

THE USE OF TECHNOLOGY IN ARBITRATION: ENSURING THE FUTURE IS AVAILABLE TO BOTH PARTIES

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INTRODUCTION

Among the advantages typically given for arbitration are its potential speed and cost benefits over traditional litigation. Yet, it would probably not surprise anyone familiar with the arbitral process that these supposed benefits can be illusory. For example, as the types of disputes submitted to arbitration have become more complex, the arbitral process has become more formal. Complicated procedural motions, discovery disputes, and multi-day hearings are more and more commonplace in the world of complex commercial arbitration. All of this takes time, and increases costs. Even in simpler disputes, the costs of arbitration for such things as the fees for the arbitrators and the administering body, as well as charges for the hearing room, can significantly deplete any savings achieved in reduced attorney fees.

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Perhaps this trend is the inevitable result of alternative dispute resolution's "growing pains" and is irreversible.¹ After all, it simply is not possible to deal with all the issues in a complex multimillion-dollar international commercial dispute the same way one would have dealt with the typical dispute submitted to arbitration fifty years ago. Many parties in complex arbitrations today are represented by teams of lawyers from large law firms; they usually want the neutrals to be attorneys with significant experience in the business in question; they commonly expect the award to be in accordance with their contract and applicable law; and many times they require a reasoned award even if it is not otherwise mandated.²

Nevertheless, that does not mean nothing can be done to increase the efficiency—and reduce the cost—of the arbitral process. Some of these "improvements," however—for example, increased arbitrator control of the process—can be controversial.³ On the other hand, the increased use of technical aids⁴ can

¹ See Thomas E. Carbonneau, *Darkness and Light in the Shadows of International Arbitral Adjudication*, in *FACT-FINDING BEFORE INTERNATIONAL TRIBUNALS: ELEVENTH SOKOL COLLOQUIUM* 153, 162–67 (Richard B. Lillich ed., 1992) (criticizing this trend).

² Reasoned awards are the norm in international arbitration, but are not presumed in domestic U.S. arbitrations. Compare United Nations Commission on International Trade Law [UNCITRAL], *Model Law on International Commercial Arbitration*, art. 31, U.N. Doc. A/40/17/Annex I, at 81–93 (June 21, 1985) [hereinafter UNCITRAL Model Law] (requiring an award to state the reasoning on which it was based), with American Arbitration Association [AAA], *Commercial Arbitration Rules and Mediation Procedures (Including Procedures for Large, Complex Commercial Disputes)*, R. 42(b) (Sept. 15, 2005) (stating an arbitrator need not render a reasoned award).

³ See, e.g., *International Colloquium Discusses Proactive Management of Arbitration Process and Other Key Issues*, DISP. RESOL. J., Feb. 2000, at 5 (discussing the possible proactive measures available to arbitrators); Deborah Masucci, *Taking Responsibility: Parties, Counsel Share Duty with Arbitrators to Ensure Integrity of Arbitration Process*, DISP. RESOL. MAG., Fall 1998, at 22 (noting the need for professionalism on the part of parties).

⁴ The terms "technical aid" and "technology" are used interchangeably in this article to refer generally to information and communication technologies useful in the conduct of an arbitration, such as e-mail, use of the Internet, document processing, video conferencing, and the like. As a matter of necessity, examples are drawn from only those technologies which are in existence today; many, if not all, of the principles discussed in this article should be applicable to future technologies as well. As the future is unpredictable, the reader is cautioned that exceptions are inevitable, and that the exception to this expectation may prove the rule. For a discussion of some examples of technical aids currently in use, see Edward C. Prado & Leslie Sara Hyman, *Technological Advances in the Courtroom*, ISSUES OF DEMOCRACY, May 2003, at 32, 32–36, <http://usinfo.state.gov/journals/itdhr/0503/>

reduce cost, increase speed of resolution, and otherwise aid in the arbitral process. Furthermore, it can do so in a way that is fair to both parties, all the time maintaining their expectations of the process.

Fairness in the availability of a technical aid to both parties, however, is not a given. Particularly in international matters, the parties may not have equal ability to exploit the technology in question. They may have unequal financial resources to deploy it,⁵ they may have unequal access to it,⁶ or they may have significantly unequal experience using it.⁷ To what extent in any of these cases should the panel be charged to level the playing field, potentially even to the point of prohibiting the use of any technical aid which is not equally available to and useable by both parties? The answer to this question is not simple or uniform⁸ and is probably not without some controversy, but should, it is submitted, be: No, a panel does not have to assure technology equality, at least for many situations.

This answer, however, depends on, among other things, the technology in question, the use to which it is to be put, and its effect on the other party's ability to fairly put on its case. How, indeed when and under what conditions, is an arbitral panel to make this determination? This article will explore some of the issues, both legal and practical, and general principles that may bear on a panel's decision to permit the use of a technical aid in

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⁵ An example of this situation might occur in a dispute between an individual or small company and a large corporation.

⁶ For example, a party may not have high-speed access to the Internet available to it where it is located, Internet access may be restricted by its government, or the size of e-mails may be limited.

⁷ See example, *supra* note 5.

⁸ The International Chamber of Commerce ("ICC") has studied the use of IT in arbitration. ICC INT'L COURT OF ARBITRATION BULLETIN, USING TECHNOLOGY TO RESOLVE BUSINESS DISPUTES (Supp. 2004). The ICC Task Force on IT in Arbitration, of which the author was a member, composed a report that considers issues pertinent to the question of *whether* to use technology in arbitration, although it focuses more on *how* to use it. See Erik Schäfer, *IT in Arbitration: The Work of the ICC Task Force*, in USING TECHNOLOGY TO RESOLVE BUSINESS DISPUTES, *supra*, at 59, 59–60.

The use of technology in trials, while generally promoted by the courts, is also not without issues, some of which parallel those arising in arbitral proceedings. See Fedric I. Lederer, *Technology-Augmented Courtrooms: Progress Amid a Few Complications, or the Problematic Interrelationship Between Court and Counsel*, 60 N.Y.U. ANN. SURV. AM. L. 675, 677–88 (2005) (discussing the current state of technology in the courtroom and the resulting complications).

an arbitration.⁹ It will then consider several technology case studies, including the impact of the technologies on the arbitral process, the application of these general principles to each technology, and the steps, if any, which should be taken prior to the use of the technical aid in question.¹⁰

THE BASIC PRINCIPLES

Before turning to the case studies of the individual technologies, it is useful to consider whether it is possible to develop a general methodology for a panel to employ in the arbitral process in a way that is useful for the determination of whether the use of a particular technical aid should be permitted or even mandated.¹¹ Certainly, an easy to administer black and white test for all cases would be very desirable; but such a test is, given the wide variety of possible technologies to which it is to be applied and the wide variation in the circumstances in which it is to be applied, alas, improbable. Nevertheless, we should be able to set forth at least some basic principles a panel can and, hopefully, should consider whenever it must decide whether to permit or require the use of any specific technical aid in the arbitration.

We do need to be mindful of a fundamental concern whenever one is dealing with constructing rules involving the use of technology. Technology is ever changing, and doing so rapidly and in unpredictable ways. For example, who, in as late as the

⁹ See *infra* notes 11–85 and accompanying text. This article will not deal extensively with how to use technology in an arbitration, except to the extent it impacts on the fairness of its use or is part of the case studies. Issues on methods of employment of a technical aid tend to be specific to the aid and thus are usually not of general applicability.

¹⁰ See *infra* notes 86–112 and accompanying text. The technology case studies discussed in this article were chosen as exemplary of the wide variety of issues raised by the use of technology in the arbitral process. They are not necessarily the most complex examples.

¹¹ This article will not consider the circumstance, which is much easier analytically, where both parties agree to the use of the technical aid. The parties have almost unlimited ability to agree on the procedures that are to be used in their arbitration. See *infra* note 56 and accompanying text. Standards for the implementation of technical aids whose use is desired by both parties are dealt with extensively in the ICC Report, which, in essence, starts from a general assumption of party consent. See *Operating Standards for Using IT in International Arbitration*, in USING TECHNOLOGY TO RESOLVE BUSINESS DISPUTES, *supra* note 8, at 75, 75 [hereinafter *Operating Standards for IT*]. This article rather will deal with the cases where one, or even both parties, objects to the use of the technical aid.

early 1990s, would have predicted the growth of the commercial uses of the Internet and the degree to which those uses would engender new and unusual legal disputes?¹² Any basic principles that are to be useful over a reasonable period of time need to take into account this changing nature of technology.

What does this requirement mean practically? First, there will be the inevitable trade-off between the duration of a principle's applicability and its specificity. In other words, the more specific the principle, the more likely it will become obsolete more quickly.¹³ Second, in what may be more of a corollary to the first observation, rules that deal with methods of implementation—that is, rules that provide for or require certain means to accomplish the desired ends—are more likely to become obsolete sooner than rules which are general in nature as to the means of accomplishment.¹⁴ We are thus forced to conclude that

¹² Consider, for example, that the first domain name dispute brought under the Internet Corporation for Assigned Names and Numbers (“ICANN”) rules was administered by the World Intellectual Property Organization (“WIPO”) and decided in January of 2000. *See* World Wrestling Fed’n Entm’t, Inc. v. Bosman, No. D99-0001 (WIPO Arbitration & Mediation Center Admin. Panel 2000), available at <http://www.wipo.int/amc/en/domains/decisions/html/1999/d1999-0001.html>.

