The Impact of COVID-19 on International Dispute Resolution

Discussion Paper

Overall Introduction

History has taught us that crises, such as a pandemic, are often an engine of innovation. A paper by researchers at the International Monetary Fund found that "*pandemic events accelerate robot adoption, especially when the health impact is severe and is associated with a significant economic downturn*".[1] Johannes Gutenberg's labour-saving printing press is, for instance, believed to be linked to the Black Death.[2]

In our own time, COVID-19 has forced us to find new ways to complete old tasks, so as to cope with, and limit, the spread of the disease. International dispute resolution has not been immune from this force for adaptation and change. In particular, the suspension of international travel and ordinary social interaction meant that the conventional way of resolving international disputes, wherein a group of people is convened in one physical venue, had to change.

And change it did. Amongst other developments, the wide adoption of remote technology to conduct hearings is testament to that. As we begin to see the light at the end of the COVID-19 tunnel, it is timely to ask ourselves whether we should go back to old practises (such as in-person hearings) when the pandemic blows over. Furthermore, since the pandemic has shown us that traditional dispute resolution processes are mutable (in quite a short span of time), it is worth reflecting whether they should be re-invented altogether.

This paper divides into two parts. It was written with international commercial arbitration at the forefront of our minds, although most of the points may have application beyond this context. Part I argues that the benefits of using technology to improve current arbitral procedures outweigh its costs. Part II argues that technology has the further potential of transforming the process of arbitration. Specifically, the idea of fully asynchronous arbitration would be explored, and commended as a direction of future reforms.

[1] Tahsin S. Sedik and Jiae Yoo, "Pandemics and Automation: Will the Lost Jobs Come Back?" (International Monetary Fund Working Paper No 2021/011).
[2] "What history tells you about post-pandemic booms" (The Economist; 25 April 2021).

Part I: COVID-19, Technology and Arbitral Procedure

1. Introduction

There is little doubt that COVID-19 has normalised the incorporation of technology in international dispute resolution. Notably, the pandemic has enlivened debate about the effect of technology on arbitral procedure and it has become apparent that technology can supplement and enhance existing procedural innovations in many respects.

This part of the paper will first examine procedural innovations which can be implemented to maximise efficiency in arbitration irrespective of the use of technology. It will then consider the effect of technology on these procedural innovations, both positive and negative. It will be concluded that, overall, the adoption of technology adds value and reduces inefficiencies in arbitral procedure, which benefits outweigh its costs.

2. Innovations in arbitral procedure

This section explores three areas of procedural innovation which optimise the arbitral process even without the use of technology. They are:- (1) case management conferences ("**CMCs**"), (2) document production, and (3) expert evidence.

2.1 CMCs

CMCs are an important tool for the tribunal to proactively manage a case as it progresses. When used effectively, CMCs can reduce large inefficiencies in both the procedure and the substance of the arbitration. Specifically, CMCs allow the tribunal to have active oversight of the procedure and progression of the arbitration. This is critical to maximising efficiency, because, rather than addressing them in the evidentiary hearing (ie the hearing where evidence is taken), the tribunal can deal with problems as soon as they are spotted.

In general, there are various types of CMC which are held at various stages of an arbitral life cycle.

First CMCs

A "first CMC" is held immediately after the tribunal is formed. It is a fundamental step for setting a broad procedural framework between the

parties and the tribunal at the very beginning of an arbitration. The first CMC invariably culminates in a procedural document known as "Procedural Order No 1" ("**PO1**"), which sets out the foundational procedural features of a case.

It is customary and advisable for a first CMC to organise the following procedural steps:-

- Scheduling of the main evidentiary hearing;
- Scheduling of the procedural timetable;
- Identification of party representatives;
- Identification of the method and format of communication; and
- Formalising of the process of exchange of case by parties.

At the risk of stating the obvious, not all procedural matters can, or should, be settled at a first CMC. For one thing, the course of the arbitration may change. It is thus important to be flexible and to keep the procedure evolving as the case itself does. For another, there are procedural issues that are best left until later in the arbitration, including document disclosure, expert evidence, and matters related to the evidentiary hearing (such as the calling of witnesses). These procedures should only be outlined at the first CMC, for they can only be properly designed once more detailed understandings and knowledge of the case emerge.

Subject to this *caveat*, the efficiency benefits of a first CMC are obvious. By setting various "milestone dates" of the arbitral process at the outset, it creates expectation amongst the parties to complete the specified procedural steps by those dates. This pressure on the parties ultimately promotes compliance, so that the arbitration can progress smoothly. Moreover, by settling the basic features of the arbitral process (such as the acceptable mode of communication), it prevents disputes about them from arising. Given these benefits, it is unsurprising that leading arbitral institutions have embraced the idea of first CMCs and PO1 in their rules.[3]

CMCs on issues

A CMC on issues allows the tribunal to discuss with the parties its understanding of the parties' cases. Accordingly, it is best convened after the first exchange of cases. A CMC on issues plays a critical role in streamlining the

[3] See, eg, London Court of International Arbitration Rules of Arbitration 2021, Article 14.1 (supplemented by its Notes for Arbitrators); International Chambers of Commerce Rules of Arbitration (2021), Article 24 (supplemented by its Commission Report on Techniques for Controlling Time and Costs in Arbitration).

arbitral process. It assists both the parties and the tribunal in mutually understanding the key issues in the parties' cases, and, when the parties are preparing subsequent submissions, channels their time and energy to those issues that are relevant and necessary for resolving the dispute.

