

A Lawyer's Perspective: Confidentiality, Privacy and Security in Arbitration in Times of Covid

Sofia Ribeiro Mendes

Table of Content

A. Introduction	205
B. Online Arbitration	207
I. General Overview	207
II. Legal Framework for conducting Remote Hearings	209
III. Challenges and Practical Tips for holding Remote Hearings	215
C. Confidentiality and Privacy	220
I. General Overview	220
II. Legal Basis for the Confidentiality of the Arbitration	222
III. Challenges and Practical Tips	223
D. Security	225
I. General Overview	225
II. Potential Threats to Cybersecurity	226
III. Practical Tips	228
E. Final Remarks	230
Bibliography	231

A. Introduction

The current pandemic, caused by SARS CoV-2 and COVID-19 (“COVID-19 pandemic” or “pandemic”), has had, and will most likely continue to have, at least in the immediate future, a huge impact on the world, creating a set of challenges which still require a continuous effort of adaptation from all of us.

This was immediately visible at the outset of the pandemic in first half of 2020, with the generalised and worldwide cancellation of all in-person events without knowing if and when such events could be resumed and the shift to online events using various platforms that have proliferated in these troubled times.

Throughout the world laws were published imposing special and exceptional regulations, with implications for arbitration proceedings in progress. Online events started to appear everywhere, because soon after March 2020¹ it was certain that for some time it would be impossible to hold hearings in person. The pandemic particularly affected international arbitration proceedings² given the numerous restrictions on movement that were imposed in many countries at that time and the uncertainty as to how long they would last.

Before long it was clear to everyone that the world had changed with the COVID-19 pandemic and that the arbitration world would not be immune to those changes. Whether those changes are here to stay, only time can tell, but it is not too bold to anticipate that, in several aspects, arbitration proceedings included, there is no turning back.

This article focusses on arbitration proceedings and how arbitration practitioners, including arbitral institutions, have adapted their *modus*

-
- 1 In Portugal, on 18 March 2020, the President of the Republic decreed a state of emergency, in view of the exceptional global public health situation and the proliferation of recorded cases of COVID-19. Consequently, all judicial proceedings, including arbitration proceedings based in Portugal, were suspended from 13 March 2020 to 3 June 2020 (suspension ordered under Law 1-A/2020 of 19 March 2020 and lifted by Law 16/2020 of 29 May 2020) and again from 22 January 2021 to 6 April 2021 (suspension ordered under Law 4-B/2021 of 1 February 2021 and lifted by Law 13-B/2021 of 5 April 2021).
 - 2 Article 7 of Law 1-A/2020 initially stayed all arbitration proceedings under way in Portugal; in response to criticisms, this was later amended to clarify that the suspension was subject to the parties' willingness to continue the proceedings. Arbitration parties could therefore (i) maintain the original schedule for the arbitration proceedings, (ii) agree to extend the deadlines initially decided without the need for suspension, or (iii) stay the proceedings. Also, following the approval of Law 4-B/2021, the Commercial Arbitration Centre of the Portuguese Chamber of Commerce and Industry ("CAC") announced that (i) the Secretariat would continue to perform its functions; (ii) parties were free to decide to suspend proceedings or to allow deadlines to be counted normal in cases where the arbitral tribunal had not yet been constituted; and (iii) where the arbitral tribunal had already been constituted, it was up to the tribunal to decide how to proceed with the arbitration. On the international scene, major arbitral institutions such as the International Chamber of Commerce (ICC), International Centre for Settlement of Investment Disputes (ICSID), London Court of International Arbitration (LCIA) and others, issued a Covid 19 Joint Statement to support international arbitration's ability to contribute to stability and foreseeability in a highly unstable environment, including by ensuring that pending cases could continue and that parties could have their cases heard without undue delay (<https://iccwbo.org/content/uploads/sites/3/2020/04/covid19-joint-statement.pdf>).

operandi in response to COVID-19, especially in the critical areas of the confidentiality, privacy and cybersecurity of proceedings.

It seeks to describe some of the key legal as well as practical challenges currently faced in these areas in arbitration and to offer some observations on what the future may look like in arbitration, in the post-pandemic scenario.

B. Online Arbitration

I. General Overview

In the context of arbitration proceedings, particularly in international arbitration, arbitration users had for some time been well accustomed to using modern communication technologies in their proceedings³.

The 2018 Queen Mary University of London Survey⁴ showed that a significant majority of arbitration users had already been confronted in arbitration proceedings with the use of videoconferencing (60%), other communication technology suited to the courtroom (73%) or had already used cloud data storage (54%).

Likewise, arbitration users had been familiar for many years with having some online, virtual or remote hearings⁵ in their proceedings, held by

3 Ostrove et al., *Online Arbitration Hearings: A review of key developments in response to COVID-19*, available online at <https://www.dlapiper.com/pt/portugal/insights/publications/2020/09/virtual-hearings-report>.

4 Fridland and Brekoulakis, *2018 International Arbitration Survey: The Evolution of International Arbitration*, available at [https://arbitration.qmul.ac.uk/media/arbitration/docs/2018-International-Arbitration-Survey--The-Evolution-of-International-Arbitration-\(2\).PDF](https://arbitration.qmul.ac.uk/media/arbitration/docs/2018-International-Arbitration-Survey--The-Evolution-of-International-Arbitration-(2).PDF).

5 The terminology for hearings conducted using communication technology to simultaneously connect participants from two or more locations is not used consistently by different authors and the expressions 'online hearings', 'virtual hearings' and 'remote hearings' are often used interchangeably. In Scherer, 'Remote Hearings in International Arbitration: An Analytical Framework' (2020) 37-4 *Journal of International Arbitration*, 2, the author presents an extensive explanation of the different definitions and types of hearings, preferring the use of the expression 'remote hearings' over 'online hearings' or 'virtual hearings'. For Maxi Scherer, the use of the expression 'virtual hearings' is not appropriate and should be avoided or used sparingly since in computer science, and even in lay terms, 'virtual' is often defined as 'not physically present as such but made by software to appear to be so from the point of view of a program or user' or as something 'not really or physically existent', when in case of virtual hearings in arbitration the hearing is

telephone or by videoconference: most case management conferences were held by telephone, as were some procedural hearings. It was even quite common to have witnesses or experts testifying by video link. However, it was relatively rare prior to the pandemic for entire hearings to be conducted remotely. The survey showed that 78% of the arbitrators had never or rarely conducted remote hearings.

Recent research⁶ has shown that, during the first pandemic period (i.e. until 30 June 2020), the number of fully remote hearings tripled compared to pre-pandemic data.

Consequently, the possibility of having fully remote hearings in pending arbitration proceedings immediately faced arbitrators and counsel with a number of questions, not only as to whether it was preferable to postpone scheduled hearings due to travel restrictions and social distancing measures, but also whether if those hearings could be held remotely under the applicable arbitral rules. In addition, consideration was soon given to the risk of potential challenges to awards based on remote hearings, on the grounds of possible violation of the parties' right to be heard and treated equally or to due process⁷.