¹³ For example, a rule dealing with the presentation, administration, and admissibility of live video evidence in the 1990s, which only contemplated the technology then in existence—namely, expensive two-way satellite setups—would likely be rendered obsolete by the advent of relatively much less expensive streaming video over the Internet. In addition to the significant cost differences in the two technologies, there are also differences in the ease of administration of the systems and the handling of documentary evidence, among other things, which could obsolete a rule that was too specific.

¹⁴ As an example, consider the case of documents which are to be exchanged electronically—that is as computer readable files. Such documents can be recorded in a variety of formats. A format is:

[a] specific pre-established arrangement or organization of data. Data in a *file* is stored in a format that is established by whatever *application* created the file (i.e., organized the data) and typically needs to be read by the same or similar program that can interpret the format and present the data to the user on the computer screen. Almost everything associated with computers has a format.

Webopedia, Definition of Format (Oct. 11, 2005), <http://www.webopedia.com/TERM/f/format.html>.

The following general factors are some of the more important ones in the choice of the format:

- 1) Compatibility – That the documents can be read by all who need to do so;
- 2) Reliability – That there are some reasonable assurances that the documents have not been altered;
- 3) Identification – That each document name is unique;
- 4) Reproducibility – That the documents may be reproduced, used and displayed as needed during the arbitral proceedings; and

any meaningful basic principles will need both to be relatively general in nature as well as to avoid the requirement, or even the context, of the use of specific technologies.¹⁵

Turning now to the development of the basic principles, the first step in that process is a review of the questions a panel should ask itself when it is confronted with a request to use, or need to use, a technical aid. There are, it is submitted, only three fundamental questions that need to be asked:

- (1) Must the panel ensure in all cases that both parties have equal access to the technical aid in question?
- (2) If not, does the panel have the power to regulate the use of that technical aid and what is the scope of that power?
- (3) If so, to what issues should a panel look to guide it in doing so?

It should be noted that the issue of the use of technology may arise in diverse situations.¹⁶ In one, a party may have used a

5) Reviewability – That the documents can be scanned and searched for content.

See *Issues to Be Considered When Using IT in International Arbitration*, in *USING TECHNOLOGY TO RESOLVE BUSINESS DISPUTES*, *supra* note 8, at 63, 67–70 [hereinafter *Issues When Using IT*]; *Operating Standards for IT*, *supra* note 11, at 79–82.

At the present time, one way to meet such requirements is for all electronic documents to be exchanged in PDF (Portable Document Format) format. See *Operating Standards for IT*, *supra* note 12, at 89. The PDF format was developed by Adobe Systems, Inc., to create a document format that could be viewed on computer systems manufactured by different companies and operating under different operating systems with as little variation in appearance as possible. The PDF software also allows the document to be “locked,” a procedure which makes unauthorized alteration of the document difficult, but not impossible. PDF documents are also searchable and can be given unique names.

A requirement that electronic documents be in PDF format is often adopted under the assumption that it both ensures universal compatibility and readability of the document as well as provides a measure of assurance that it has not been altered. Obviously, such a specific requirement provides a best practices alternative only so long as the PDF format both (1) is the best document format then available to achieve the desired security and compatibility objectives and (2) continues to be a generally accepted and used method to do so.

¹⁵ This, of course, does not mean that the basic principles will not be applicable to specific current technologies. The case studies contained at the end of this article are applications of the proposed basic principles to various examples of existing technologies. See *infra* notes 86–112 and accompanying text.

¹⁶ Presumably no issue of concern for a panel would be presented if *both* parties wished to use the technical aid under conditions that were agreeable to both of them. The parties by mutual agreement can generally control the arbitral process and there are relatively few matters that a panel can force both parties to do, or prevent them from doing, over their mutual objection. See *infra* note 55.

technical aid without requesting panel permission, and that use is subsequently objected to by the other party.¹⁷ A second situation is when permission to use a technical aid is requested by one party but objected to by the other.¹⁸ A third situation occurs when the panel itself decides on its own initiative to require the parties to use a technical aid.¹⁹ A fourth situation is presented if the technical aid is incorporated into the arbitration rules promulgated by the administering body in question.²⁰

The first question is whether a panel must level the technology playing field, prohibiting the use of any technology under any circumstances unless both parties have equal ability to exploit it. As mentioned above, the answer to this question, in this author's opinion, should be no, at least as a flat general principle. Simply put, a blanket general rule of equality of access could by analogy be extended to require a panel to level the playing field for all factors touching on a party's ability to develop or present its case. For example, total equality would seem also to imply equality of legal representation.²¹ On the other hand, while a panel may not be required to level the playing field in all cases, procedural due process or other "fair access" or "equality of treatment" concepts may require a panel to do so in some circumstances.²² When do these circumstances arise?

As a starting point for this analysis, there is no provision in the statutes of the United States²³ or the fundamental

¹⁷ The pre-hearing use of document analysis software, the output of which is later sought to be used in conjunction with the hearings, is an example of this circumstance.

¹⁸ A technical aid for the presentation of evidence proposed by one party for use at the hearings would be one example.

¹⁹ See *infra* text accompanying notes 93–100.

²⁰ See *infra* text accompanying notes 101–12.

²¹ A requirement of equality of legal representation could mean only that the parties must have the same number of lawyers at the hearing, or it could restrict the size of the respective legal teams, or it could even go to the experience of those teams. Whatever it may mean, this author knows of no circumstance where it has been imposed.

²² The ICC Report agrees with this conclusion as to the existence of, and limitations on, a panel's power to regulate technical aids during the course of an arbitration. See *Issues When Using IT*, *supra* note 14, at 66.

²³ The grounds for vacation of an award under the Federal Arbitration Act ("FAA") are contained in 9 U.S.C. § 10 (Supp. 2002). The ones arguably relevant are as follows: if the award was procured by undue means; where there was evident partiality in the arbitrators; where the arbitrators were guilty of misconduct in refusing to hear evidence pertinent and material to the controversy; if there was any misbehavior by which the rights of any party have been prejudiced or if the

international treaty²⁴ applicable to the enforcement of arbitral awards that would require an arbitral panel in all cases to refuse to allow a party the ability to take advantage of a superior case preparation or presentation opportunity. It is true that some United States courts have found various non-statutory bases for vacation, namely manifest disregard of the law,²⁵ capricious or irrational decision,²⁶ or violation of public policy.²⁷ As noted,²⁸

arbitrators exceeded their powers. *Id.* § 10(a).

²⁴ The only arguable pertinent grounds are provided by the United Nations Conference on International Commercial Arbitration Convention on the Recognition and Enforcement of Foreign Arbitral Awards, art. 5, Dec. 29, 1958, 21 U.S.T. 2517. This provides that the recognition and enforcement of an arbitral award may be refused only when there is proof that the following occurred: the party against whom the award is invoked was unable to present his case, *Id.* § 1(b); the arbitral procedure was not in accordance with the agreement of the parties, "or failing such agreement, was not in accordance with the law of the country where the arbitration took place," *Id.* § 1(d); or the recognition or enforcement of the award would be contrary to the public policy of that country, *Id.* § 2(b).

²⁵ Manifest disregard of the law originated as a theory in dictum in *Wilko v. Swan*, 346 U.S. 427, 436–37 (1953). Generally speaking, it has been applied narrowly, if at all. *See, e.g.*, *Rodriguez v. Prudential-Bache Sec., Inc.*, 882 F. Supp. 1202, 1209 (D.P.R. 1995) (alteration in the original) ("[T]he hurdle [to show manifest disregard of law in commercial arbitrations] is a high one. In order to vacate an arbitration award, there must be some showing in the record, other than the result obtained, that the arbitrators knew the law and expressly disregarded it."); *Fine v. Bear, Sterns & Co., Inc.*, 765 F. Supp. 824, 827 (S.D.N.Y. 1991) (alterations in the original) (quoting *Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Bobker*, 808 F.2d 930, 933–34 (2d Cir. 1986) ("[Manifest disregard of the law] is applicable only where the law alleged to have been disregarded is 'well defined, explicit, and clearly applicable,' so that the error was 'capable of being readily and instantly perceived by the average person qualified to serve as an arbitrator.'"). Indeed, a number of courts have essentially rejected it as a basis for vacation of an arbitral award. *See, e.g.*, *Baravati v. Josephthal, Lyon & Ross, Inc.*, 28 F.3d 704, 706 (7th Cir. 1994).

Whatever its current status, it would hardly qualify as a ground for requiring a totally level and equal technological playing field.

²⁶ As with manifest disregard of the law, these two theories, often applied interchangeably, are applied narrowly. *See Brown v. Rauscher Pierce Refsnes, Inc.*, 994 F.2d 775, 781 (11th Cir. 1993) (alterations in original) (citation omitted) ("For an award to be vacated as arbitrary and capricious, [it] must contain more than an error of law or interpretation . . . there must be no ground for [it]."); *Ainsworth v. Skurnick*, 960 F.2d 939, 941 (11th Cir. 1992) (quoting *Raiford v. Merrill Lynch, Pierce, Fenner & Smith*, 903 F.2d 1410, 1413 (11th Cir. 1990) ("An award is arbitrary and capricious only if 'a ground for the arbitrator's decision cannot be inferred from the facts of the case.'").

Whether these theories even pertain to procedural decisions at all would seem to be open to some question. By their very terms, their applicability would seem to be restricted to the final award. In any event, and even assuming that they do apply to procedural decisions, it would be an extraordinary and extreme procedural decision that would trigger either of them.