Furthermore, a CMC on issues, when coupled with "episodic hearings", may markedly streamline the arbitral process. As explained in the Background Paper for this topic, once a dispositive issue is identified, the tribunal may hold an evidentiary hearing for that issue only. Depending on how it is resolved, it is possible for the rest of the issues to fall away completely. The potential savings on costs and time can be enormous. A CMC on issues facilitates the organisation of episodic hearings by shedding light on these critical issues.

Experts CMC

The process of adducing expert evidence, if uncontrolled by the tribunal, can massively drive up the costs and length of an arbitration. Specifically, without the tribunal's directions, irrelevant, duplicative or otherwise unhelpful evidence could be prepared, at the expense of the economy of the process. An experts CMC allows the tribunal to maintain active oversight and management by directing the parties and the experts properly. The subjects-matter of these directions are elaborated in Section 2.3 below.

Pre-hearing CMC

It is common practice for parties to attend a pre-hearing CMC before the main evidentiary hearing. The purpose is to settle the details of hearing procedures. A pre-hearing CMC should take place sufficiently in advance of the evidentiary hearing to allow for the adequate management of procedural issues. As alluded to above, many of these issues cannot be dealt with at the first CMC, as the shape of the arbitration would still be obscure at the time, and there are variables which can only be settled when the hearing date draws closer.

Common issues addressed in the pre-hearing CMC include the following:-

- Identification of the live issues that fall to be determined;
- Venue and hearing facilities, or virtual hearing platform and technological logistics;
- Transcription;
- Hearing timetable (including the time allocation between parties);
- Witnesses to be called for cross-examination;

- Interpretation;
- Electronic and hard copy format of hearing bundles; and
- Necessity of written closing submissions.

2.2 Document production

In complex commercial arbitrations, document production is often extensive. It is therefore essential that the tribunal remains actively involved so as to guide the procedure and to ensure what is produced is relevant and efficient.

To organise information related to document production, it is customary for arbitral parties to prepare a so-called "Redfern schedule" to record the exchange of document requests, party submissions, objections and responses, and (once made) tribunal decisions on each document or each category of documents.

In the absence of sufficient prior communications amongst the parties and the tribunal, the use of Redfern schedules can be challenging. That is because, in the face of a contested document request in a Redfern schedule, the tribunal may find it difficult to resolve the contest without the parties' assistance on their understandings of the dispute. For example, where a document request is opposed on the ground of irrelevance, it is often hard for the tribunal to decide if the document in question is relevant without a proper context of the dispute.

To address this situation, one procedural innovation is to settle document production and disclosure issues by way of a short procedural hearing or teleconference, called in a timely fashion ahead of the document production stage. By this process, the tribunal and the parties can work out, by reference to the nature of the dispute, what evidence is needed on which issues and why. Thus, when presented with a contested document request in a Redfern schedule, the tribunal is better placed to resolve the dispute on paper (without further need to convene the parties). The whole document production procedure is thereby streamlined.

2.3 Expert evidence

The efficient management of the expert evidence procedure requires proactive attention by the tribunal at every stage of the arbitral process. Critically, the procedure should limit the extraneous variables between the experts, namely (1) the issues on which to opine, (2) the materials to be relied

upon, and (3) the methodology to be used (to the extent possible). The best practice procedure includes:-

- Identifying disciplines in need of expert evidence and proposing experts;
- Establishing within each discipline a common list of questions;
- Deferring the production of all expert reports until all factual evidence (documentary and witness) is available so that the experts can opine on the basis of a common set of facts;
- Requiring the experts within each discipline to produce a joint expert report identifying areas of agreement and disagreement, before they produce individual expert reports on the areas of disagreement only; and
- Requiring the experts to produce reply expert opinions by using the methodology or factual assumptions adopted by their counter-experts. This step would reveal what any difference in expert opinion can be attributed to, be it the use of a different method, factual assumption or interpretation of witness testimony. It would also allow the tribunal to link any difference in opinion to the use of a particular method or fact, facilitating the tribunal's understanding of what the expert opinion would be if it ultimately accepts one method or set of facts.

This procedure requires active communication by the tribunal, whether by way of experts CMCs or teleconferences. The rewards in efficiency of time and cost are significant.

3. Positive impacts of technology

The naturalised use of technology has resulted in a new approach to case management. Because tribunal engagement before the evidentiary hearing becomes far easier with the aid of remote technology, the innovations in arbitral procedure outlined above require less effort to implement and are therefore more accessible to a tribunal. Accordingly, the tribunal is able to actively engage with the case well in advance of the evidentiary hearing, even if the case involves international parties scattered across various time zones.

For example, instead of leaving procedural issues for the main evidentiary hearing, parties and tribunals are better equipped to resolve these preliminary issues in a timely manner due to the convenience of remote CMCs (as further discussed below). As a consequence, preliminary issues are able to be resolved much more efficiently. Furthermore, the incentive and ability to address these issues as and when they arise means that the rest of the arbitration is reserved for the key substantive issues in

dispute between the parties. Consequently, the remainder of the arbitration is streamlined and free from distractions arising from interlocutory procedural issues.