Accordingly, many arbitral institutions⁸ have changed or updated their rules to either expressly provide for, or at least leave open, the possibility of the arbitration being conducted 'remotely' using technology, including video hearings and telephone hearings.

conducted in several locations and the participants really exist and interact with each other using technologies, so there can be no doubts about the physical reality of these type of hearings. This author is not also keen on the use of the term "online hearings" to avoid confusion with the concepts of online dispute resolution (ODR) and online courts which often entail proceedings that are conducted outside physical courtrooms using computer technology, without a hearing (in the sense of a synchronous exchange of arguments or evidence) taking place at all, as the entire proceedings are conducted in asynchronous form.

6 Born, Day and Virjee, 'Empirical Study of Experiences with Remote Hearings', in Scherer, Bassiri and Wahab (eds) *International Arbitration and the COVID-19 Revolution* (2020), 2.

7 Scherer, 'Remote Hearings in International Arbitration: An Analytical Framework' (2020) 37-4 *Journal of International Arbitration*, 2 (29 ff.). See also, for Portugal, Hoyos and Sampaio, *Does a right to a physical hearing exist in international arbitration?*, ICCA Projects: 2-6, available at https://cdn.arbitration-icca.org/s3fs-public/document/media_document/Portugal-Right-To-A-Physical-Hearing-Report.pdf.

8 Examples of these are the ICC, ICSID and LCIA.

Likewise, as discussed further below, many arbitral stakeholders, such as arbitral institutions⁹, arbitral bodies¹⁰ and law firms¹¹, have issued guidance to parties and their counsel on how to hold a hearing remotely and how to best plan for and organize it, which has proved to be very useful tool for arbitration practitioners.

II. Legal Framework for conducting Remote Hearings

The pandemic showed that few national laws and arbitration rules contained specific provisions regarding the use of remote hearings and the few that did usually only contained references to the permitted use of technology or the need for expedient or appropriate means to conduct hearings¹².

With the sudden onset of the COVID-19 pandemic and the related lockdown measures, arbitral tribunals made use of provisions of this type to justify recourse to remote hearings in several proceedings then under way.

Because most of the arbitration rules that contained references to remote hearings did so only for particular special circumstances¹³ or to expedite forms of proceedings¹⁴, some authors argue that, *a contrario*, remote hearings were by implication prohibited in all other situations not specifically provided for in those rules.

-
- 9 This was the case of American Arbitration Association (AAA)- International Centre for Dispute Resolution (ICDR), *Virtual Hearing Guide for Arbitrators and Parties*, available at <https://go.adr.org/covid-19-virtual-hearings.html>.
 - 10 This was the case of the Chartered Institute of Arbitrators (CI Arb), *Guidance Note on Remote Dispute Resolution Proceedings* (2020), available at <https://www.ciarb.org/media/8967/remote-hearings-guidance-note.pdf>.
 - 11 For example, <https://www.dlapiper.com/pt/global/insights/publications/2021/07/virtual-hearings-2021/>.
 - 12 Scherer, 'Remote Hearings in International Arbitration: An Analytical Framework' (2020) 37-4 *Journal of International Arbitration*, 9 mentions Article 1072b, para. 4 of the Dutch Civil Procedure Code and Article 19 para. 2 of the LCIA Rules as among the few examples of rules that specifically allow that arbitral tribunals may conduct hearings remotely
 - 13 For example, Article 28 para. 4 UNCITRAL Arbitration Rules provides that witnesses and experts may be heard remotely but contains no similar provision for other parts of hearings, such as opening or closing legal arguments.
 - 14 As emergency arbitration proceedings or expedited proceedings'

A party's right to a hearing¹⁵ is said to be a fundamental principle in international arbitration¹⁶ and so many national laws¹⁷ and institutional arbitration rules contain provisions to that effect¹⁸, specifying either that a party is free to request a hearing or that the arbitration cannot be conducted on a documents-only basis¹⁹ unless all parties agree to this^{20,21}.

Having established that, the problem is whether this necessarily entails the holding of a physical hearing, as traditionally²² it is considered that hearings must be oral (principle of orality) and allow for a simultaneous exchange of arguments or evidence (principle of immediacy) before the arbitral tribunal.

-
- 15 Born, *International Commercial Arbitration* (2014), 3512. Blackaby et al., *Redfern and Hunter on International Arbitration* (2009), 413-428.
 - 16 Respect for party autonomy and for the fundamental principles of due process and equal and fair treatment are often understood as international public policy in procedural matters.
 - 17 This is the case of Article 34 of the Portuguese Arbitration Law that provides that unless agreed otherwise by the parties the arbitral tribunal decides on the holding of hearings, but the tribunal is obliged to hold a hearing for evidence production if one party so requests. The drafting of this article was clearly inspired by Article 24 of the Model Law, with minor differences. It is also the case of the Spanish Arbitration Act (Art. 30) or the German ZPO (§ 1047).
 - 18 Mendes 'Chapter 9: Evidence' in Fonseca et al. (eds) *International Arbitration in Portugal*. (2020), 131 (137).
 - 19 Most commentators accept that due process of law is not undermined if the arbitration is conducted only in writing and on the basis of documents. To this effect, see Blackaby et. al. *Redfern and Hunter on International Arbitration*, (2015), 400 and Caramelo, 'A Condução do Processo Arbitral – Comentários aos arts 30º a 38º da Lei de Arbitragem Voluntária' (2013) 73-II/III ROA, 669. Also, the Prague Rules explicitly state in Article 8 (1) that to promote cost-efficiency, the arbitral tribunal and the parties should seek to resolve the dispute on a document only basis.
 - 20 Oliveira, *Arbitragem Voluntária: uma Introdução* (2020), 133. See also Caramelo, 'A Condução do Processo Arbitral – Comentários aos arts 30º a 38º da Lei de Arbitragem Voluntária' (2013) 73-II/III ROA, 669.
 - 21 Some commentators contend that compelling reasons for holding an oral hearing, namely, to ensure the equal right of the parties to be heard and to present its case, may exceptionally allow the arbitral tribunal to overcome the previous agreement of the parties of not holding a hearing and schedule an oral hearing. See Caramelo, 'A Condução do Processo Arbitral – Comentários aos arts 30º a 38º da Lei de Arbitragem Voluntária' (2013) 73-II/III ROA, 669. This position is debatable as it can potentially violate party autonomy and subject the award to setting aside proceedings
 - 22 El Ahdab et al., 'Approaches to Evidence across Legal Cultures' in Kläsener, Magál and Neuhaus (eds), *The Guide to Evidence in International Arbitration* (2021), 5.

However, if one considers that a hearing consists of an oral and synchronous exchange of arguments or evidence (witnesses and experts' testimony) before a tribunal – as opposed to the written and asynchronous exchange of arguments or evidence (documents) in the parties' briefs – since the remote hearing allows for the exchange to be oral and synchronous, it seems that the legal requirement is fulfilled, and that the mere right to a hearing should not exclude the possibility to hold the hearing remotely.

In any case, faced with the lack of express provisions for remote hearings in many arbitral rules and the fear that the conduct of remote hearings in pending arbitration proceedings could jeopardize the validity of the award, several arbitral institutions started by releasing guidance notes to assist arbitration users to that end and soon many felt the need to update their arbitration rules to introduce express provisions admitting remote hearings through the use of technology.

For instance, the ICC Arbitration Rules, in the 2017 version, provided in Article 22 that both the parties and the tribunal were required to be proactive in making efforts to conduct arbitrations efficiently and to agree to appropriate procedural measures to further that cause wherever possible. Article 24 of the ICC Rules stated that an ICC tribunal can use telephone or video conferencing for both Case Management Conferences and other hearings 'where attendance in person is not essential'.