²⁷ The foundation of this theory is in *United Paper Workers' International*

however, these theories are not universally accepted by United States courts, and none of the theories has been extended to require a panel to level the playing field as a matter of general applicability. Accordingly, it is safe to conclude that none of these bases, either statutory or judge-made, rise to the level of requiring absolute equality of treatment. Nevertheless, the United States,²⁹ like most other countries,³⁰ as well as many arbitral bodies,³¹ does have minimum procedural standards that vary from country to country, and body to body, and which, if not followed, are grounds for vacation of an arbitral award.³²

Union, AFL-CIO v. Misco, Inc., 484 U.S. 29, 42–44 (1987) (explaining vacation of arbitral awards when the awards are against public policy). Although *Misco* was a labor arbitration case, it has been followed in the commercial context. *See, e.g., Rauscher Pierce Refsnes*, 994 F.2d at 782–83. To be grounds for reversal, the public policy that is violated must be both “explicit” and “well defined and dominant, and . . . ascertained by reference to the laws and legal precedents.” *Id.* at 782 (quoting *Misco*, 484 U.S. at 43).

Like the theories of manifest disregard of the law and capricious or irrational decision, public policy theory generally is narrowly applied and then used only in extreme situations.

²⁸ *See supra* notes 25–27.

²⁹ *See* 9 U.S.C. § 10(c) (Supp. 2002); GARY B. BORN, INTERNATIONAL COMMERCIAL ARBITRATION IN THE UNITED STATES 545 (1994) (describing minimum levels of regulation in the arbitration process to create “procedural regularity and fairness”).

³⁰ UNCITRAL Model Law, *supra* note 2, at art. 36(1)(a)(ii). *See generally* ALAN REDFERN & MARTIN HUNTER, LAW AND PRACTICE OF INTERNATIONAL COMMERCIAL ARBITRATION 441–43 (2d ed., Sweet & Maxwell 1991).

³¹ ICC, *Rules of Arbitration*, art. 15(2), ICC Pub. No. 808 (Jan. 1, 1998), <http://www.iccwbo.org/court/english/arbitration/rules.asp>; AAA, *Commercial Arbitration Rules and Mediation Procedures*, *supra* note 2, R. 17(a)(i).

³² A full discussion of the application of arbitral procedural due process standards, either internationally or just in the United States, is beyond the scope of this article.

First, there is a choice-of-law issue which determines what due process standards to apply. International arbitrations often present complex choice-of-law circumstances with multiple possible jurisdictions whose laws may be applicable. *See infra* note 85. But even where only two jurisdictions (the arbitral forum and the site of the enforcement of the award) are involved, the analysis is not free from doubt. *Compare* *Parsons & Wittemore Overseas Co., Inc. v. Societe Generale de L’Industrie du Papier (RAKYA)*, 508 F.2d 969, 976–77 (2d Cir. 1974) (holding that the law of place where the arbitration award is to be enforced applies), *and* *Iran Aircraft Indus. v. Avco Corp.*, 980 F.2d 141, 144–45 (2d Cir. 1992) (discussing “direct” enforceability of arbitral awards of other countries in the United States), *with* Ramona Martinez, Comment, *Recognition and Enforcement of International Arbitral Awards under the United Nations Convention of 1958: The “Refusal” Provisions*, 24 INT’L LAW. 487, 516–17 (1990) (arguing for the application of the law of either the site of arbitration or that chosen by the parties to apply to the contract in question). For a fuller discussion of choice-of-law in the context of dispute

Generally speaking, these procedural due process standards tend to require minimum procedures to ensure that each party has a full and fair opportunity to present its case³³ and, as such, would certainly impact a panel's decision on whether to permit or require the use of a particular technical aid. Clearly, a panel could not do so if the use of the technical aid would deprive a party of fundamental procedural fairness. But it should be noted that the generally accepted procedural fairness grounds for vacating an award³⁴ do not speak specifically in terms of the use of particular technical aids and are rather directed to the underlying effects of that use (for example, failure of notice, failure to allow cross, and so on). There also is no one-to-one correspondence between cause (the use of the technical aid) and effect (the alleged procedural defect). Thus, the use of e-mail for party-panel communications may cause a failure of notice if a panel's e-mail is not received by a party, or the failure of an opportunity to be heard if a party's e-mail is not received by the panel, or the use of e-mail may raise no procedural problem at

resolution and the Internet, see NORMAN SOLOVAY & CYNTHIA K. REED, *THE INTERNET AND DISPUTE RESOLUTION: UNTANGLING THE WEB* 5-33 to 5-37 (2006).

Second, even assuming United States law is applicable, there are a multitude of procedural grounds which have been used to challenge awards. They have met with varying degrees of success. For example, United States courts have generally given arbitrators wide latitude to permit or refuse new claims. *See, e.g.,* *Carte Blanche (Singapore) PTE., Ltd., v. Carte Blanche Int'l, Ltd.*, 888 F.2d 260, 264-65 (2d Cir. 1989) (describing reasons for courts to review arbitral award). On the other hand, the courts have not been quite so unanimous in their view of a panel's scheduling of the hearings themselves. *Compare* *Schmidt v. Finberg*, 942 F.2d 1571, 1574-75 (11th Cir. 1991) (finding reasonable basis for the panel's decision to refuse postponement of hearing), *with* *Allendale Nursing Home, Inc. v. Local 1115 Joint Board*, 377 F. Supp. 1208, 1213-14 (S.D.N.Y. 1974) (holding the arbitrator's refusal for adjournment to be improper). Other procedural grounds that have been used to challenge an arbitral award include: exclusion of evidence, *e.g.,* *Bell Aerospace Co. v. Local 516*, 500 F.2d 921, 923 (2d Cir. 1974); availability of cross examination, *e.g.,* *Fairchild & Co., Inc. v. Richmond, Fredericksburg and Potomac R.R. Co.*, 516 F. Supp. 1305, 1314-15 (D.D.C. 1981); notice, *e.g.,* *Sesostris, S.A.E., v. Transportes Navales, S.A.*, 727 F. Supp. 737, 741 (D. Mass. 1989); inadequate deliberations, *e.g.,* *Jones v. St. Louis-San Francisco Ry. Co.*, 728 F.2d 257, 261-63 (6th Cir. 1984); and so on. But even such a fundamental right in court as that of cross-examination has not been viewed as an absolute ground for vacating an arbitral award. *See Fairchild*, 516 F. Supp. at 1314; *Laminoirs-Trefileries-Cableries de Lens, S.A., v. Southwire Co.*, 484 F. Supp. 1063, 1066-67 (N.D. Ga. 1980) (holding that prevention of cross-examination does not deny a fair hearing to a party).

³³ *See* REDFERN & HUNTER, *supra* note 30, at 441; *see also* SOLOVAY & REED, *supra* note 32, at 8-25 to 8-27.

³⁴ *See supra* note 32.

all.³⁵ Likewise, the use of video testimony may deprive a party of the right to cross examine the witness in question, or it may deprive a party of the right to put on rebuttal witnesses, or similarly, it may raise no procedural problem.³⁶

Because the applicable procedural test is accordingly dependent not only on the identity of the jurisdiction whose law is to be applied, but also on the procedural infirmity claimed,³⁷ there are no easy rules to use to determine when procedural fairness precludes a panel from permitting or requiring the use of a particular technical aid. About the best that can be said is that a panel is free to do so unless its use deprives a party of the minimal procedural fairness required by the jurisdiction whose laws are applicable to the conduct of the arbitration.³⁸

Unfortunately, this does not end the analysis necessary to answer the first question. There is an additional “procedural” requirement that must be considered, namely a requirement in, for example, the UNCITRAL Model Law, that “the parties shall be treated with equality.”³⁹ A number of countries have similar requirements,⁴⁰ as do some arbitral rules.⁴¹ What does this requirement of equal treatment mean and what impact does it

³⁵ See the discussion of e-mail party panel communications, *infra* notes 93–100 and accompanying text.

³⁶ See *infra* notes 69, 71–72.

³⁷ And even when the jurisdiction and procedural infirmities have been identified, the law on the issue may not be free from doubt and the outcome of the analysis may well be heavily driven by the facts of the situation.

³⁸ See *supra* note 32.

³⁹ UNCITRAL Model Law, *supra* note 2, at art. 18.

⁴⁰ See, e.g., Bundesgesetz uber das Internationale Privatrecht [IPRG], Swiss Private International Law Act, Systematische Sammlung [Federal Law] Dec. 18, 1987, SR 291, art. 182(3). Arguably, a provision such as that in 9 U.S.C. § 10, which requires the panel treats the parties impartially, could be read similarly. See *infra* note 45.

⁴¹ See AAA, *Commercial Arbitration Rules and Mediation Procedures*, *supra* note 2, art. 16(1); UNCITRAL Arbitration Rules, G.A. Res. 31/98, at art. 15(1) (Dec. 15, 1976). The latter is typical and provides: “Subject to these Rules, the arbitral tribunal may conduct the arbitration in such manner as it considers appropriate, provided that the parties are treated with equality and that at any stage of the proceedings each party is given a full opportunity of presenting his case.” *Id.*

Not all arbitration rules have the same requirement of equal treatment. The ICC Rules, for example, provide: “In all cases, the Arbitral Tribunal shall act fairly and impartially and ensure that each party has a reasonable opportunity to present its case.” ICC, *Rules of Arbitration*, *supra* note 31, at art. 15(2).