This is possible only because of the maturity of remote technology at present. In the past, remote technology was not sophisticated enough for a virtual hearing to be viable. The streams were often choppy, the interface unsuitable for even a short videoconference, let alone a legal hearing with a sizeable group of attendees, and the overall experience user-unfriendly. Thanks in no small part to COVID-19, this has now all changed. It is beyond doubt that the digital environment created by such applications as Zoom is sufficiently stable and serviceable for a virtual hearing to be conducted in places with a sufficient bandwidth.

Once the virtual format is adopted, the logistics of hearings and CMCs may be easily organised. For starters, there is no longer a need to travel to meet in one destination for a CMC or a hearing. This reduces time and cost for the parties. Scheduling has also become much easier, for there is no need for travel time to be taken into account. Participants can thus fit in remote CMCs and procedural hearings into their schedules much more easily than if they are in physical form. Moreover, for these reasons, CMCs and procedural hearings can be called with much shorter notice, enabling urgent issues to be dealt with more swiftly.

A virtual hearing may be further facilitated by other technologies. For instance, electronic document management affords easy access to hundreds of thousands of documents in a remote setting. More specifically, the use of "dropboxes" or shared databases for the purpose of electronic file-sharing enables digital searches and categorisation and thus makes the location of documents easy. The screen-sharing function of video-conferencing platforms also allows participants of a remote CMC or hearing to view the documents under scrutiny conveniently and simultaneously. Another branch of facilitative technology concerns document production. Recent years have seen the development of predictive coding technology to assist in filtering and sorting documents in extensive document production exercises. In some jurisdictions, such technology has been judicially approved.[4] It is anticipated that a wider adoption of technology assisted document review will reduce time and costs (and possibly enhance the accuracy)[5] of such exercises.

4. Limitations of technology

[4] See, for example, *Da Silva Moore v Publicis Groupe & MLS Group* 287 FRD 182 (affirmed in 2012 U.S. Dist. LEXIS 58742) for the US; *Pyrrho Investments v MWB Property* [2016] EWHC 256, and *Brown v BCA Trading Ltd* [2016] EWHC 1464 for the UK; *Irish Bank Resolution Corporation Ltd v Quinn* for Ireland.

[5] Herbert L. Roitblatt, Anne Kershaw & Patrick Oot, "Document Categorization in Legal Electronic Discovery: Computer Classification vs. Manual Review" (2010) 61 J. Am. Soc'y for Info. Sci. & Tech. 70, 79.

At this juncture, it must be acknowledged that special challenges are present when technology is used to handle procedural matters such as the ones stated above.

Particularly acute are cybersecurity and confidentiality breaches. Specifically, because the digital environment is more porous than a brick-and-mortar barrier, files that are shared online may be accessible to hackers, as may private remote meetings. In this regard, organisers of these online endeavours must pay attention to cybersecurity and confidentiality risks, and mitigate them in a reasonable and proportionate manner. A helpful reference is the detailed protocol issued by the International Council for Commercial Arbitration and the New York City Bar Association,[6] which contains both high-level principles and concrete guidelines. It is hoped that, with the assistance of this sort of framework (and ever-improving technology), the risks of cybersecurity and confidentiality breaches is kept at a manageable and tolerable level.

At the same time, it must be acknowledged that there are fewer disadvantages of using remote technology in the context of procedural matters than in evidentiary hearings. The most common objections to the use of such technology concern the ease and effectiveness of witness examination in a remote setting. These objections carry no force when remote technology is used simply to settle procedures.

In any event, even in relation to an evidentiary hearing, the proposition that remote hearings are inferior to in-person hearings must be tested, rather than taken for granted. It is often said that "justice must not only be done, but also be seen to be done". This maxim captures two notions of justice, namely substantive justice and procedural justice. Substantive justice is achieved when the tribunal correctly applies the relevant law to the facts of a given case as correctly found. Procedural justice is more complex, for it has many dimensions. As a general rule, a procedurally just process should ensure that the parties are given an opportunity to state and defend their case (including an opportunity to test the opponent's case), and also that the tribunal is independent and impartial. Against these two criteria, do remote evidentiary hearings fare worse than in-person ones?

In this regard, it may be helpful to distinguish between evidentiary hearings featuring factual witnesses, and those featuring only expert witnesses. It is submitted that, in the context of international arbitration, for both types of hearing, there is little basis to suppose that remote evidentiary hearings would be less effective in achieving substantive and procedural justice than in-person ones.

[6] ICCA-NYC Bar-CPR Protocol on Cybersecurity in International Arbitration (2020 Edition), accessible at https://cdn.arbitration-icca.org/s3fs-public/document/media_document/icca-nyc_bar-cpr_cybersecurity_protocol_for_international_arbitration_-_electronic_version.pdf (accessed 22 June 2021).

For hearings featuring factual witnesses, remote hearings are often criticised for undermining substantive justice, in that an untruthful account by a factual witness is more likely to be accepted than if evidence is taken in-person. The supporting argument often consists of several strands, yet none of them is convincing.