In respect of the main hearing, Article 25 para. 2 of the ICC Rules provides that the tribunal 'shall hear the parties together in person if any of them so requests'.

In the context of the pandemic, the ICC felt the need to issue a guidance note clarifying that this 'can be construed as referring to the parties having an opportunity for a live, adversarial exchange and not to preclude a hearing taking place 'in person' by virtual means if the circumstances so warrant'.

The ICC later issued a *Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic*²³ that included a reminder of the rules and measures already provided under the ICC Arbitration Rules and in other notes, reports and guides issued by the institution²⁴ that could

23 <https://iccwbo.org/publication/icc-guidance-note-on-possible-measures-aimed-at-mitigating-the-effects-of-the-covid-19-pandemic/>

24 ICC, Note to Parties and Arbitral Tribunals on the Conduct of the Arbitration under the ICC Arbitration Rules, the report approved by the ICC Arbitration Commission entitled Controlling Time and Costs in Arbitration and Effective Management of Arbitration – A Guide for In-House Counsel and Other Party Representatives.

be of assistance. The guidance also refers to matters to be considered by arbitrators when determining the possibility of holding remote hearings, as well as on the steps to be taken beforehand, in particular, to ensure the suitable conduct of all participants and especially the privacy and confidentiality of the remote hearing itself and of the documents to be shared by electronic means.

More recently, the ICC issued revised Rules of Arbitration which entered into force on 1 January 2021, along with updates to the ICC Court's Note to Parties and Arbitral Tribunals on the Conduct of Arbitration. Article 26 of the revised Rules now expressly states that 'the arbitral tribunal may decide, after consulting the parties, and on the basis of the relevant facts and circumstances of the case, that any hearing will be conducted by physical attendance or remotely by videoconference, telephone or other appropriate means of communication'.

Similarly, the LCIA also updated its Arbitration Rules and Mediation Rules in August 2020, including changes that focus on the primacy of electronic communication, facilitating electronic signing of awards by arbitrators and refining and expanding the provisions on the use of online hearings. In particular, Article 19 para. 2 of the LCIA Arbitration Rules 2020 specifically allows for any hearing to be held virtually: '...As to form, a hearing may take place in person, or virtually by conference call, video conference or using other communications technology with participants in one or more geographical places (or in a combined form)'.

In Portugal, arbitration law does not expressly provide for a right of the parties to have a physical hearing in their arbitration proceedings.

In the context of arbitration, Portugal's primary source of statutory law is Law No. 63/2011, of December 14, which approved the Portuguese Voluntary Arbitration Law ("PAL").

Article 30 para. 2 b) PAL states that the fundamental principle of the arbitration process is to guarantee the parties a reasonable opportunity to assert their rights, in writing or orally, before the final award is rendered.

Article 31 para. 2 PAL goes on to provide that the arbitral tribunal may, unless otherwise agreed by the parties, meet in any place it deems appropriate. Some authors²⁵ have therefore argued that there is no right

25 Hoyos and Sampaio, *Does a right to a physical hearing exist in international arbitration?*, ICCA Projects: 2-6, available at https://cdn.arbitration-icca.org/s3fs-public/document/media_document/Portugal-Right-To-A-Physical-Hearing-Report.pdf, state that there is a general consensus among Portuguese authors regarding the possibility of conducting hearings remotely, with the exception of Professor António Menezes Cordeiro, who in the pre-pandemic context expressed

in Portugal to a physical arbitration hearing and that the arbitral tribunal together with the parties may agree to hold a remote hearing.

If the parties are in agreement on whether to hold a remote hearing, typically the arbitral tribunal will follow the parties' agreement and no issues are raised²⁶.

The difficulty resides when one party requests a remote hearing while the other opposes the request and insists on holding a physical hearing, it being up to the arbitral tribunal to decide.

When deciding, the arbitral tribunal must weigh firstly the parties' right to be heard and treated equally and the arbitral tribunal's obligation to conduct the proceedings in the most efficient and expeditious way. Assuming that the request of a party to hold a physical hearing would entail a delay or the rescheduling of the hearing (for example, due to travel restrictions or social distancing rules, or because it is unadvisable due to health issues and not merely because the party considers travel to the physical hearing to be too troublesome or costly²⁷) the arbitral tribunal will most likely deny the request and decide on the holding of a remote hearing, if the applicable law so permits.

If the arbitral tribunal considers that the applicable arbitration law or arbitral rules grant the tribunal the power to decide to hold a remote hearing in the face of opposition from one or both parties, such a decision

a contrary view: '(...) a court cannot function electronically, without people ever meeting physically and without the need for a physical space where documents are legally stored; this is not possible: it would leave open the various legal points to which the determination of the seat is relevant and this even when all practical problems are overcome'. Cordeiro, *Tratado da Arbitragem – Comentário à Lei 63/2011, de 14 de Dezembro* (2015), 311.

- 26 Most commentators on the UNCITRAL Model Law point out that Article 19 provides for the autonomy of the parties and the arbitral tribunal in establishing the procedural rules whereby the arbitration will be conducted, stating that this freedom is at the core of modern systems of arbitration, as it trusts in the ability of the parties and the arbitral tribunal to conduct the proceedings in a fair and efficient manner, which is also valid for deciding to hold remote hearings. See, for all, Holtzmann and Neuhaus, *A Guide to the UNCITRAL Model Law on International Commercial Arbitration (Legislative History and Commentary)* (1989).
- 27 As Maxi Sherer correctly puts it in Scherer, 'Remote Hearings in International Arbitration: An Analytical Framework' (2020) 37-4 *Journal of International Arbitration*, 18, apart from the current pandemic, a variety of possible reasons is conceivable for a party requiring a remote hearing, ranging from certain participants not being able to attend physically due to professional inconvenience or medical conditions, just to state a few; in any case, the stronger the impediment the heavier this factor will weigh in the overall assessment of the arbitral tribunal.

is discretionary, but grounds must be stated. This means that when deciding, the arbitral tribunal will consider the reasons behind each party's position on whether or not to hold a remote hearing, the content of that hearing (e.g. expert or witness testimony, legal arguments), the technology available for holding the remote hearing and the possibility of all the participants accessing it, as well as the timing and costs of holding a physical hearing as opposed to a remote hearing and vice versa. This is valid whether in a pandemic context or not.

As regards the legal grounds for allowing the arbitral tribunal, in the absence of agreement of the parties, to impose on the parties the holding of a remote hearing, most authors²⁸ refer to the tribunal's broad power to organize procedural matters.

Along the lines of the Model Law, most national arbitral laws, the Portuguese law included, typically provide that, failing agreement by the parties, the arbitral tribunal may conduct the arbitration in such a manner as it sees fit.

Portuguese Law provides that arbitral tribunals enjoy a wide range of discretion in determining whether to conduct hearings or decide solely on the basis of documents. Similarly, it grants the arbitral tribunal the power to choose the place where it will meet (including to conduct scheduled hearings), which allows the conclusion that this power also includes authority to decide on whether a hearing should be conducted remotely.