This rule has not been interpreted to require that the panel “treat the parties in exactly the same fashion.” MICHAEL W. BUHLER & THOMAS H. WEBSTER, *HANDBOOK OF ICC ARBITRATION* 199 (2005).

have on a panel's latitude to conduct the arbitration? Clearly, the various rules explicitly and the UNCITRAL Model Law implicitly⁴² condition a panel's discretion to conduct the arbitration on the equality of party treatment. Accordingly, in an arbitration governed by these laws⁴³ or rules, a panel could not approve or require the use of a technical aid if to do so would mean that it would be treating the parties unequally.⁴⁴

So then, what does the requirement of equal treatment mean? At the extreme, it could require a panel to ensure equality in fact. In other words, under this interpretation a panel would be required to ensure a level playing field in fact and the inability of one party to use a technical aid would prevent the other party from using it as well. Or, it could require that a panel afford each party an equal opportunity, whether or not they both have equal ability to exploit the opportunity. Under this interpretation, a party's ability to use a technical aid would not affect the analysis so long as it was afforded the opportunity to do so. Or, it may simply require that the parties must be treated impartially.⁴⁵

Guidance on the answers to these questions is mixed. A leading book on international arbitration has characterized the general effect of the requirement of equal treatment as "clear," summarizing it as:

The arbitration tribunal should give the parties equal rights. It should not hear one party in the absence of the other; it should not communicate with one party without informing the other; it should not accord to one party privileges which it is not prepared to accord to the other. In a phrase, it should not demonstrate any favouritism; and this is so whether or not a

⁴² Unlike the various rules in question which explicitly condition the conduct of the arbitration on the equality of treatment of the parties, article 18 of the UNCITRAL Model Law just contains a general requirement to that effect. See UNCITRAL Model Law, *supra* note 2, at art. 18.

⁴³ See *supra* note 32 (discussing the choice-of-law determination as to the governing law).

⁴⁴ See *supra* note 22 and accompanying text.

⁴⁵ Is there any meaningful difference between a requirement to treat the parties equally and a requirement to treat the parties impartially? Compare 9 U.S.C. § 10 (Supp. 2002) (stating that federal courts may vacate arbitration awards if there is evidence of "partiality"), with UNCITRAL Model Law, *supra* note 2, at art. 18 (stating that the "parties shall be treated with equality"). Fortunately, the conclusions reached in this article do not require that the semantic differences between the two phrases be parsed.

positive obligation of “equal treatment” is imposed by the relevant rules of arbitration or of the *lex arbitri*.⁴⁶

On the other hand, and perhaps not surprisingly, the question of the scope of the equality of treatment requirement has not been explicitly dealt with by any U.S. court, although rulings in which the requirement is mentioned do generally confirm the broad discretion vested in the arbitrators to conduct the arbitration.⁴⁷ In addition, as with the requirement of fundamental procedural fairness, a U.S. view of this requirement may or may not be the same as those of other countries, which themselves may not be uniform.

Furthermore, a closer examination of actual arbitration practice indicates a less clear analysis than that indicated by Redfern and Hunter. For example, the rule that a panel should be impartial has not always been extended to the individual panel members. Until recently, the general practice in domestic United States arbitration, as opposed to international arbitral practice, included a presumption, and in fact almost an assumption, that party appointed arbitrators were not impartial.⁴⁸ This U.S. practice even extended to party-arbitrator

⁴⁶ REDFERN & HUNTER, *supra* note 30, at 357.

⁴⁷ See *E.spire Commc'ns, Inc. v. CNS Commc'ns*, 39 F. App'x 905, 908–11 (4th Cir. 2002) (upholding arbitrator's ruling even if he had excluded relevant evidence); *C. Melchers GmbH & Co. v. Corbin Assocs.*, No. 1:05-CV-349, 2006 WL 925056, at *7–8 (E.D. Tenn. Apr. 7, 2006) (noting the wide discretion granted to arbitrators by federal courts); *InterChem Asia 2000 Pte. Ltd. v. Oceana Petrochemicals AG*, 373 F. Supp. 2d 340, 352 (S.D.N.Y. 2005) (“The handling of procedure during an arbitration is committed to the discretion of the arbitrator.”).

This view is also echoed in an article by Michael F. Hoellering, the then general counsel of the AAA:

Once the tribunal is constituted, however, the parties communicate directly with the tribunal, which has wide discretion in the conduct of the proceedings, subject only to the basic obligation that the parties be treated with equality and given a fair opportunity to present their case.

Michael F. Hoellering, *International Arbitration Agreements: A Look Behind the Scenes*, 53 DISP. RESOL. J., Nov. 1998, at 64, 65.

⁴⁸ A presumption of impartiality for party-appointed arbitrators (unless the parties agree that the party-appointed arbitrators may be partial) was only recently adopted by the AAA in its Commercial Rules on July 1, 2003 (subsequently amended in September, 2005). See AAA, *Commercial Arbitration Rules and Mediation Procedures*, *supra* note 2, R. 12(b). Previously, there was no such presumption and party chosen panel members were allowed to be partial, indeed were expected to be and to have the ability to have extensive ex parte communications with the party who chose them. This prior practice, which has been characterized as a “uniquely American concept,” was met with some criticism. Paulsson, *Ethics for International Arbitrators: How Far Have the 1987 Guidelines Fared?*, Speech at the 23rd IBA

communications. While there is a general prohibition under the AAA Rules against ex parte communications, it did not, and still does not, extend to party appointed arbitrators.⁴⁹ Other examples where panels clearly need not treat parties equally include the legal representation allowed at the hearings,⁵⁰ the location of the hearings themselves,⁵¹ and the balance of procedural rulings made prior to the hearings.⁵²

Where does all this lead as to the impact of the equality of treatment requirement on the ability of a panel to permit or require the use of a technical aid? Certainly, there is no rational basis to interpret the equality of treatment requirement to include a requirement of a totally level technology playing field. On the other hand, it is clear that the requirement of equal treatment would prevent a panel from permitting one party to use a technical aid if it denies that use to the other. The thrust of the actual requirement is somewhere between these extremes but may vary from jurisdiction to jurisdiction.

Conference (Sept. 1990), in W. MICHAEL REISMAN ET AL., INTERNATIONAL COMMERCIAL ARBITRATION 943 (Foundation Press 1997).

⁴⁹ See, e.g., AAA, *Commercial Arbitration Rules and Mediation Procedures*, *supra* note 2, R. 18(a) (prohibiting either party or anyone acting on their behalf from communicating ex parte with an arbitrator or a candidate for arbitrator concerning the arbitration, except that ex parte communications are allowed with a candidate for direct appointment by a party but only regarding the general nature of the controversy and the anticipated proceedings and to discuss the candidate's qualifications, availability, or independence, or to discuss the suitability of candidates for selection as a third arbitrator where the parties or party-designated arbitrators are to participate in that selection). While this rule does not apply to arbitrators directly appointed by the parties who the parties have agreed in writing are non-neutral, the rule does express a preference that the parties agree it applies, at least prospectively, even in that circumstance. See *id.*

⁵⁰ See *supra* note 21.

⁵¹ There is no obligation that a panel hold the hearings at a location that is mutually convenient for both parties. In many arbitrations, the location of the hearings is set in the arbitration clause in the contract that is in issue. If there is unequal bargaining power between the parties, that location will likely be a place that is convenient to the party with the greater power. This can be a real strategic and tactical advantage.

⁵² Total equality of treatment during the course of a long arbitration could be argued to include even a requirement that a panel must balance its procedural rulings so that it does not make substantially more of such rulings in favor of one party or the other. That, of course, would be contrary to an arbitrator's fundamental obligation to decide matters as he or she sees them. For a criticism of the practice of trying to balance procedural rulings, see SIR MICHAEL J. MUSTILL & STEWART C. BOYD, *THE LAW AND PRACTICE OF COMMERCIAL ARBITRATION IN ENGLAND*, 253-54 (2d ed. 1989).

It is thus reasonable to conclude that, like the question of minimum procedural fairness, the applicable test of equality of treatment is dependent not only on the identity of the jurisdiction whose law is to be applied, but also the claimed inequality and the facts presented. If so, there would be no easy rules to use to determine when an unequal treatment would preclude a panel from permitting or requiring the use of a particular technical aid. Again, the best that can be said is that a panel should be able to do so unless the use of the technical aid deprives a party of equality of treatment as required by laws applicable to the conduct of the arbitration.

Turning to the second question, if there is no obligation to provide technology equality, does a panel have any power to impose any restriction on a party's use of technology in an arbitration? From the foregoing discussion, the answer to that question is definitely yes if the failure to do so would result in a party being deprived of fundamental procedural fairness or equality of treatment required by the arbitral rules or law of the jurisdiction applicable to the arbitration. But, what are a panel's powers to regulate the use of technical aids in the more common situation where the use of the aid does not affect either party's fundamental rights?

A panel's powers⁵³ arise from, and are constrained by, three sources: the agreement of the parties, applicable law, and the arbitral rules, if any, of the administering body, if there is one.⁵⁴ The foundation of any arbitration is the parties' agreement to resolve their dispute through private rather than governmental means. Unless it is in conflict with applicable law or arbitral rules, the parties may agree on any procedure to be used in the arbitration and that agreement is binding on the panel.⁵⁵ Whether a technical aid may be used in an arbitral proceeding, and, if so, under what conditions, are procedural issues and, accordingly, may be agreed upon by the parties absent a conflict

⁵³ See, e.g., REDFERN & HUNTER, *supra* note 30, at 257.

⁵⁴ See *infra* note 80 (regarding the issues presented in an *ad hoc* arbitration, an arbitration not administered by an administering body).