First, it may be thought that a factual witness is more likely to lie in a remote setting. In the context of litigation, the underlying basis may be that the "majesty" of a courtroom setting has a psychological impact on the witness,[7] making them more truthful than they would otherwise be. This plainly has no relevance in relation to arbitration, which, if conducted physically, takes place in a conference room. More fundamentally, the assumption that a determined liar would change their mind due to the room they are in does not appear to have the backing of empirical evidence.

Secondly, it may be thought that a factual witness who does lie is less likely to be caught in a remote hearing. The argument is that the demeanour of a liar is more conspicuous when observed in a physical setting. But experience has shown that demeanour is a treacherous guide to who is telling the truth: the honest witness may be nervous and incoherent, whereas even the most deceptive witness can stare the tribunal in the eye and lie. In any event, at least in the context of commercial disputes, the primary basis of an evidentiary finding is surely contemporaneous documentation and inherent probabilities, rather than witnesses' recollections. As cautioned by Leggatt J (as his Lordship then was), "*the best approach for a judge to adopt in the trial of a commercial case is … to place little if any reliance on witnesses' recollections of what was said in meetings and conversations, and to base factual findings on inferences drawn from the documentary evidence and known or probable facts*".[8] Accordingly, the materiality of an undetected lie should not be overstated.

Thirdly, it is often said that cross-examination is less effective in a remote setting. Yet, experience suggests that this has more to do with a lack of familiarity than any immanent feature of the remote environment. With time, practice and adaptations, cross-examination in a virtual hearing should be as effective as its physical counterpart.[9]

[7] See Andrew Langdon QC, "Inaugural Address" (delivered on 14 December 2016), accessible at https://www.barristermagazine.com/inaugural-address-by-andrew-langdon-qc-chairman-of-the-bar-2017-delivered-in-middle-temple-hall-london-on-14-december-2016/ (accessed 22 June 2021).
[8] Gestmin SGPS SA v Credit Suisse (UK) Limited & Anor [2013] EWHC 3560 (Comm), at [22].
[9] See W Miles, "Remote Advocacy, Witness Preparation & Cross-Examination: Practical Tips & Challenges" , Chapter 6 in "International Arbitration and the COVID-19 Revolution" (Kluwer; 2020).

In the premises, the supposition that a remote evidentiary hearing would be less effective in doing substantive justice than an in-person hearing does not seem to withstand scrutiny.

What about procedural justice? Switching the hearing format from physical to remote certainly does not affect the independence and impartiality of the tribunal, but does it curtail parties' right to be heard? Provided that technological capabilities (such as access to an adequate bandwidth) are not an issue, it is hard to imagine how that could be the case. Our experience in the pandemic has shown that, with some adaptations, virtual advocacy could be just as effective as in-person advocacy. As to the giving of evidence, witnesses could present their narrative, and be cross-examined, remotely, just as they could in a physical setting. For completeness, it is noted that abusive practices undermining the integrity of the process (eg witness coaching) can be easily prevented in a remote environment.

As to hearings featuring only expert witnesses, the supposed superiority of an in-person hearing is even less obvious. In terms of substantive justice, it is not obvious that a physical hearing is more conducive to the correct resolution of expert issues. Surely, we are interested in what an expert has to say, not how they say it. As to procedural justice, the reasons canvassed above apply equally here to demonstrate that it is not compromised in a remote hearing.

5. Conclusion

In a nutshell, it is submitted that the increasing popularity of technology in international arbitration is a positive development which greatly enhances the efficiency of the arbitral process, without compromising the quality of justice it delivers. We should continue to embrace technological developments even after we emerge from the pandemic.

Part II: Fully asynchronous arbitration

1. Introduction

Thus far, we have considered how technology has "automated" international arbitration, but we have yet to consider how it may be "transformed" by technological innovations. The distinction between "automation" and "transformation" was drawn by Professor Richard Susskind, a leading legal futurist and technologist. According to him, automation "*involves grafting new technology onto old working practices*" by way of "*process improvement*", whereas transformation is about *"[displacing] and*

revolutionising] conventional working habits" and "*[blasting] old approaches out of the water*".[10]

The rest of this paper concerns transformation. Building on recent proposals for "partially asynchronous" arbitration, it considers, specifically, whether it is possible (and desirable) to introduce a "fully asynchronous" arbitral process for international disputes. In what follows, the concept of asynchronicity will first be unpacked. The paper will then describe the "generic" and "specialist" fully asynchronous litigation models already in use or proposed for future development. The potential of fully asynchronous arbitration will be examined thereafter. It will be concluded that the benefits of introducing a fully asynchronous process (in terms of both efficiency and access) outweighs its potential disadvantages, making it a viable direction of future reform.

2. The concept of asynchronicity

A process is "asynchronous" if its progression does not require the simultaneous participation of its participants. There is no need for everyone to be available at the same time. In other words, sequential participation forms the conceptual core of an asynchronous process.

A classic example is an email exchange: the sender and the recipient do not have to be simultaneously online for the exchange to move forward. It is "fully asynchronous", because at no point are the sender and the recipient required to be available at the same time. In contrast, traditional evidentiary hearings are "fully synchronous", in that all parties (or their representatives) and the adjudicator(s) are expected to be present at the same time, from beginning (marked by some form of "opening submissions"), through the middle (the taking of evidence), to end (some form of "closing submissions"). Between these two extremes are "partially asynchronous" processes. As the name suggests, these are processes of which part (but not all) are asynchronous.