This does not mean however that arbitral tribunals should have 'carte blanche' when it comes to determining the holding of remote hearings, especially when such a decision is opposed by one of the parties.

It is generally true that arbitral tribunals based around the world have broad powers to determine the appropriate procedure in an arbitration and that no reason emerges for this power not to include the decision on whether to hold a remote hearing. But this power comes with responsibility and the arbitral tribunal, when taking such a decision, must weigh carefully all the circumstances of the case, namely the parties' right to be heard and to be treated fairly and equally (without falling into any due

28 In a pre-pandemic scenario, Ana Serra e Moura, in 'Chapter 7: The Conduct of Arbitral Proceedings' in Fonseca et al. (eds) *International Arbitration in Portugal* (2020), 97 (112), stated that 'The arbitral tribunal has full discretion to organize one or more hearings (...) take into account the costs that a hearing with parties from different nationalities may have. In such cases, electronic means may be an appropriate remedy to keep costs under control while still serving the purpose of assisting the arbitral tribunal and the parties'.

process paranoia)²⁹, so to avoid the award being challenged as a result of the remote hearing.

In any case, the focus of the arbitral tribunal (and of a national court if confronted with the same issue in recognition and enforcement proceedings) should not be on the format in which the hearing takes place (remotely or physically) but rather on whether the guarantees of due process have been properly respected.

III. Challenges and Practical Tips for holding Remote Hearings

We shall now focus on the practical aspects of conducting a remote hearing, from the perspective of the arbitral tribunal and legal teams, as remote hearings should not just duplicate an in-person hearing. This offers an excellent opportunity for arbitration practitioners to reconsider what procedures may best meet the specific needs of a case, as one size does not fit all³⁰.

In terms of challenges and fears that remote hearings bring³¹, the fact that arbitrators might not be able to sit ‘together’ in the same location due to social distancing rules or precautions immediately raises the question on how the arbitration will be conducted and how deliberations between the arbitral tribunal will take place.

In such a scenario, this obstacle may be overcome if the arbitrators schedule regular breaks with a secure audio/video line to be able to internally discuss issues in a timely manner and use real-time messaging (e.g. WhatsApp) to allow immediate comments and deliberations on pressing issues.

Another concern that arises in international arbitration with participants located in different points of the globe is that different time-zones may pose difficulties for the hearing schedule or the scheduling may prove

29 Regarding ‘due process paranoia’ and the over cautious behaviour of some arbitrators, see Monteiro et al., *Manual de Arbitragem*, (2019), 288-299.

30 Practical tips for holding effective remote hearings were widely discussed in the China Arbitration Summit 2020 and can be viewed at <https://icsid.worldbank.org/resources/multimedia/china-arbitration-summit-2020-practical-tips-holding-effective-remote-hearings>.

31 Wahab, *Exculpating the Fear to Virtually Hear: A Proposed Pathway to Virtual Hearing Considerations in International Arbitrations*, 2020, available at https://delosdr.org/wp-content/uploads/2020/10/Abdel-Wahab_Exculpating-the-Fear-to-Virtually-Hear_August-2020_NYSBA_NYDRL.pdf.

more more awkward for one party depending on the location of majority of participants. Also, there may be a tendency for arbitrators to schedule the hearing to suit their own time zone, which may prove complicated for some of the attendees.

There is no easy solution for this problem, but it may be mitigated if the arbitral tribunal carefully considers the physical location of all participants and schedules shorter hearings with starting/finishing times designed to accommodate the time zone of the witness or expert, with minimum inconvenience to the other participants even if this means holding hearings at 'unusual' times. It is also advisable for the arbitral tribunal to schedule short breaks more frequently to allow participants to re-focus and address any technological issues that will certainly arise during the remote hearing.

Another common concern about holding a remote hearing is that witnesses and experts might have someone prompting them while they testify.

This fear may be overcome if witnesses and experts are able to leave home and testify from a neutral location with a good IT system (e.g. a law firm or an arbitration centre). If this is not an option, the arbitral tribunal should ask the witness/expert to solemnly declare that there is no one else in the room, which can also be verified by using a 360-degree camera or by asking the witness/expert to show the room before starting. Another solution is to establish that the door to the room must be visible during the whole testimony. Alternatively, whenever possible, the arbitral tribunal may allow for the parties' representatives to be present in the room while the witness/expert testifies.

There is also some concern that the arbitral tribunal might subconsciously take into account the shortcomings of a remote hearing when evaluating witness or expert testimony, which may compromise the arbitral tribunal's ability to assess the evidence. For instance, witnesses may be more or less accustomed to using online platforms and might not look directly at a questioner through the computer camera or display a degree of discomfort during the testimony, inadvertently compromising their credibility in the eyes of the tribunal. Also, in a remote hearing, arbitrators may not have the same ability to observe the body language of the witnesses or experts during the testimony as during in-person hearings. Parties may then be concerned that this jeopardises the presentation of witness evidence as the arbitral tribunal may tend to give precedence to documentary evidence.

These are of course legitimate concerns but, on reflection, this imbalance may also occur during in-person hearings, as there will always be people who are more convincing than others.

Nevertheless, these challenges of witness testimony by video conference will certainly tend to disappear over time. For the present, they can be mitigated through preparation, as the legal team should get their witnesses and experts as familiarised as possible with what is in store for them at a remote hearing.

Lawyers are also often concerned with the difficulty of raising objections, if necessary, during the remote hearing. This may be easily overcome if at the beginning of the remote hearing the arbitral tribunal and the parties establish a protocol on how to make objections. This can be as simple as unmuting and turning video on or using the 'raise hand' function that appears in most available platforms. The arbitral tribunal should also be able to mute the witness once an objection is raised.

Another huge concern that the holding of a remote hearings often raises among practitioners is that of the security and privacy of the platform to be used.

In terms of cybersecurity, the main concern is how to ensure that unauthorized third parties cannot gain access to the remote hearing.

In terms of data privacy or confidentiality, the main fear is whether the remote hearing platform provider or any other third party involved, who stores, transmits or otherwise has access to the arbitration data during the remote hearing, might (mis)use the data outside the arbitral proceedings.

Due to the importance of confidentiality and security to arbitration users, who seek primarily to protect their trade secrets and confidential information while having their disputes resolved in an expeditious and cost-effective manner, these issues will be further discussed below. In any case, these fears and concerns may be mitigated by using a platform that offers end-to-end encryption and password protection, ensuring all video conferencing is protected by passwords and establishing access restrictions.

Another challenge that may arise with the widespread use of online arbitrations and remote hearings is related to the uneven access to technology enjoyed by participants in an arbitration.

For instance, witnesses located in some parts of the world may not have access to the same technological equipment or high-speed internet as others. There is no easy solution to this problem, but it may be anticipated during the preparation of the remote hearing and the arbitral tribunal may offer an alternative venue for the witnesses to testify.

Also, issues related to translations and interpreters may present additional challenges when working in an online environment, as reliable connectivity and transmission speed will be critical for the interpreter translating the testimony. During in-person hearings, there is always a risk that an interpreter may unconsciously (or not) impose his own interpretation

of ambiguous language or mistranslate testimony. In remote hearings, this risk is significantly higher where simultaneous (rather than consecutive) translation may be employed. To mitigate the risk, the opposing party may have a ‘check’ interpreter attending the remote hearing, who can raise objections as to the accuracy of the translation if needed.