⁵⁵ The ICC Rules of Arbitration, art. 15(1) is exemplary. It provides in pertinent part: "The proceedings before the Arbitral Tribunal shall be governed by these Rules and, where these Rules are silent, by any rules which the parties . . . may settle on . . ." ICC, *Rules of Arbitration*, *supra* note 31, at art. 15(1); see also AAA, *Commercial Arbitration Rules and Mediation Procedures*, *supra* note 2, R. 1(a) ("The parties, by written agreement, may vary the procedures set forth in these rules.").

with applicable law or arbitral rule.⁵⁶ This agreement of the parties as to technology related procedural matters may be by stipulation or consent made during the arbitral proceedings or it could be incorporated into the arbitration agreement or clause itself.⁵⁷ Because of the changing nature of technology, however, the wisdom of detailed technology-related provisions in the arbitration clause is debatable.⁵⁸ On the other hand, it is good practice for a panel to obtain mutual party consent to the use of any technology in the arbitral proceedings and such consent can be as specific and detailed regarding the technology in question as is thought desirable.⁵⁹ A discussion of the pertinent considerations in crafting such consent is heavily dependent on the particular technical aid in question and changes as technology changes, and is beyond the scope of this Article.⁶⁰

But what if the parties do not agree or have not agreed? What powers does an arbitral panel have to permit or require the use of a technical aid over the objection of one of the parties? Needless to say, there are no provisions in the FAA or any of the more commonly invoked arbitral rules (such as UNCITRAL or those of the AAA or the ICC⁶¹) which speak either specifically to the use of a particular technical aid or more generally to the use of technology in the arbitral process. Applicable law⁶² and arbitral rules,⁶³ however, do typically give arbitrators wide latitude to manage the proceedings. Many rules allow a panel to

⁵⁶ See *Operating Standards for IT*, *supra* note 11, at 75.

⁵⁷ For some of the issues arising in the drafting of arbitration clauses, see Stephen R. Bond, *How to Draft an Arbitration Clause*, J. INT'L ARB. 65 (1989) and Stephen R. Bond, *How to Draft an Arbitration Clause (Revisited)*, 1 ICC INT'L CT. ARB. BULL. 14 (1990).

⁵⁸ Arbitrations growing out of a commercial contract often occur years after it was executed. There could be a real issue as to the continued availability of the IT specified by the contract after these lengths of time. Even if the IT required is still available, its use may no longer be practical. See *Issues When Using IT*, *supra* note 14, at 63.

⁵⁹ See *id.*

⁶⁰ See *id.* at 63–73 (discussing factors that should be considered when planning to use technology in arbitration).

⁶¹ Although the ICC does not mandate a particular use of technology, it certainly acknowledges that a panel would have the power to direct particular use. See *id.* at 64.

⁶² UNCITRAL Model Law, *supra* note 2, at art. 19(2); see also cases cited *supra* note 47.

⁶³ See UNCITRAL Arbitration Rules, *supra* note 41, at art. 15(1); AAA, *Commercial Arbitration Rules and Mediation Procedures*, *supra* note 2, at art. 16(1); ICC, *Rules of Arbitration*, *supra* note 31, at art. 15(1).

develop its own procedures for the arbitration so long as those procedures do not conflict with applicable law, the rules themselves, or the agreement of the parties.⁶⁴ And, as noted above, most countries require that arbitral panels ensure that the proceedings be conducted according to some minimum standards of fair play. Indeed, the obligation of equal treatment would seem at the very least to require that a panel ensure a technical aid be available to both parties, even if they do not have equal ability to use it.⁶⁵ Accordingly, absent an agreement of the parties, one party's use of a technical aid in developing or presenting its case should, in fact probably must, be subject to the control of the panel just like any other matters regarding the development and presentation of an arbitration.

The next and last question the panel needs to consider is really at the heart of the issue: to what factors should the panel look to determine whether it should permit or require the use of a technical aid? In other words, what standards are applicable to the use of technical aids in the arbitral process?

In many, perhaps most, respects the answer to this question is one of first impression. There are certainly general legal principles which impact a panel's considerations on these issues⁶⁶ but there is little or no specific guidance, either in U.S. law, or the most commonly employed arbitral rules, or, aside from the ICC Report, in the legal literature. And the answer is not dictated purely by legal concerns, although the legal issues previously discussed bear heavily on it. In addition, technical issues and efficiency of the arbitral proceedings must also be considered.

Certainly then at least the following factors, as may be and if appropriate, will enter into a panel's determination on whether to permit or require the use of any technical aid:

- The reason for the use of the technical aid.
- Whether the use of the technical aid advances the purposes of the arbitral process.
- Whether the use of the technical aid affects only one

⁶⁴ See, e.g., ICC, *Rules of Arbitration*, *supra* note 31, at art. 15(1). For a description of the effect of this provision, see BUHLER & WEBSTER, *supra* note 41, at 198–99.

⁶⁵ See *supra* text accompanying note 52 and p. 281.

⁶⁶ Namely those of legality of use, minimum procedural fairness, and, if applicable, equality of treatment.

party's development or presentation of its case or whether both parties' cases are impacted.

- Whether the technical aid will be used by or available to the panel.
- The cost of the technical aid and who will bear it.
- Each respective party's ability to effectively use the technical aid.
- Whether there are any technical issues presented by the use of the technical aid.
- Whether the use of the technical aid is permitted by and complies with applicable law.
- Whether the use of the technical aid may deprive a party of the minimal procedural fairness or equality of treatment required by any law applicable to the arbitration.

Let's consider each of them in turn.

The first two questions, the reason for the use of the aid and whether it advances the purposes of the arbitral process, are really part of the same issue. Inherent in any determination a panel may undertake to decide whether or not to permit or require the use of a technical aid is a balancing process, which must weigh the reasons for using the aid against the problems engendered by that use. A finding that an aid advances the arbitral process—for example, by reducing the cost or increasing the speed of the proceedings—or generally promotes efficiency in the process would certainly weigh in favor of permitting its use.⁶⁷ This should be the case in most circumstances. On the other hand, there is probably little reason to allow the use of any technology aid in the rare situation where its implementation cost substantially outweighs the benefits it produces in the administration of the arbitration, unless, of course, both parties desire to use it.

⁶⁷ It should be remembered that the purposes of the arbitral process—namely the reasons why the parties choose to arbitrate—may not be the same from arbitration to arbitration. Parties choose to arbitrate for a variety of reasons. Some do so because it is faster, some because it is private and confidential, some because of the ability to have a particular type of adjudicator, and so on. For a discussion of this phenomenon, see Soia Mentschikoff, *Commercial Arbitration*, 61 COLUM. L. REV. 846, 849–50 (1961). While some factors cut across all arbitrations—for example, reducing the cost or increasing the speed of the process—the context in which the arbitration arises may indicate that others are also important to the parties.

While the first two questions are two aspects of the same issue, the next question—whether the use of the technical aid affects only one party's development or presentation of its case or whether both parties' cases are impacted—raises two distinct issues. An aid can be used in the development of a party's case, in the presentation of that case, or in both. Alternatively, the use of an aid may affect only one party or it may affect both. Presumably, a party should be free, without the need to request panel permission, to use any aid in case development that does not materially deprive the other party of its ability to prepare or present its own case.⁶⁸ On the other hand, the use of an aid by one party which affects the presentation of both parties' cases should typically require the permission of the panel.⁶⁹

Whether the technical aid is to be made available to the panel is a critical question. It is very hard to envision a situation in which a panel should have access to a technology aid which is not equally accessible to both parties.⁷⁰ Accordingly, it is probably a safe general rule that any technical aid made

⁶⁸ As noted above, an example of such an aid would be sophisticated document management software to process and categorize produced documents. *See supra* note 17 and accompanying text.

⁶⁹ Technology used to present evidence is an example of aid which can affect both parties' presentation of their cases. A panel, when asked to permit the use of a technical aid for the presentation of evidence, must, in addition to the other issues of importance, ensure that the aid is reliable. The panel, for example, should inquire, among other things, whether the aid (i) fairly, accurately, and completely presents the evidence in question and (ii) allows the other side a full and fair opportunity to cross-examine the witness in question. A specific example of such an aid is real-time video. This aid is useful when a witness refuses, and cannot be compelled, to attend the hearings in person. In these situations the witness will be in a remote facility from the panel; the attorneys can be either at the panel's location or that of the witness. The advent of streaming video over the Internet has significantly reduced the cost of video testimony, but it is still not inexpensive, requiring two video conferencing facilities and high speed Internet capability. In addition to these cost issues, the panel must also consider procedures to ensure the usefulness and reliability of remote video testimony. For example, the representatives of both parties will probably need to be present at the witness location to give both parties comfort that the witness was not improperly coached or otherwise influenced during his testimony. A copy of the documents to be used by the witness during his testimony need to be on site or a procedure in place for electronically transmitting them to, and printing them at, that location. For a general discussion of the use of video conferencing in arbitral proceedings, see *Explanatory Notes on the Standards, in USING TECHNOLOGY TO RESOLVE BUSINESS DISPUTES*, *supra* note 8, at 99, 112–13, and *Operating Standards for IT*, *supra* note 11, at 86.