Strictly speaking, an asynchronous process does not necessarily require the support of modern technology. An exchange of letters is fully asynchronous. However, the following discussion is devoted to technology assisted asynchronous arbitration, as that is where the future lies, and asynchronicity without the aid of technology would be too time-consuming and impractical to merit consideration.

3. Asynchronous arbitration

[10] Richard Susskind, *Online Courts and the Future of Justice* (OUP;2019), p.54.

The idea that some parts of an arbitration may be held asynchronously has generated interests during the COVID-19 pandemic.

One academic who has drawn attention to this possibility is Professor Maxi Scherer.[11] Specifically, she proposed that asynchronous participation could take the form of a video recording of the counsel's opening submissions, which recording would be made available to the tribunal in advance of the evidentiary hearing, with the rest thereof taking place in a synchronous fashion. In her submissions, such a partially asynchronous model could mitigate the organisational problems arising from participants being in different time zones. The downsides, according to Professor Scherer, include the fact that the asynchronous format cannot apply to the taking of evidence, which requires real-time interaction amongst witnesses, counsel, and the tribunal.

What about fully asynchronous arbitration? So far as we are aware, there has been very little (if any) discussion on its potential. This shall be the focus of the remainder of the paper. Before we address that issue specifically, it would be helpful to set the scene by describing some of the models already in use, or under scrutiny, in the context of domestic litigation.

3.1 Existing models – generic and specialist

Broadly speaking, there are two types of fully asynchronous litigation which are in use or being examined for their potential. The first involves the use of generic technology not specifically designed for asynchronous dispute resolution, whereas the second involves the use of specialist online platforms.

Examples of the first model include dispute resolution by email. In Singapore, in response to the disruptions caused by COVID-19, an "asynchronous court dispute resolution hearing by email" was introduced in March 2020.[12] It is a process designed for the Singapore High Court's "case management list" whereby parties and the court would communicate by email on such matters as applications for case management directions, and the court's "early neutral evaluation" of liability and/or quantum in the claim. The process resembles the paper disposal mechanism that is familiar to many jurisdictions. It is fully asynchronous, because none of the parties have to be online at

[11] See Maxi Scherer, Asynchronous Hearings: The Next New Normal?, Kluwer Arbitration Blog, 9/9/2020, http://arbitrationblog.kluwerarbitration.com/2020/09/09/asynchronous-hearings-the-next-new-normal/ (accessed 16/6/2021).

[12] "Asynchronous Court Dispute Resolution Hearings by Email (aCDR) for Case Management Lists at the State Courts Centre for Dispute Resolution (SCCDR)" (Singapore State Courts' Registrar's Circular No 2 of 2020).

the same time for the process to move forward. Moreover, it does not involve the use of any specialist platform; rather, it exemplifies an application of generic technology (namely, email) in the context of dispute resolution.

Contrast that with the second model of fully asynchronous litigation, which employs specialist online platforms for court users. An example is the "asynchronous trial" system in use by the Hangzhou Internet Court of the People's Republic of China. To participate in such a trial, litigants are to log onto an online platform designed and developed specifically for that purpose. The trial proper comprises three stages: (i) questioning and answering, (ii) debating, and (iii) closing statements. All submissions may be in written or audio form. Stage (i) is further divided into two sessions. In the first, questioning session, participants (including the judge) may ask questions as they wish, and parties can choose whether to immediately answer questions directed to them. In the second, answering session, the parties can only give answers to the questions raised. In stage (ii), parties are expected to express their opinions on the answers given. Lastly, in stage (iii), the parties are to close their case. This is a fully asynchronous process, for the parties do not have to be simultaneously online to participate: Party A may leave a question on the platform for Party B to answer without Party B's virtual presence. Likewise, the court can read or re-play the parties' submissions at its leisure. It was designed to be an asynchronous process from start to finish, with no feature of a real-time exchange of arguments or evidence at any stage.

A similar "online court" process has attracted interests in the UK. Sir Ernest Ryder, former Senior President of Tribunals, described the process as "*continuous online hearings*", whereby "*all participants are able to iterate and comment upon the basic case papers online, over a reasonable window of time, so that the issues in dispute can be clarified and explored*" and "*the judge will take an inquisitorial and problem-solving approach, guiding the parties to explain and understand their respective positions*".[13] This idea was picked up later on by Sir Geoffrey Vos, who described in greater detail how it might work. As he imagined it, participants can log onto a platform when they have the time to do so within a time window; make their submissions online; questions can then be asked by the judge online and responded to by the parties online; such an "*iterative online process*" is analogous to texting; and, importantly, judges would have a much greater role to play in controlling the conduct of the case than in a traditional trial, "*asking questions, directing evidence and resolving cases stage by stage*".[14] His

[13] Sir Ernest Ryder, "The Modernisation of Access to Justice in Times of Austerity" (3 March 2016), §§29-30.
[14] Sir Geoffrey Vos, "Debate on how the adoption of new technology can be accelerated to improve the efficiency of the justice system" (20 June 2018), §§16 and 22.

hope was that "*oral evidence at a synchronous hearing could become the exception rather than the rule*".[15]

3.2 Fully asynchronous international arbitration – potential and challenges

To what extent can, and should, fully asynchronous processes (whether generic or specialist) be adopted in international arbitration? It is submitted that such a reform is possible, and that, in light of its benefits and potential, it should be seriously considered as the next revolutionary step.