As shown, most of the challenges and fears concerning remote hearings can be easily overcome and do not present a serious obstacle to arbitral tribunals holding remote hearings³² as ultimately this format will not prevent a just and fair hearing from taking place.

Nonetheless, the importance of carefully preparing the hearing has never been greater than with remote hearings.

The arbitral tribunal bears the responsibility of managing hearings efficiently, balancing the conflicting interests of efficiency and due process.

Case management decisions that expressly address these issues have proven to be crucial in the current context, especially as regards the holding of remote hearings, as they may provide grounds for challenging enforcement of an award resulting from a remote hearing.

It is therefore advisable that the arbitral tribunal should establish a comprehensive protocol on the holding of the remote hearings, preferably agreed with the parties, to ensure the hearing runs smoothly.

In procedural orders, the arbitral tribunal should seek to obtain the express agreement of the parties to the holding of a remote hearing. If it is not possible to obtain such agreement, it would be wise for arbitrators to issue a well-reasoned order as to why the arbitration is proceeding with a remote hearing, including, whenever possible, an explicit waiver of any challenge to the award based on the hearing being conducted remotely.

The arbitral tribunal should also consider establishing a cyber-security protocol that addresses the protection of the hearing room, the host level of control of the hearing, the video and audio directives and the sharing of document bundles.

As explained below, it is advisable for the hearing room to be password protected and for the parties to disclose in advance a participant list, to be shared with the arbitral tribunal and opposing party. Other security features such as two-factor authentication, video/audio recording and separate

32 The challenges of virtual hearings were amply discussed at the 32nd Annual ITA Workshop and Annual Meeting, which can be consulted at <https://itainreview.org/articles/2021/vol3/issue1/online-arbitration-hearing-ethical-challenges-and-opportunities.html>.

passwords for virtual break-out rooms are a good option for ensuring the privacy and security of the proceedings.

It has also proven helpful to arbitral tribunals to establish in advance of the remote hearing whether the host will be the institution, a tribunal secretary, the chair, IT staff, or a combination of these.

In any case, a significant body of soft law³³ is available on the subject and can be a precious aid to arbitrators and lawyers participating in remote hearings.

In conclusion, we have lived through almost two years of the pandemic and initial fears about holding remote hearings have faded away, as online communication has become almost commonplace in everyone's life and not only in the context of arbitration.

The question is whether remote hearings will remain an important part of the arbitration scene when in-person hearings become a viable option again.

The author of this article is confident that online hearings are here to stay.

As mentioned, many institutions including the ICC, the LCIA and ICSID have issued guidance on the subject, which suggests that over recent months many arbitral tribunals have adopted protocols to replace in-person hearings with remote hearings.

Equally, the flexibility of arbitration procedure will allow parties to agree on a hybrid approach, which will probably be the future, allowing arbitrators and parties to agree on a hybrid model that proves to be efficient and guarantees procedural fairness and the integrity of the hearing process itself.

Ultimately, the future of online hearings will depend on the experience of arbitration users and the skill of arbitral institutions and arbitrators in ensuring that the proceedings run smoothly and that parties are given adequate opportunity to present their case.

33 For a comprehensive list, see <https://delosdr.org/resources-on-virtual-hearings/>.

C. Confidentiality and Privacy

I. General Overview

‘Confidentiality’ and ‘privacy’ are terms often used interchangeably in the arbitration world, when in fact these two concepts are different and are worth distinguishing.

‘Privacy’ in arbitral proceedings usually refers to the idea that, unlike in state court proceedings, no third party can enter the arbitration proceedings or witness them, as these proceedings take place in a private set-up behind closed doors. In other words, privacy only means that arbitration proceedings cannot be attended by a third party who is not a party to the dispute, an exception being made for counsel, witnesses and arbitrators.

‘Confidentiality’ on the other hand means that the content of the arbitration proceedings, including the award, are to be kept confidential and in principle may not be published or disclosed by any party.

In any case, confidentiality in its broadest sense, including the privacy aspect, is widely³⁴ considered as one of the key reasons why parties choose to go for arbitration instead of settling their disputes in state courts. Parties wish to protect the sensitive information which may constitute the subject matter or be revealed during arbitration proceedings (e.g. trade secrets, commercial know-how, intellectual property), as arbitration is seen as an intrinsically private dispute settlement mechanism. This flows from the traditional understanding of the arbitration agreement as a private contractual arrangement.

34 See Poudret and Besson, *Comparative Law of International Arbitration* (2007), 315-321. The authors stated that ‘[S]ometimes praised as one of the principal advantages of arbitration, the question of confidentiality has aroused the interests of authors and given rise to numerous discussions. It has led to an abundance of case law and caused great debate in connection with two famous cases in Australia and Sweden. The difficulty of the subject is due to the fact that there is no uniform conception of confidentiality in arbitration. The notion varies with the situations and functions which it is supposed to cover and does not even apply equally to all participants in arbitral proceedings. In addition, the laws governing arbitration considered here do not explicitly deal with confidentiality, and this contributes to the uncertainty surrounding the subject. Doubts persist even in institutional arbitration. While certain sets of rules contain provisions concerning one or more aspects of confidentiality in arbitration, those containing generic principles governing the question are rarer.’ (315-316). See also Born, *International Commercial Arbitration* (2014), 2249-2287.

It used therefore to be the case that arbitration proceedings were typically only known to the participants and a few other participants and awards were seldom published.

If this assumption was true 25 years ago, in the pre-internet age, the paradigm has gradually shifted with the emergence of a tension between the transparency demanded by the public interest, especially as regards arbitration involving state entities, and the confidentiality of the proceedings.

Calls for increased transparency in arbitration proceedings have gradually eroded the importance of confidentiality and privacy in arbitration.

Also, arbitral institutions now commonly publish awards (with or without redactions to conceal the identity of the parties involved) and there are several databases available for this purpose.

Interest in arbitration – or at least in certain high-profile cases – has been increasing over the years.

With the pandemic, the use of online arbitration platforms – with large-scale transfers of documents and the holding of remote hearings – has grown exponentially. The vast number of arbitrators, parties, lawyers and witnesses working online and attending remote hearings from their home/business networks, which may offer little protection against intrusion by, has also exponentially increased the risk of a cyberattack.

Consequently, the issue of confidentiality and privacy of the arbitration has become more difficult to manage with the increased use of all this technology.

Additionally, the complexity of the arbitration proceedings has escalated over the last decade or so, due to the involvement of multiple actors (witnesses, translators, officials of the arbitral institution, etc.) in the arbitration proceedings, who have access to confidential information but who are not subject to any confidentiality agreement resulting from the applicable arbitral rules. This poses several additional challenges as to how the confidentiality of the arbitration proceedings can be safeguarded.

In this context, several commentators³⁵ have already asked the difficult question of whether confidentiality is still possible in modern arbitration,

35 Cremades and Cortés 'The Principle of Confidentiality in Arbitration: A Necessary Crisis' (2013) 23-3 *Journal of Arbitration Studies*, 25, available online at <https://www.koreascience.or.kr/article/JAKO201330951777494.pdf>. See also Paulsson and Rawding, 'The Trouble with Confidentiality' (1995) 11 *ARB. INT'L* 303 (312). Singer 'Arbitration Privacy and Confidentiality In the Age of (Coronavirus) Technology' (2020) 38-7 *Alternatives to the High Cost of Litigation* 107, available online at <https://doi.org/10.1002/alt.21849>

and if so, what can parties actually do to ensure the confidentiality of their arbitration proceedings.

