeap, 'How Sacred is the Right to be Heard in Arbitration?' (2021) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2021/06/14/how-sacred-is-the-right-to-be-heard-in-arbitration/>.
- Maria Hoyos and Carolina Botelho, "Portugal", *The ICCA Reports: Does a Right to a Physical Hearing Exist in International Arbitration?* (2021) available at <https://www.arbitration-icca.org/right-to-a-physical-hearing-international-arbitration>.

- Sejin Kim, 'Audiovisual Evidence in International Arbitration: Would 'seeing is believing' still work?', in Carlos González Bueno (ed), *40 Under 40 International Arbitration* (Dykinson, Madrid, 2021), 211.
- Malcolm Malca Vargas, *Comunicación persuasiva para el litigio arbitral* (Palestra, Lima, 2020).
- Emma Martín, 'The use of Technology in International Arbitration', in Carlos González Bueno (ed), *40 Under 40 International Arbitration* (Dykinson, Madrid, 2021) 337.
- Wendy Miles, 'Chapter 6. Remote Advocacy, Witness Preparation & Cross-Examination: Practical Tips & Challenges', in Maxi Sherer, Mohamed Wahab and Niuscha Bassiri (eds), *International Arbitration and the COVID-19 Revolution* (Wolters Kluwer, Alphen aan den Rijn, 2021), 121.
- Rebeca Mosquera, 'Cybersecurity in times of virtual hearings', in Carlos González Bueno (ed), *40 Under 40 International Arbitration* (Dykinson, Madrid, 2021), 201.
- Sophie Nappert and Mihaela Apostol, 'Healthy Virtual Hearings' (2020) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2020/07/17/healthy-virtual-hearings/>.
- Ricardo Olmos, 'Uso de realidad virtual y realidad aumentada en el arbitraje internacional' (2020) 7 *Latin American Journal of Trade Policy*, 39.
- Jim Pastore, 'Practical Approaches to Cybersecurity in Arbitration' (2017) 40-3 *Fordham International Law Journal*, 1023.
- Pilar Perales Viscasillas, 'El arbitraje internacional durante la pandemia y más allá: *soft law*, audiencias virtuales y sostenibilidad' in María Arias (ed), *Anuario de Arbitraje 2022* (Civitas: Thomson-Reuters, Pamplona, 2022) (forthcoming).
- Pilar Perales Viscasillas, 'Audiencias virtuales y debido proceso' (2021) 42 *Spain Arbitration Review*, 9.
- Catherine Rogers and Fahira Brodlija, 'Chapter 3. Arbitrator Appointments in the Age of COVID-19. International Arbitration and the COVID-19 Revolution' in Maxi Sherer, Mohamed Wahab and Niuscha Bassiri (eds), *International Arbitration and the COVID-19 Revolution* (Wolters Kluwer, Alphen aan den Rijn, 2021), 49.
- Ignacio Santabaya and Paula Fernández, 'The holding of virtual hearings in arbitration: main action protocols issued by national and international institutions' (2021) 8 *La Ley Arbitraje y Mediación*, 1.
- Maxi Scherer, 'Remote Hearings in International Arbitration: An Analytical Framework' (2020) 37-4 *Journal of International Arbitration*, 1.
- Maxi Scherer, 'Asynchronous Hearings: The Next New Normal?' (2020) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2020/09/09/asynchronous-hearings-the-next-new-normal/>.

- Maxi Scherer, Franz Schwarz, Helmut Ortner and Ole Jensen, 'In a 'First' Worldwide, Austrian Supreme Court Confirms Arbitral Tribunal's Power to Hold Remote Hearings Over One Party's Objection and Rejects Due Process Concerns' (2020) *Kluwer Arbitration Blog*, available at <http://arbitrationblog.kluwerarbitration.com/2020/10/24/in-a-first-worldwide-austrian-supreme-court-confirms-arbitral-tribunals-power-to-hold-remote-hearings-over-one-partys-objection-and-rejects-due-process-concerns/>.
- Christopher Selby, Layne Hellrung and Stephanie Mills, 'Canada: Crossing The Line: Misconduct During Virtual Examinations', (Cassels, 2021).
- Patricia Shaughnessy, 'Chapter 2. Initiating and Administering Arbitration Remotely. International Arbitration and the COVID-19 Revolution', in Maxi Scherer, Mohamed Wahab and Niuscha Bassiri (ed), *International Arbitration and the COVID-19 Revolution* (Wolters Kluwer, Alphen aan den Rijn, 2021), 27.
- Janet Walker, 'Virtual Hearings: An Arbitrator's Perspective' (2020), available at <https://www.tribunalarbitraldesporto.pt/noticias/virtual-hearings-an-arbitrator-s-perspective>.
- Laura Zimmerman, 'International Arbitration 2.0. Strategies for Tech-Savvy Proceedings', in Carlos González Bueno (ed), *40 Under 40 International Arbitration* (Dykinson, Madrid, 2021), 185.