The "can" question divides into two issues. First, can arbitral parties agree to have their dispute resolved by a fully asynchronous process? This is relatively straightforward. The arbitral process is determined by the parties. If parties agree that a dispute is to be arbitrated entirely by, say, email, that would be decisive. Secondly, do we have the technology for a fully asynchronous arbitration to take place? The answer is obvious for the generic model, for, *ex hypothesi*, participants would be using technology already in use for other purposes. As to the specialist model, although there is yet to be an online platform dedicated to fully asynchronous arbitration, it seems that the foundational technology is already available. This is evidenced by the platform currently deployed by the Hangzhou Internet Court, and also by other existing platforms for domestic litigation, such as Matterhorn (an American online dispute resolution platform allowing litigants to communicate asynchronously with the judge and other stakeholders in the case, currently in use in over 150 courts and 20 states),[16] and the "eCourtroom" used in the Federal Court of Australia for, *inter alia*, handling simple applications.[17] The technologies used to develop these litigation platforms should be capable of use in arbitration, since the core functional requirement (namely, sequential participation amongst the parties and the adjudicator) is the same in both contexts.

The "should" question is more difficult. To properly answer it, it is necessary to weigh the pros and cons of fully asynchronous arbitration for international disputes.

The benefits of fully asynchronous arbitration is obvious. First, by allowing participants to engage the arbitral process sequentially and at their leisure, it saves time, reduces costs, and eliminates the inconvenience arising from time zone differences. Synchronous arbitration requires all participants to be present at the same time. Effectively, it locks up a fixed period of everybody's time, even though the information

[15] Ibid, §22.
[16] See Matterhorn's official website: https://getmatterhorn.com/ (accessed 22 June 2021).
[17] See eCourtroom's official website: https://www.ecourtroom.fedcourt.gov.au/ecourtroom/default.aspx (accessed 22 June 2021).

that is exchanged during the hearing can just as easily be picked up without simultaneous participation. This generates wasted costs, both in terms of time and money. By contrast, fully asynchronous arbitration allows everybody to access the arbitral process as and when they see fit. The potential cutdown on the time and costs of the arbitral process may be huge. In Sir Geoffrey Vos's words, *"[w]e can resolve many cases and some aspects of the more complex cases without paying for partners in law firms, assistant solicitors and barristers all to sit, sometimes for hours or days on end, listening to material they can pick up online in far less time*".[18] Moreover, as with remote hearings, fully asynchronous arbitration obviates international travel, further saving time and costs. Lastly, because fully asynchronous arbitration does away with the need for everyone to be available at the same time for any part of the proceedings, time zone differences would no longer pose a problem.

Secondly and more importantly, because of these efficiency benefits, fully asynchronous arbitration may significantly promote access to arbitration by less economically resourceful entities, such as low-income individuals and small-and-medium-sized enterprises ("**SMEs**"). These are potential users of international arbitration too, as cross-border commercial activities (such as cross-country sales) are no longer confined to the rich. The extent to which a fully asynchronous process may facilitate their access to arbitration can be analysed from a temporal and a material dimension.

Temporally, because parties are relieved of the need to pre-schedule blocks of time to attend hearings, they are more able, and likely, to engage the arbitral process. Time investment is a significant consideration for individuals whose commitments (such as work and caregiving) would be disrupted by the "lock-up" period of legal proceedings. This is illustrated by a 2018 survey conducted in Nigeria, where the respondents cited lack of time as the 4th most common reason for not commencing legal proceedings.[19] This factor disproportionately affects low-income individuals, for, compared to the economically resourceful, they have a much smaller margin to re-arrange their commitments. For instance, they may be unable to afford to lose their job, or to hire someone on the market to care for their significant others. Fully asynchronous arbitration can prove attractive to these individuals, for the time investment required is much lower. By extension, SMEs are more likely to engage arbitration if it is fully asynchronous, because they could allocate much less time resource to the process, reserving it for their business activities.

[18] Sir Geoffrey Vos, "Debate" (*supra*), §16.
[19] HiiL, "Justice Needs and Satisfaction in Nigeria 2018", p.98: accessible at https://www.hiil.org/wp-content/uploads/2018/07/HiiL-Nigeria-JNS-report-web.pdf (accessed 22 June 2021).

Materially, the reduction in costs resulting from fully asynchronous arbitration would remove the financial barrier to arbitration. Rightly or wrongly, arbitration has a reputation of being serviceable only for the rich. In a recent English family decision, it was observed that "*[t]here is a common misconception that the use of arbitration, as an alternative to the court process in financial remedy cases, is the purview only of the rich who seek privacy away from the courts and the eyes of the media*".[20] This perception seems to be amply justified in the world of international arbitration. According to the CIArb Costs of International Arbitration Survey published in 2011, the average costs of international arbitration was around £1.5 million, most of which was lawyers' fees.[21] By reducing lawyers' hours on a case, a fully asynchronous process has the potential of dramatically lowering such costs, making international arbitration more accessible.