II. Legal Basis for the Confidentiality of the Arbitration

Before moving on to analysis of the specific issues that have arisen from the increased use of online platforms and remote hearings in arbitrations with the pandemic and exploring what can the parties do to (try to) keep their arbitration private and confidential, is necessary to establish the legal basis for the confidentiality of the arbitration.

The UNCITRAL Model Law is silent on confidentiality.

In the absence of any international rules requiring the confidentiality of arbitral proceedings, opinions have diverged on the issue of whether or not arbitral proceedings are confidential *per se*.

Some jurisdictions³⁶ have rejected the idea of an implied duty of confidentiality in arbitration and state courts have held that there cannot be a presumption of confidentiality in arbitration.

Others³⁷ have recognised the concept of implied confidentiality, as there is no express statutory provision governing confidentiality.

Another solution³⁸ adopted by some countries is to have an express statutory provision stating that there is no duty of confidentiality in arbitration proceedings unless the parties agree otherwise.

Taking a clear stand in keeping with a tradition long established worldwide³⁹, the Portuguese Arbitration Law expressly provides in Article 30 para. 5 that arbitral proceedings are confidential, without prejudice to the possibility of final awards and other decisions being published, provided that all details identifying the parties involved are removed.

Under Portuguese law, arbitrators, parties and arbitral institutions therefore have to maintain and preserve confidentiality regarding all information obtained in the arbitration, which also includes documents of which they become aware of during the course of the proceedings. Nonetheless, the Law also states that the parties are entitled to make public the procedural acts necessary for the defence of their rights or to

36 E.g. courts in Australia and the USA.

37 For instance, the UK and France.

38 This is the case of Norway.

39 Caramelo, 'A Condução do Processo Arbitral – Comentários aos arts 30º a 38º da Lei de Arbitragem Voluntária' (2013) 73-II/III ROA, 669 (681 ff.).

comply with the duty to communicate or disclose procedural acts to the competent authorities, as may be imposed by law.

As regards the rules of arbitral institutions on confidentiality and privacy, for example, the UNCITRAL Rules⁴⁰ and the Stockholm Chamber of Commerce (SCC) Rules⁴¹ are modest in their requirements, merely providing for private hearings and confidentiality of awards. The ICC Rules⁴² only provide for the confidentiality of awards, materials and the tribunal's deliberations, if requested by a party. The LCIA⁴³ requires parties to keep the (i) award, (ii) all materials and documents presented and, (iii) the Tribunal's deliberations confidential, providing for a few exceptions to this rule, namely, a court order, parties' consent, public interest and reasonable necessity.

This brief comparative analysis of confidentiality rules around the world clearly shows that the nature of arbitration proceedings and the extent of their confidentiality will depend on the seat of the arbitration and the arbitral rules applicable to the proceedings.

III. Challenges and Practical Tips

As mentioned above, the increased use of online platforms and remote hearings raises a whole new series of issues concerning confidentiality in arbitration.

Some of these issues are part of a wider list of issues concerning confidentiality in modern society that technical solutions have sought

40 Article 6 of the Rules provides that hearings for the presentation of evidence or for oral argument are public, except where there is a need to protect confidential information or the integrity of the arbitral process where the arbitral tribunal shall make arrangements to hold in private that part of the hearing requiring such protection. Article 7 defines confidential and protected information and states that it shall not be available to the public as an exception for transparency.

41 Article 3 provides that unless otherwise agreed by the parties, the SCC, the Arbitral Tribunal and any administrative secretary of the Arbitral Tribunal shall maintain the confidentiality of the arbitration and the award and Article 9 establishes the same for the procedure.

42 Article 22 para. 3. In contrast, the Mediation Rules (Art. 9) state that the proceedings, but not the fact that they are taking place, have taken place or will take place, are private and confidential, unless the parties agree otherwise.

43 Article 30. The Rules also state that the LCIA will not publish any award or any part of an award without the prior written consent of all parties and the Arbitral Tribunal.

to resolve. For instance, in connection with remote hearings, arbitration practitioners and parties often question whether the online platform to be used is secure. Doubts have also arisen about the identity of the person sitting in the room and who else might be watching (or recording) the arbitration proceedings.

Likewise, parties are often troubled by doubts as to whether the witness or the expert is alone or has someone else in the room, who might be giving him instructions.

None of these fears typically arise in physical hearings and can in fact undermine confidence in a just and fair arbitration, leading to potential challenges of the award on grounds relating to the remote hearing.

In conclusion, it is undeniable that issues of confidentiality and privacy have become more difficult to manage in the Covid era.

However, that does not mean that there are no steps to be taken to ensure the confidentiality of the arbitration and to reduce the risks of unexpected publicity of the proceedings.

In general terms, parties are free to decide the degree of confidentiality they wish to confer on their arbitration. To protect their interests, parties can agree on specific confidentiality provisions to be included in the arbitration agreement (e.g. confidentiality requirements for documents and confidentiality obligations of third parties) or, at a later stage, to include such provisions in the applicable arbitration rules.

Since many institutional rules do not establish confidentiality *per se* and, in the absence of a request from a party, the rules leave it to the Arbitral Tribunal's discretion to decide on the confidentiality of the proceedings, if it is important to a party that all documents exchanged remain confidential or that depositions and the award be maintained confidential by all participants, including witnesses, experts and the administrative personnel of the arbitral institution, then it is advisable that the party specifically states this and requests the Arbitral Tribunal to include the confidentiality clause in a procedural order.

In other cases, it might be justified for the parties and the arbitral tribunal to agree a full protocol that guarantees the confidentiality and cybersecurity of the proceedings.

In response to some of the challenges and fears that have arisen with the increased use of remote hearings, a number of practical solutions have been adopted in recent arbitrations with success and are therefore worth reiterating.

As mentioned above when discussing the pros and cons of remote hearings, these practical tips include arbitral tribunals adjusting the oath or declaration made by witnesses and experts to include express confirmation

that they are alone in the room, that they are not recording the deposition and that they will respect the confidentiality of the documents to which they have been given access in the course of the proceedings.

It is also important that the online platform to be used in the remote hearing should enjoy the participants' trust and feature all the necessary technical tools to ensure that video conferencing is protected by passwords and that other restrictions on access to the hearing are put in place.

Remote attendance of the hearing can be ensured with virtual waiting rooms for witnesses and break-out rooms that allow the arbitral tribunal and the legal teams to meet securely.

As regards the documents shared electronically in the arbitration proceedings, it is important to ensure they are handed over through a secure platform that prevents the documents being used other than for the purposes of the proceedings and that digital records of the hearing are destroyed after the end of the proceedings.

Recent experience has also shown that it is easier to keep the proceedings secure and confidential if the participants (arbitrators, lawyers, witnesses, and experts) attend the remote hearing from a business environment rather than from home or a hotel, where the network is more vulnerable to cyberattacks.

Arbitrators should also consider establishing procedural orders to address several practical aspects of the proceedings, especially those related to the confidentiality and security of the remote hearings. These orders can be prepared jointly with the parties, as the process of collaborating on an order governing online proceedings and remote hearings will prompt the parties to consider all the issues at stake, which will certainly help to reduce problems and misunderstandings at a later stage.