⁷⁰ The discussion of real time reporting systems, *infra* text accompanying notes 87–93, contains an example of these circumstances.

available to the panel by one party must be made available to the other party, at least for the purposes of dealing with the evidence presented by the first party. A much more difficult question is presented if the other party (that is, the party who is not the one proposing to use the technical aid in the first place) requests that it also be allowed to use the aid for its own case.⁷¹

Cost, the next issue on the list, may or may not be a factor that needs to be considered. Some technical aids, such as e-mail and use of the Internet, are virtually free provided each party has the minimal technology needed to use them. Others, such as video testimony, can involve significant costs. Clearly, an arbitrator should be reluctant to authorize the use of an aid if its cost is disproportionate to either the amount in controversy or the value to be gained by its use. Less clear is the situation where the cost, though justifiable, is more than one party is willing to, or can, bear.⁷²

Cost actually is just one factor that may affect a party's ability to use a given technology. Access, willingness, technical sophistication, existing technical resources, language, and location (both of the hearings and of each party) are some of the other factors which may also do so. Is the fact that one party is unable to use the technology in question a decisive factor in the decision as to whether to permit its use by the other party? The answer should be that, while it is a factor to consider, it may well not be a decisive factor. And, in fact, the reasons for the inability may mitigate against it being considered as a factor at all. Thus, a party should not be precluded from using a readily available,

⁷¹ For example, again consider the example of real-time video described *supra* note 69. It is one thing for the panel to ensure a full and fair cross-examination opportunity; it is quite another to require that the party proposing to use the system make it available to the other party for the presentation of that party's witnesses.

⁷² Again consider the example of remote video testimony described *supra* notes 69 and 71. A difficult issue is presented if both sides have remote witnesses unwilling to travel to the arbitration, but one party can afford a remote video hook up while the other can not. Is the panel justified, as a condition of permitting the first party to use video testimony, in requiring that it provide the video facilities to the other party for its witnesses? The easy answer is to do so and then include the total cost for all witnesses as part of the costs of the arbitration that the panel can then allocate as appropriate in its final award. But, what if the latter party is a claimant with limited resources and it is far from clear whether it will be able to pay those costs if the arbitration goes against it?

widely used, relatively inexpensive technical aid, solely because the other side refuses to use it.⁷³

Among the technical issues that are presented by the use of the technical aid are security, privacy,⁷⁴ reliability,⁷⁵ and compatibility.⁷⁶ Some technical issues are decisive. Absent very extraordinary circumstances, it is hard to envision a valid reason for approving the use of a technical aid that is either not sufficiently secure or does not provide for the appropriate privacy

⁷³ For an example of such an aid, see the discussion on web-filing *infra* notes 101–13 and accompanying text.

⁷⁴ Security and privacy are related but distinct issues. The security of a system is its ability to withstand unauthorized attempts to access it for whatever purpose. The definition of “security” of a computer:

In the computer industry, refers to techniques for ensuring that data stored in a computer cannot be read or compromised by any individuals without authorization. Most security measures involve data encryption and passwords. Data encryption is the translation of data into a form that is unintelligible without a deciphering mechanism. A password is a secret word or phrase that gives a user access to a particular program or system.

What is Security? - A Word Definition From the Webopedia Computer Dictionary, <http://www.webopedia.com/TERM/s/security.html> (last visited Oct. 17, 2006).

Privacy of a system, on the other hand, relates to the ability of user of the system to control access to the data stored on it to people authorized to see it. It has been defined as:

The degree to which an individual can determine which personal information is to be shared with whom and for what purpose. Although always a concern when users pass confidential information to vendors by phone, mail or fax, the Internet has brought this issue to the forefront. Web sites often have privacy policies that stipulate exactly what will be done with the information you enter.

Privacy Definition: TechEncyclopedia from Techweb, <http://www.techweb.com/encyclopedia/defineterm.jhtml?term=privacy&x=31&y=6> (last visited Oct. 17, 2006).

From these definitions, it follows that a system which is not secure cannot have adequate privacy, but a secure system may or may not have adequate privacy.

In the context of arbitral proceedings, it should be noted that applicable privacy protocols may allow the participants in the arbitration (the parties, the Panel, and the administrating body) access to some data, but not to all. See *Issues When Using IT*, *supra* note 14, at 67, 71.

⁷⁵ Note that reliability may mean different things depending on the technical aid in question. Thus, in the context of an electronic document, it means whether or not there is protection from unauthorized alteration. See *supra* note 14. For a technology used to display evidence, reliability means that the aid must do so fairly, accurately, and completely. If the technology is unreliable—if, for example, in the case of video transmission of testimony, the transmission is intermittent or it can not be assured that the witness’s testimony is unaffected by the process—the panel must either decline to allow it to be used or require that steps be taken to assure that it is reliable.

⁷⁶ See *Issues When Using IT*, *supra* note 14, at 67.

controls.⁷⁷ Also, an aid which is not reliable, either because it works inconsistently or unpredictably or because it does not produce reliable data,⁷⁸ should not be used. On the other hand, issues such as compatibility usually go to the parties' relative ability to use or exploit the technology in question and should be judged accordingly.

That the technical aid must be legal at first glance seems to be obvious. The panel clearly should not authorize the use of any procedure, technical or not, that would be illegal for the panel to do so.⁷⁹ But the concept is not quite so simple in practice. First, it involves two different and distinct issues. One is whether the use of the aid is permitted by the arbitral rules and national laws applicable to the arbitration. The other is whether the parties, and the panel, if appropriate, have the right to use the aid in question. This second question is more a matter of contract than it is a matter of legal or rule interpretation.

With respect to the first question, the panel must consider both the rules of the appropriate administering body, if any,⁸⁰ as

⁷⁷ Although they may be decisive—security, and, by extension, privacy—are not absolute tests. No system is absolutely secure. The applicable test is rather: is the security reasonably sufficient under the circumstances? See *infra* note 97 for the security issues involved in the use of e-mail for confidential communications.

⁷⁸ See *supra* notes 14 and 75 for further discussion on technological reliability.

⁷⁹ Different countries may regard various technical aids differently. Access to Internet and e-mail services, available in Western countries without restriction, are monitored and regulated in countries like China. See Howard W. French, *Chinese Discuss Plan to Tighten Restrictions on Cyberspace*, N.Y. TIMES, Jul. 4, 2006, at A3. Similarly, the ability to gather evidence varies significantly from country to country. See Jacob Dolinger & Carmen Tiburcio, *The Forum Law Rule in International Litigation—Which Procedural Law Governs Proceedings to be Performed in Foreign Jurisdictions: Lex Fori or Lex Delegationis?*, 33 TEX. INT'L L.J. 425, 433–34 (discussing the collection of evidence in foreign jurisdictions).

⁸⁰ An additional issue is presented in *ad hoc* arbitrations, arbitrations which are not administered by any administering body. *Ad hoc* arbitrations present many challenges, both to the parties and the panel. For an example of some of them, see *Advanced Micro Devices, Inc. v. Intel Corp.*, 885 P.2d 994 (1994) (discussing the scope of an arbitrator's powers in awarding relief). In particular, there are no administering body arbitral rules and the procedures that are required or permitted to be used by the panel are only those set forth in applicable law or agreed upon by the parties. Should a panel in an *ad hoc* arbitration consider proposing to the parties at the beginning of the arbitration a set of procedural protocols? If so, how detailed on the use of technology should they be? For an example of the difficulty in fashioning *ad hoc* rules, see *Kuwait v. American Indep. Oil Co.*, 66 I.L.R. 518, 521–24 (Arbitration Trib. 1982) (discussing, among other things, fashioning rules to determine the applicable law, contractual obligations of the parties, and indemnification rights). The ICC Report generally contains suggestions as to proposed rules for the use in the arbitral process of currently available technologies.

well as the law of the applicable jurisdiction. While the identity of the appropriate administering body is usually fairly obvious, the determination of the identity of the country whose laws apply to the arbitration, or, more to the point, to the issue of the use of the technical aid in question, may not be so simple. Many arbitrations, particularly in the international context, involve multiple jurisdictions. Each party may be from a different country, the hearings may be in a third country, the administering body from a fourth, the citizenship of the panel of one or more yet still different countries, and the citizenship of the witness(es) in question of still more different countries. Possible choice-of-law analyses can be varied and complex.⁸¹ It is easy to conclude that the panel should not authorize any aid at the hearings the use of which is illegal in the site of the hearings. But what about an aid which is illegal at the site of the hearings, but used only by one of the parties in its home country where such use is legal? Or, one that is legal at the hearings' site, but illegal at the location of a witness who is to testify remotely? Clearly, the general absolute rule may, in practice, be less so.

The second issue pertaining to the legality of the aids use arises from the fact that many, if not most technical aids, involve the use of computer software, databases, or other materials which are generally provided by their suppliers under license.⁸² Does the panel have the obligation to investigate whether the parties have the right to use the technical aids they propose to use, or, perhaps more to the point, whether the parties have the right to give the aid to the panel to use? That a party may regard a panel's inquiry into the rights that party has to use its own software is, to say the least, well beyond the panel's authority, at least for those instances where there is no prior indication of a cause for concern, is understandable. Whatever may be the

See Operating Standards for IT, supra note 11, at 75–87.

⁸¹ Even if there are only two countries involved—the location of the hearings and the country where enforcement is sought—there is not uniform agreement as to the choice-of-law determination. *See supra* note 32.

⁸² Computer software, data bases, and the like are typically not sold but distributed under license. The basis for the license is the copyrights and other intellectual property contained in the licensed product. These licenses typically contain strict provisions on the number of copies that can be made of the licensed product and in some cases also restrict where and how the copies can be used. *See* 1 RICHARD RAYSMAN AND PETER BROWN, *COMPUTER LAW* §§ 7.01–7.43 (perm. ed., rev. vol. 2006) (discussing some of the more common provisions in such licenses and the issues involved in their enforcement).

panel's inclination to do so for aids that only the parties use, prudence dictates that it take whatever steps it deems necessary to satisfy itself that it has the right to use any aid given to it.⁸³ Generally speaking under the law of most nations, all knowing users of infringing software may be held liable for infringement.⁸⁴

The last consideration is whether the use of the technical aid deprives a party of the minimal procedural fairness or requirement of equal treatment that applies under the arbitral rules in question and in the country whose law is applicable to the arbitration.⁸⁵ In all events, the technical aid *must* pass whatever test is used. A panel should never allow one party to use any procedure the result of which deprives the other party of the minimal procedural fairness or equal treatment required by applicable law or arbitral rule.