Promotion of access to arbitration is promotion of access to justice, and, as such, a deserving and valuable goal. All the more so in the wake of COVID-19, which has generated a big volume of disputes in need of a cost-effective and speedy forum outside of local courts.[22] There is, however, an issue as to who ought to contribute to its achievement. It may well be arguable that private organisations (such as arbitral institutions) do not have a duty to do so. Whatever is the better view for that debate, there are self-serving reasons for arbitral institutions to make arbitration accessible to the less economically resourceful. For one thing, this demographic represents an enormous "latent legal market".[23] For another, providing a cost-effective process would allow arbitration to become a dispute resolution system of choice. As observed by Sir Rupert Jackson, "*[e]very dispute resolution system needs to adapt to the changing needs of society and the rapid advances of technology. That means an almost constant process of procedural reform … Competition between dispute resolution systems or institutions is a driver of improvement*." If the arbitral process is able to harness the efficiency benefits of asynchronicity when other dispute resolution processes fail, it would win that "*competition*". Accordingly, for selfish reasons, arbitral institutions should look into the potential of fully asynchronous arbitration.

So much for the benefits of fully asynchronous arbitration. What of its disadvantages? Morally, it may be said that this process would widen the gap between socio-economic classes, on the basis that fully asynchronous arbitration is essentially "economy class justice" for the economically disadvantaged, all the while the wealthy can afford and choose the traditional synchronous process. Underlying this claim is the assumption

[20] *Haley v Haley* [2020] EWCA Civ 1369; [2021] 2 WLR 357, §5 (King LJ).
[21] CIArb Costs of International Arbitration Survey (2011), p.13.
[22] See *Haley* (*supra*), §5 (King LJ).
[23] Richard Susskind, *The Future of Law: Facing the Challenges of Information Technology* (Clarendon; 1996), p.27.

that a synchronous process is superior to its asynchronous counterpart. But in what ways?

Is it fair to assume that, substantively, fully asynchronous arbitration would undermine the rectitude of decisions? Legally, it is hard to imagine why legal submissions would be more helpful when delivered in real time than when made asynchronously. The greatest value of a synchronous hearing is that the tribunal can raise questions on legal materials which have already been submitted thereto, and that the matter can be clarified then and there. In an asynchronous process, the tribunal can still seek clarifications and assistance from legal representatives, just as it could in a synchronous hearing, albeit with some degrees of delay. Indeed, legal submissions given asynchronously may even be more helpful, because legal representatives would not be pressed to give an immediate response, and would have the time to produce a thoughtful, organised, and coherent answer. Factually, it may be thought that, by ridding the arbitration of an exchange of *viva voce* evidence, it is much harder to assess the credibility of witnesses in a fully asynchronous process. That is because it would be impossible to gauge their real time demeanour, such as their immediate reaction to a question. However, as explained above, the demeanour of witnesses is an unreliable guide of their honesty and, at least in the context of commercial disputes, rarely does the resolution of factual issues turn on the witnesses' recollection of what happened. A more powerful concern is that, because a fully asynchronous process affords witnesses a time gap before answering questions, there is a greater risk of witness coaching and recent fabrications. However, the usual cross-examination techniques should be able to expose these ploys without much difficulty. In these premises, a general statement that fully asynchronous arbitration is, substantively, "second rate" justice does not seem to rest on solid grounds.

Nevertheless, would parties see fully asynchronous arbitration as inferior to a synchronous process? It is plausible that parties may prefer a traditional hearing, whether physical or remote, because of its deeper interpersonal elements. Research shows that people place higher value on procedural justice as informed by interpersonal connections than the quality of decision-making.[24] A traditional hearing offers real-time face-to-face interactions, whereas a fully asynchronous process does not. On this basis, the former may be considered a superior interpersonal experience. However, it is anticipated that this preference may change over time. As pointed out by Professor Susskind, recent anecdotal accounts in the field of psychotherapy have demonstrated that the younger generation prefers texting to voice (or video)-based communications.[25] In this light, it is entirely possible that the "selfie generation"

[24] See generally Tom R. Tyler & Steven L. Blader, "The Group Engagement Model: Procedural Justice, Social Identity, and Cooperative Behavior" (2003) 7 PERSONALITY & SOC. PSYCHOL. REV. 349, 357.
[25] Richard Susskind, *Online Courts* (*supra*), p.213.

would prefer fully asynchronous arbitration, which can be conducted entirely by text, to a traditional hearing.

On the other hand, a fully asynchronous process, whether of the generic or specialist kind, is quicker, cheaper, and more convenient, without compromising the quality of decisions (at least for commercial disputes). It gives the parties full opportunity to comment on the case materials as the case progresses. The process, as conceived by some, would be more intelligible and streamlined, for judges are expected to "*take an inquisitorial and problem-solving approach, guiding the parties to explain and understand their respective positions*",[26] and to be "*totally* au fait *with the issues and the stage that her online 'trial' had reached and what she truly needed to know to resolve the issues that really divided the parties in the case*".[27] Further, recent research shows that, by removing the need for face-to-face interactions, fully asynchronous dispute resolution may make the process fairer, because "*judges need not be exposed to parties' group-based identity traits*" which may become a source of bias.[28] In these premises, it is difficult to see why parties would consider fully asynchronous arbitration as the inferior offering. This would, of course, be a radical and inconvenient change for lawyers who are trained under, and invested in, the traditional model; but it must be the view of the users, rather than lawyers and adjudicators, which are paramount.[29]

In these premises, the "economy class" justice argument is unconvincing.