D. Security

I. General Overview

As has been discussed over the course of this article, the emergency situation that we continue to experience with the COVID-19 pandemic has forced the world to adapt to a new reality, involving exponential growth in

the use of online communications in the private and public sectors alike, including in the area of justice⁴⁴.

In arbitration, online platforms have been widely adopted for holding meetings, conferences and gatherings and a preference has emerged for the almost exclusive use of remote means for conducting both domestic and international arbitration proceedings, which has raised several new issues related to the cybersecurity of the proceedings.

While until recently arbitration was not on most people's radar as a potential source of cybersecurity risk, experience has shown that some arbitrations are attractive targets for cyberattacks, particularly if hackers can identify a weak link in the chain of custody. Arbitrators and lawyers are not known for having the latest cybersecurity features in the networks they use. Even arbitral institutions have been victims of cyberattacks.

Additionally, security breaches are most prone to occur when multiple parties, arbitrators, counsels, witnesses and experts attend remote hearings from their home networks, where there might be little protection against intrusion by hackers.

In this scenario, hackers can easily crash the proceedings through zoom-bombing or the arbitral institution's website. The electronic hearing bundle can also be hacked which has led several arbitral institutions to issue guidance on how to best address these challenges.

As mentioned above, it has proven helpful for the parties and the arbitral tribunal to agree on a cybersecurity protocol on the outset of the proceedings.

Best practices include party representatives, counsel and arbitrators agreeing on a set of reasonable precautions to be taken in relation to cybersecurity, privacy and data protection at the start of the arbitration and for these to be applicable throughout the proceedings, so as to ensure an appropriate level of security for the case.

II. Potential Threats to Cybersecurity

In 2017, the ICC Commission Report on Information Technology in International Arbitration showed that, despite the potential seriousness of issues of confidentiality and data security in arbitration proceedings, many arbitration users were oblivious of the potential threats to their arbitration

44 C. P. Cunha 'Arbitration in Portugal before and after the COVID-19 pandemic' (2020) 12-12 *Revista Internacional de Arbitragem e Conciliação* 189.

proceedings in these regards or were 'too willing to opt for convenience over security'⁴⁵.

This statement has never been so relevant as it is today in the context of a generalised use of remote hearings.

While arbitration is not regarded by many as a potential source of cybersecurity risk, in reality the arbitration process is an obvious attractive target for cyberattacks⁴⁶, as arbitrations are likely to entail the exchange of information that is not in the public domain. Some of that information may have the potential to cause commercial damage, to influence share prices, to reveal corporate strategies or even government policy.

If one thinks about it, the amount of information transferred electronically, mostly by e-mail, in the context of an arbitration, is the most important factor.

Clients and lawyers and other legal advisers, including experts, normally share information and discuss the strategy for the case, circulating drafts of the submissions, all by email.

Party submissions and various types of evidence (e.g. documents, expert reports and witness statements) are mainly (or even solely) exchanged electronically with the arbitral institutions, arbitrators, the opposing legal team and third-party service providers.

Documents are also usually reviewed and produced by email or over an electronic data hosting platform that is often owned by third-party service provider.

Likewise, the final award will be drafted, discussed and exchanged between the arbitrators and also with the arbitral institution administering the arbitration before being communicated to the parties.

This means that legal advisers, arbitrators, parties to disputes and arbitral institutions are obvious targets for cyber-attacks.

But besides these primary targets, the sophistication of the attacks may also involve secondary participants such as past or prospective arbitrators or third parties holding information on any of the above, including experts, witnesses and platform service providers, since once data has been sent electronically in the context of an arbitration, the sender can no longer monitor or ensure its security and there is a fair chance that some of those participants will have limited cybersecurity protections.

45 ICC, *Commission Report: Information Technology in International Arbitration* 15 (2017), cited in Scherer, 'Remote Hearings in International Arbitration: An Analytical Framework' (2020) 37-4 *Journal of International Arbitration*, 27.

46 As explained in <https://www.herbertsmithfreehills.com/latest-thinking/inside-arbitration-cybersecurity-matters-arbitration-away-from-prying-eyes>.

Regarding the hackers and the question of who might be interested in the data exchanged in an arbitration, there are multiple possible answers depending on the importance and subject matter of a particular arbitration.

Cybercriminals generally perpetrate such attacks for monetary gain, either by withholding information for ransom or stealing information and selling it on to interested third parties.

As said, the risk of having a cyberattack increases where parties, counsels and arbitral tribunals are working from home on unsecured networks or are using technologies that are unfamiliar to them, facilitating the attack.

It has also been reported⁴⁷ that cybersecurity risks have increased immensely in the current context 'as hackers use COVID-19 as "bait" to launch cyber-attacks on new and vulnerable remote working infrastructure and hijack video conference calls'.

To combat these risks, the arbitral community has published several soft law instruments providing guidance on how to protect data and ensure proceedings are cybersecure, and these have proved very helpful to arbitral tribunals, parties and parties' representatives navigating for the first time through the waters of online arbitration and remote hearings.

III. Practical Tips

Important guidance on data protection and cybersecurity has been published in the past year.

The prime examples are the ICC's Note on Information Technology in International Arbitration⁴⁸, the International Bar Association's Presidential Task Force's Guidelines on Cyber Security⁴⁹ and the ICCA-NYC Bar-CPR Protocol on Cybersecurity in International Arbitration (2020)⁵⁰.

47 <https://www.ashurst.com/en/news-and-insights/legal-updates/arbitration-and-covid-19---cybersecurity-and-data-protection/>.

48 <https://iccwbo.org/publication/information-technology-international-arbitration-report-icc-commission-arbitration-adr/>.

49 <https://www.ibanet.org/MediaHandler?id=2F9FA5D6-6E9D-413C-AF80-681BAFD300B0>.

50 <https://www.arbitration-icca.org/icca-reports-no-6-icca-nyc-bar-cpr-protocol-cybersecurity-international-arbitration>.

Some arbitral institutions⁵¹ have also updated their procedural rules to include tougher provisions on cybersecurity and data protection and have introduced more secure digital platforms for managing case materials.

Online platforms have taken practical steps to apply and incorporate some of the distinctive features proposed by various cybersecurity instruments, including the 2020 Protocol and International Standards (ISO).

The features that have been identified⁵² as improving the security of online platforms and that may best gain the trust of arbitration users moving online are:

- Multi-factor authentication or two-step verification, which limits the potential for data exposure as it provides for an additional layer of security, so that only authorised individuals may access sensitive information. Other features, such as default passwords, pre-entry waiting rooms and enhanced encryption, also help to repel cyber-attacks;
- Encryption of data, which protects information by using extremely complex and unique codes that mix up data and prevent unauthorised users from deciphering sensitive information, and requires routine audits during which the platform is tested to detect potential security vulnerabilities;
- Collection and storage of information data using a platform that allows secure exchange of information, which is initially stored securely and then, after the conclusion of arbitral proceedings, destroyed in compliance of applicable privacy rules.
- Managing breach incidents, as platforms should be able to act promptly to mitigate a data breach and recover lost or stolen information, which can be achieved through routine platform audits to perform a studied plan of actions in order to respond to an incident.