What then can we learn from this discussion? More to the point, can it be summarized in a meaningful way? No complete set of rules can be set forth, but there are some general basic principles, namely:

- 1. The panel has inherent power to regulate the use of any technical aid proposed for use in an arbitration.
- 2. No technology should be permitted if (i) its use involves an unreasonable security risk, (ii) applicable privacy protocols can not be, or are not, implemented, (iii) it is unreliable, (iv) its use deprives the other party of the minimal procedural fairness or equal treatment required by, or its use is otherwise prohibited by, the law of any jurisdiction applicable in the circumstances, or (v) it is prohibited by the rules of the applicable arbitration administering body, if any.
- 3. Subject to principle 2, the panel should permit the use of a technical aid if the advantages of its use in the arbitral process outweigh the disadvantages of such use,

⁸³ See *Issues When Using IT*, *supra* note 14, at 72.

⁸⁴ See generally, *e.g.*, 1 JAY DRATLER, JR. & STEPHEN M. MCJOHN, INTELLECTUAL PROPERTY LAW § 2.01 (perm. ed., rev. vol. 2006) (regarding patent infringement); 2 JAY DRATLER, JR. & STEPHEN M. MCJOHN, INTELLECTUAL PROPERTY LAW § 6.01 (perm. ed., rev. vol. 2006) (regarding copyright infringement).

⁸⁵ As with the issue of legality, the determination of which country's law applies to determine the applicable test of procedural fairness involves a potentially complex choice-of-law analysis. Possible laws of jurisdictions which may be applicable are those of the location of the hearings, the location(s) of the parties, and the location(s) where the award will be sought to be enforced. The first is probably the most likely one for the panel to use, however, and it may be impossible or impractical for it to even consider the last.

but may impose such conditions on such use as the panel deems necessary and reasonable.

- 4. Subject to principle 2, the panel should be allowed on its own motion to require such use if such advantages outweigh such disadvantages and the costs of implementation are not unreasonable in the circumstances.
- 5. Among the factors a panel should consider in making the balancing test set forth in principles 3 and 4 are (i) whether the aid advances a purpose of the arbitral process, (ii) the aid's cost of use, (iii) the effect of the aid on the other party's ability to prepare or present its case, (iv) the ability of the other party to use the aid in question, (v) any technical issues arising from its use, and (vi) any rules bearing on the issue in question of the applicable arbitration administering body.
- 6. Subject to principle 2 (i)–(iv), the rules promulgated by an arbitral administering body should be able to require or permit the use of any technical aid.
- 7. Subject to principle 2, a party should be allowed, with or without advance panel permission, to use any technology it desires in the preparation of its case.

CASE STUDIES

Let us now consider application of these principles. We have already discussed some of the implications in the use of video conference technology for the presentation of testimony.⁸⁶ We will consider three other case studies. They demonstrate the wide variety of issues the use of technology can present to an arbitral panel. They were also chosen because they represent a case where the aid is proposed by one of the parties, a case where it is proposed by the panel, and a case where the administering body has adopted it as part of its rules. The three uses we will look at are (1) the use of real time computer display of testimony, (2) the use of e-mail for party-panel communications, and (3) the commencement and conduct of an arbitration in whole or in part by electronic means over the Internet.

⁸⁶ See *supra* notes 69, 71–72.

A. *Real Time Computer Display of Testimony*⁸⁷

Everyone is familiar with the traditional role of a court reporter in an arbitral hearing. The reporter listens to the testimony and simultaneously records it, usually by way of a stenographic machine, either on a paper tape, computer disc, or both. The testimony is subsequently transcribed by the reporter into the familiar transcript form. If a question needs to be repeated, the reporter must read it off the paper tape or disc display. If either a party or the panel wishes to have prior testimony read, it may or may not be accessible in real time.⁸⁸

On receipt, careful counsel typically will review the transcripts for errors. Corrections are not unusual, but, because the review is conducted several days after the day of the testimony, disputes as to the actual wording may and do occur. The process can take well over two weeks, unless expedited transcripts are ordered from the reporter with a resulting extra charge.

A number of the issues and problems inherent in traditional transcribed testimony may be eliminated through the use of real time computer display of testimony or, as it is more commonly known, real-time transcription.⁸⁹ This procedure involves the use of computer laptops to display the testimony as it is recorded. Basically, the reporter must record the testimony to a computer disc as well as to paper tape, and the computer translates the stenographic shorthand code in which the testimony is recorded to draft plain text in a transcript format, records it to a disc, and the resulting information is displayed in real time on one or more

⁸⁷ Computer display of testimony is but one way a computer can be used to display evidence at hearings. For a case in which the admissibility of such evidence was considered, see *Verizon Directories Corp. v. Yellow Book USA, Inc.*, 331 F. Supp. 2d 136 (E.D.N.Y. 2004).

⁸⁸ Obviously, the testimony can be immediately accessed if the transcript for it has already been created by the reporter. It will also likely be available, but on disc, if the reporter records to disc, either by itself or with a paper tape. Its immediate availability in other cases is not certain.

⁸⁹ The pros and cons of real-time transcription and display of testimony before a jury have been considered by the courts, both in criminal cases, *e.g.*, *Tavares v. United States*, 914 F. Supp. 732, 733 (D. Mass. 1996), and civil ones, *e.g.*, *Phan v. Trinity Reg'l Hosp.*, 3 F. Supp. 2d 1014 (N.D. Iowa 1998). The chief concerns these courts have expressed (confusion regarding difficult spellings, undue weight to the displayed testimony, and the raw form of transcript) have much less bearing in an arbitral setting than in a trial before a jury, but one or more may be issues to be considered by a panel in how to implement the aid.

laptop displays in the hearing room. The displayed testimony is usually made available to both parties' counsel and the panel. It can be followed in real time while the witness is testifying. Corrections can be made on the spot. If a party or the panel wishes to review prior testimony, they can scroll through the day's, or any prior day's, testimony. Indeed, they may use key word or phrase search algorithms to find specific testimony quickly and easily. All participants have corrected testimony immediately available to them.

The cost of real time computer display of testimony over and above the base cost of the reporter is not great, at least as a percentage of the base cost. The total cost of transcribed testimony, however, is not insignificant.

What if one party wants a transcript and is willing to pay for it while the other party is unwilling to pay for it? Under these circumstances with a traditional transcript, a panel should have no difficulty requiring that the transcript be provided to both itself and the other party. Nor would the panel be subject to much criticism if it included the transcript's cost in the costs of the arbitration to be taxed as part of the final award. But what should it do if the party which wants the testimony to be transcribed also has paid for real time computer display of testimony? Is that party required to provide it to the other party or the panel? And does it make a difference if the party ordering the transcript does wish to provide real-time computer display of testimony to the panel, or the panel desires to have access to it?

Let's see how the principles work in practice for the case of real time computer display of testimony. First, there seems to be no issue with respect to the legality of use of this aid or that it is secure, private, and reliable.⁹⁰ It is also clear that this technical aid advances a number of the purposes of the arbitral process. It aids in the hearing process, making it more efficient and, in the long run, cheaper. There is thus little doubt that a panel should not forbid its use; the pertinent question is how should it condition that use when one party refuses to share in its cost?

⁹⁰ Actually, its security and privacy are not significantly greater or significantly less than normal paper transcripts. On the other hand, as the displayed transcript is raw uncorrected text, its "reliability" is somewhat less than that of reviewed and corrected paper transcripts. See *supra* note 89 for a discussion of the concerns raised because of this difference in the context of jury trials. Nevertheless, because this is a known factor with which to deal, an arbitral panel should have no difficulty in finding this aid is sufficiently reliable to allow its use.

In reality, two distinct circumstances are presented. The first is when only the party paying for the aid is to have access to it. The second is when the panel will also have access to it, either because the party paying for it has offered it or because the panel has independently required it.

The second case is the easier case. It is fundamental that both parties must have full and complete access to any material provided to the panel by either party. Of course, one could argue that both sides do have access to the transcript provided to the panel, just at different times, but such an argument should certainly fail under any test of minimal procedural fairness. Accordingly, if provided to the panel, real time computer display of testimony must also be provided to the other party.⁹¹

The analysis for the first case is more complicated. On the one hand, it is hard to argue that the use by one party of an aid which is used only to read the testimony as it is being transcribed is enough, without more, to deprive the other party of minimal procedural fairness. Such use, by itself, would arguably not affect the other party's ability to put on its case; rather, it would only aid the party using it. One might argue that such use would be analogous to the situation where one party pays for expedited transcript and the other party does not. There would not seem to be any fundamental unfairness for the paying party to receive the transcript before the non-paying party. Naturally, a panel might be properly skeptical of a party that claimed it would use real time computer display of testimony only to see the transcript as it was being generated. The panel would be justified in concluding that, inevitably, a party would probably read from the

⁹¹ In these circumstances, should the panel condition provision of this aid on the reimbursement of its cost? Since it is presumed that the panel has already determined that it would deprive the other party of fundamental procedural fairness to make it available to the panel but not to that party, the answer must be no. However, nothing would prevent the panel from including those costs in the costs of the arbitral proceeding that may be apportioned in the final award at the end of the arbitration. See, e.g., AAA, *Commercial Arbitration Rules and Mediation Procedures*, *supra* note 2, R. 50 which provides:

Expenses - The expenses of witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the arbitration, including required travel and other expenses of the arbitrator, AAA representatives, and any witness and the cost of any proof produced at the direct request of the arbitrator, shall be borne equally by the parties, unless they agree otherwise or unless the arbitrator in the award assesses such expenses or any part thereof against any specified party or parties.