Another potential downside is that fully asynchronous arbitration seems to have limited utility, in that it seems to be suitable only for small-value claims of the simplest kind. There seems to be a consensus amongst even the most fervent of legal technologists that asynchronous dispute resolution of the kind described above should be confined to simple claims of a modest value. Professor Susskind, for instance, considered the value of a case, the complexity of the legal and fact patterns, and the types of legal problem at issue to be relevant factors for considering if asynchronous judging is suitable.[30]

Nevertheless, it may well be questioned whether such humility is justified. The claim value is important because it would determine the proportionate resources to be invested in resolving the claim, and because it is a fairly useful proxy for the claim's factual and legal complexity. The first reason does not, however, preclude the use of

[26] Sir Ernest Ryder, "Modernisation" (*supra*), §29.
[27] Sir Geoffrey Vos, "Debate" (*supra*), §22.
[28] Avital Mentowvich, J.J. Prescott, and Orna Rabinovich-Einy, "Are Litigation Outcome Disparities Inevitable? Courts, Technology, And the Future of Impartiality" (2020) Alabama Law Review 71(4) 893, p.975.
[29] Richard Susskind, *Online Courts* (*supra*), p.190.
[30] Ibid, pp.149-150.

an asynchronous process for high-value claims, as, surely, the more cost-effective their resolution, the better. The second reason is tied to the complexity of the underlying claim. Is a legally complicated dispute unsuitable for wholly asynchronous arbitration? For the reasons given above, it is difficult to see why. As explained, the quality of legal submissions may well be enhanced in an asynchronous process, for the legal representatives would have more time to think through their submissions. What about a factually complicated dispute? A dispute may be factually complicated because, quantitatively, a great number of factual issues are involved, or because, qualitatively, the factual issue is finely balanced. For the quantitative aspect, the following remarks by Sir Geoffrey Vos are helpful to place it in context:

> *"… [T]here are many cases where parts of the trial process are costly and unnecessary… Why do we need days of evidence, when in reality there are very rarely more than a handful of substantive factual disputes, and even those are often borne of misunderstanding or mistrust rather than substantive disagreement as to what has actually occurred? In many cases, a good proportion of the factual disputes are irrelevant to the outcome, and could be avoided altogether if the matter had been considered in sufficient detail at an earlier stage*."[31]

Thus, experience suggests that it is rare for a case to involve such a large number of real factual issues that asynchronous determination is unsuitable. For such rare cases, a synchronous hearing may well be more cost-effective and practical, but those would be the exceptions rather than the norm. As to the qualitative aspect, it does not seem that having a real-time hearing would make a difference. As stated above, although it is impossible to gauge a witness's real time demeanour in an asynchronous process, it is an unhelpful indicator of veracity. If the Tribunal has to split hairs in order to rule on a factual issue, it is much more likely that they would do so on the basis of inherent probabilities, rather than the eye contact or verbal delivery of a witness. Inherent probabilities are the same whether or not a hearing is synchronous. It follows that, when it comes to finely balanced factual issues, a synchronous hearing is probably just as good as its asynchronous counterpart. For these reasons, it seems that, save in exceptional circumstances, fully asynchronous arbitration can resolve claims both large and small, and both simple and complex.

Lastly, it may be said that technology assisted processes of the kind proposed herein are unhelpful for promoting access. That is because the intended beneficiaries (economically disadvantaged groups) are unlikely to have access to the internet or devices, or the requisite computer literacy, for engaging the new processes. In other

[31] Sir Geoffrey Vos, "Debate" (*supra*), §21.

words, a new barrier (technology) would replace the old ones (time and financial costs), taking us back to square one. Although this is a valid concern, it does not seem to be cogent against statistics. In 2021, 60% of the world population are active internet users, and 53.6% are social media users.[32] Provided that there is sufficient education (and that the design is user-friendly), these people should have no problem using either the generic or specialist model of fully asynchronous arbitration. Moreover, it is safe to assume that the percentage population who are able to access international arbitration in its present form, of which the costs average more than £1m, is far lower than the two figures above. Thus, it is submitted that technology driven access reforms in this area would be progressive and effective.

4. Conclusion

All in all, it is submitted that fully asynchronous arbitration is a promising innovation which could improve the efficiency of, and access to, arbitration. This proposal is not without its downsides, but they do not appear to overshadow its benefits. It is hoped that, in the future, work would be done on designing a specialist platform for fully asynchronous international arbitration.

Overall Conclusion

Drawing all the threads together, we submit that technology has been, and will continue to be, beneficial to the reform of international arbitral processes. Not only does it greatly enhance the efficiency and cost-effectiveness of international arbitration, but it also has the potential of facilitating access thereto. In "The Plague", Albert Camus wrote, *"[s]o all a man could win in the conflict between plague and life was knowledge and memories.*" COVID-19 has endowed us with knowledge and experience as respects the use of technology in international dispute resolution. Our next task is to avail of it to further better the system.

[32] Datareportal, "Digital 2021: Global Overview Report", accessible at https://datareportal.com/reports/digital-2021-global-overview-report (accessed 22 June 2021).