Arbitration practitioners and users should also bear in mind that a security breach in arbitration proceedings, especially when participants have not taken all the necessary precautions, may amount to violation of the confidentiality of the proceedings.

This type of vulnerability may undermine the integrity and viability of continued efforts to move international arbitration online, in line with the progress made in recent years.

51 This is the case of the ICC, the Hong Kong International Arbitration Centre (HKIAC) and the Arbitration Institute of the Stockholm Chamber of Commerce (SCC).

52 A more exhaustive list can be found at <https://www.ashurst.com/en/news-and-insights/legal-updates/arbitration-and-covid-19--cybersecurity-and-data-protection/>.

It is the responsibility of stakeholders in arbitration, in particular arbitral institutions and arbitration practitioners, to acknowledge this threat and work together to ensure proceedings are as secure as possible.

E. Final Remarks

As we have seen, international arbitration has been moving online for some time and the impact of COVID-19 has significantly accelerated this transition. As is often said, necessity is the mother of invention.

For the past 20 years, most stakeholders in arbitration have been communicating exclusively online, submitting and exchanging documents electronically, namely by e-mail, storing documents on virtual platforms, conducting hearings via telephone or videoconference and, since the start of the pandemic, conducting full hearings remotely.

As demonstrated over the course of this Article, remote hearings are not a passing trend belonging only to the very recent past. On the contrary, their use has been gaining ground in international arbitration for some years and the pandemic situation offered the right conditions to accelerate their adoption by arbitration practitioners.

Since 2020, arbitral institutions and other arbitral bodies have issued new rules addressing these issues that have helped to consolidate this new reality.

Guidance and plentiful resources are now available online on how to conduct a remote hearing.

While it is true that this new reality entails several new dangers and challenges, identified over the course of this Article, the advantages of holding remote hearings in most cases will outweigh those dangers and challenges, while respecting the principles of equal and fair treatment of the parties and of the celerity and efficiency of the arbitration.

Arbitration, as a characteristically flexible method for dispute resolution, will tend to incorporate the use of remote hearings, creating a hybrid model that combines virtual and in-presence hearings.

Going forward, issues surrounding party agreement and digital equality in relation to remote hearings will need further consideration by the arbitration community to ensure that no fundamental principles are breached with the increased use of modern technology.

Bibliography

- Jalal El Ahdab, Pablo Berenguer, Michael Chik, Jonathan Choo, Jiri Jaeger, Nicholas Peacock, Lucas Pitts and Gavin Zuo, 'Approaches to Evidence across Legal Cultures' in Amy Kläsener, Martin Magál and Joseph Neuhaus (eds), *The Guide to Evidence in International Arbitration*, (GAR, London, 2021).
- Nigel Blackaby, Constantine Partasides, Alan Redfern and Martin Hunter, *Redfern and Hunter on International Arbitration* (5th edn, Oxford University Press, Oxford 2015).
- Gary Born, *International Commercial Arbitration* (2nd edn, Kluwer Law International, The Hague, 2014)
- Gary Born, Anneliese Day and Hafez Virjee, 'Empirical Study of Experiences with Remote Hearings', in Maxi Scherer, Niuscha Bassiri and Mohamed Wahab (eds) *International Arbitration and the COVID-19 Revolution* (Kluwer Law International, The Hague, 2020), 2.
- Sampaio Caramelo, 'A Condução do Processo Arbitral – Comentários aos arts 30º a 38º da Lei de Arbitragem Voluntária' (2013) 73-II/III ROA, 669.
- António Menezes Cordeiro, *Tratado da Arbitragem – Comentário à Lei 63/2011*, de 14 de Dezembro (Almedina, Coimbra, 2015).
- Bernardo Cremades and Rodrigo Cortés 'The Principle of Confidentiality in Arbitration: A Necessary Crisis' (2013) 23-3 *Journal of Arbitration Studies*, 25.
- Carolina Pitta e Cunha 'Arbitration in Portugal before and after the COVID-19 pandemic' (2020) 12-12 *Revista Internacional de Arbitragem e Conciliação*, 189.
- Maria Hoyos and Carolina Sampaio, *Does a right to a physical hearing exist in international arbitration?*, ICCA Projects: 2-6, available at https://cdn.arbitration-icca.org/s3fs-public/document/media_document/Portugal-Right-To-A-Physical-Hearing-Report.pdf.
- Paul Fridland and Stavros Brekoulakis, *2018 International Arbitration Survey: The Evolution of International Arbitration* (Queen Mary University of London and School of International Arbitration), available at [https://arbitration.qmul.ac.uk/media/arbitration/docs/2018-International-Arbitration-Survey---The-Evolution-of-International-Arbitration-\(2\).PDF](https://arbitration.qmul.ac.uk/media/arbitration/docs/2018-International-Arbitration-Survey---The-Evolution-of-International-Arbitration-(2).PDF).
- Howard Holtzmann and Joseph Neuhaus, *A Guide to the UNCITRAL Model Law on International Commercial Arbitration* (Legislative History and Commentary) (Kluwer Law, The Hague, 1989).
- Sofia Ribeiro Mendes 'Chapter 9: Evidence' in André Pereira da Fonseca, Dário Moura Vicente, Mariana França Gouveia, Alexandra Nascimento Correia and Filipe Vaz Pinto (eds) *International Arbitration in Portugal* (Wolters Kluwer, The Hague, 2020), 97131.
- António Pedro Pinto Monteiro, Artur da Silva and Daniela Mirante, *Manual de Arbitragem*, (Almedina, Coimbra, 2019).

- Ana Serra e Moura, in 'Chapter 7: The Conduct of Arbitral Proceedings' in André Pereira da Fonseca, Dário Moura Vicente, Mariana França Gouveia, Alexandra Nascimento Correia and Filipe Vaz Pinto (eds) *International Arbitration in Portugal* (Wolters Kluwer, The Hague, 2020), 97.
- Elsa Dias Oliveira, *Arbitragem Voluntária: uma Introdução* (Almedina, Coimbra, 2020).
- Michael Ostrove, Kate Vejar, Ben Sanderson and Peter Anagnostou, *Online Arbitration Hearings: A review of key developments in response to COVID-19*, available online at <https://www.dlapiper.com/pt/portugal/insights/publications/2020/09/virtual-hearings-report>.
- Jan Paulsson and Nigel Rawding, 'The Trouble with Confidentiality' (1995) 11 *ARB. INT'L* 303.
- Jean-François Poudret and Sébastien Besson, *Comparative Law of International Arbitration* (2nd Edn, Sweet & Maxwell, London, 2007).
- Maxi Scherer, 'Remote Hearings in International Arbitration: An Analytical Framework' (2020) 37-4 *Journal of International Arbitration*, 2.
- David Singer 'Arbitration Privacy and Confidentiality In the Age of (Coronavirus) Technology' (2020) 38-7 *Alternatives to the High Cost of Litigation* 107.
- Mohamed Wahab, *Exculpating the Fear to Virtually Hear: A Proposed Pathway to Virtual Hearing Considerations in International Arbitrations*, 2020, available at https://delosdr.org/wp-content/uploads/2020/10/Abdel-Wahab_Exculpating-the-Fear-to-Virtually-Hear_August-2020_NYSBA_NYDRL.pdf.