Id.

display into the record or otherwise use it in a way that affected the testimony as it was being given.

If the panel did conclude that use which affected testimony was inevitable or if such use was in fact permitted, the panel should still permit the use of real time computer display of testimony if the advantages of its use in the arbitral process outweigh the disadvantages of such use. This involves a balancing of a number of factors. We have already concluded that the use of this aid advances a purpose of the arbitral process. There is admittedly, if the aid is not available to one party, a significant adverse effect on its ability to present its case. But there is no practical reason why the non-paying party could not use it; rather that party is just refusing to, or cannot afford to, pay for it. The key factor is thus cost of the aid. While the total cost of the aid is significant, the actual marginal cost of the use of the aid is minimal.⁹²

Accordingly, in the first case, it would be appropriate for the panel (i) to permit the use of the aid by the party requesting it, (ii) to require that the aid be supplied to the other party, but (iii) to condition the other party's use of the aid on its payment of the aid's marginal cost. Again, total cost could, if permitted, be apportioned in the final award. Incidentally, under these circumstances the aid could then also be available to the panel.

B. *E-mail for Party-Panel Communications*

Ex parte communications between one party and the panel are inherently suspect. Such communications may be evidence of (i) an award which was procured by corruption, fraud, or undue means, (ii) evident partiality or corruption in the panel, or (iii) other misconduct or misbehavior by which the rights of a party may have been prejudiced⁹³ and, as such, grounds for vacation of an award.⁹⁴ They are forbidden by the rules of some arbitral administering bodies, which often require that all party

⁹² The marginal cost of an aid is the incremental cost of its use over the cost of the proceedings if it had not been used. In the case of real time computer display of testimony, the marginal cost is the incremental charge for only the display of the testimony (plus the cost of additional required equipment, if any, whether by purchase or lease). It does not include the cost of the underlying transcription services.

⁹³ See *supra* notes 23–24.

⁹⁴ *Id.*

panel communications be either at the hearings themselves or through the administrator.⁹⁵

Requiring that all party-panel communications be made through the administrator is a sensible way of preventing suspect *ex parte* panel communications, but it is not the only way. And it is not without its own problems. Principal among them is that such a requirement slows down the communications process, potentially significantly so. In this Internet age, filings and other requests by the parties to a panel are often served at the end of the business day, if not later. Particularly in international arbitration, the parties, the panel, and the administrator may be in multiple time zones. If all service must be made on the administrator for forwarding to the panel, and likewise for orders and other communications from the panel to the parties, there is a very real possibility of losing two days in the very best of circumstances.⁹⁶

In addition, particularly if there is a format change—such as fax to e-mail or vice versa—there is a risk with any retransmission procedure that the transmittal will be corrupted or parts of it lost. Finally, in the worst case, the transmittal could be lost or sent to the wrong recipient.

One technology which can solve these problems is the use of direct e-mail for panel-party communications. Surprisingly, relatively simple protocols are necessary to ensure the reliability of the communications, as well as to guard against improper *ex parte* communications. Actually, only one is necessary, namely: all e-mail communications between any party and the panel must be simultaneously sent to the other party and to the administrator. Because the communication is simultaneously made available to the panel and the other party in the case of party originated transmissions and to both parties in the case of those originated from the panel, no *ex parte* communication is possible. In all cases, the panel's or the administrator's copy

⁹⁵ See, e.g., AAA, *Commercial Arbitration Rules and Mediation Procedures*, *supra* note 2, R. 18.

⁹⁶ For example, if the parties' filings are delivered to the administrator after the close of business at the administering body's offices, they will not be delivered to the panel until the next day, at the earliest. The same would be true for panel-to-party communications sent under the same circumstances. The whole cycle would be thus delayed by two days. And this assumes best case circumstances. It does not include delays arising from the administrator's schedule (either caused by his work itself or his time out of the office) or his potential loss of the transmittal.

provides a reference copy if a question later arises as to the existence and the substance of the transmittal or whether it was altered. While e-mail is not totally secure and private, it is generally considered sufficiently so, for example, to maintain the confidentiality of privileged communications.⁹⁷

There is no doubt that the parties could agree to use this procedure.⁹⁸ The more interesting question is whether a panel can impose it on its own motion. Even though the use of this procedure would seem to be a win-win proposition, most arbitral rules would seem to prohibit a panel from *requiring* the parties to adopt it.⁹⁹

There is little reason to support that prohibition, at least for the vast majority of arbitrations. There seems little doubt that the procedure is likely neither to be prohibited by any applicable law nor run afoul of any minimum standard of procedural fairness or requirement of equal treatment.¹⁰⁰ The advantages of use of this e-mail procedure in the arbitral process clearly outweigh the disadvantages of its use, and the costs of implementation are not unreasonable in these circumstances. The advantages have already been discussed; there are few, if any, disadvantages. Cost is minimal, if not non-existent. Indeed, unless one of the parties does not have effective access to e-mail, there seems to be no reason not to use the procedure.

⁹⁷ While concern has been voiced from time to time about the level of security inherent in unencrypted e-mail, the general consensus is that it is sufficiently secure enough such that an attorney who uses it to communicate with his or her client does not violate the canons of ethics. See, e.g., Helen W. Gunnarsson, *Should Lawyers Use E-Mail To Communicate With Clients?*, 92 ILL. B.J. 572, 572-73 (2004). Nevertheless, additional measures are easily adopted if more security is required. If the concern goes to ensuring the reliability of the contents of the e-mail, to ensure that messages are not changed after they are sent, all substantive messages may be sent in pdf format. If the security of the transmission is itself a concern, all e-mails may be sent encrypted. See *Issues When Using IT*, *supra* note 14, at 71; *Operating Standards for IT*, *supra* note 11, at 84.

⁹⁸ See, e.g., AAA, *Commercial Arbitration Rules and Mediation Procedures*, *supra* note 2, R. 39.

⁹⁹ *Id.*

¹⁰⁰ An issue of fairness only arises if the parties have unequal access to Internet e-mail services. This is not likely in today's environment; but, it is possible, for example, either because of a limitation on attachment size or governmental restrictions on access to the Internet. In the first case, the panel can adopt a rule restricting the size of permitted attachments. There may not be a solution for the second and, if so, this may be a circumstance which may prevent the panel from adopting an e-mail communication rule.

C. *Internet or On-Line Dispute Resolution*

Several administering bodies have adopted, or attempted to adopt,¹⁰¹ procedures which provide on-line dispute resolution. Before we address an actual example, we should define what we mean by on-line dispute resolution. A definition this author used

¹⁰¹ One of the first was the so-called Virtual Magistrate Project. The Virtual Magistrate Project was first set up in 1996. Its initial purpose was to be the expeditious resolution of computer network related disputes, which would be filed electronically. Neutrals with experience in both law and computer networks would be enlisted to serve as the Virtual Magistrates. They would be selected jointly by the American Arbitration Association and the Cyberspace Law Institute. The program's goal was to resolve complaints within seventy-two hours of filing. Unfortunately the Virtual Magistrate resolution mechanism was not, to say the least, widely used. It resolved only one dispute. For a fuller history of the Virtual Magistrate Project, see SOLOVAY & REED, *supra* note 32, at 2-6 to 2-10.

Currently, arguably the most widely used on-line dispute resolution is the rules established by ICANN for the resolution of domain name disputes. While ICANN itself does not administer disputes under these rules, a number of other bodies do including WIPO and the AAA. WIPO's procedures are typical. The parties submit the demand and response to WIPO for forwarding to the panel by e-mail (with a copy by post), no hearings are allowed, and the panel's decision is made on the papers. The award is sent to the parties electronically and posted publicly on WIPO's web site. Some might argue that these procedures are not true on-line arbitration; but, it is reasonable to conclude that enough activity does take place on-line for them to qualify. For a fuller description of the WIPO's domain name procedures see <http://arbitrator.wipo.int/domains/>.

Both the AAA in its Webfile procedures (Supplementary Procedures for Online Arbitration, <http://www.adr.org/sp.asp?id=22003> (last visited Feb. 4, 2007) [hereinafter Supplementary Procedures]) and the ICC through its NetCase platform, see Mirèze Philippe, *NetCase: A New ICC Arbitration Facility, in USING TECHNOLOGY TO RESOLVE BUSINESS DISPUTES*, *supra* note 8, at 53, 53-54, have on-line filing and/or communications protocols in place. The ICC's NetCase platform has been described by the ICC as:

[A]llowing arbitrations to be conducted on-line 24 hours a day from any computer in the world. . . . All participants in an arbitration can now keep in touch through a secure website hosted by ICC. Correspondence and documents can be posted on NetCase rather than sent by the traditional methods of courier, post or fax. In large arbitrations particularly, the amount of documents moved around traditionally can become burdensome. . . . Some features of the service:

NetCase provides details of the parties and the arbitrators, the procedural calendar and a statement of the current financial situation.

It includes forums where participants can exchange views;

Security features include passport protection and sophisticated encryption;

The storage system allows participants to sort documents by date, author or title; The system is standardized for ease of use;

The system is available for no additional charge.

International Chamber of Commerce, <http://www.iccwbo.org/iccfaja/index.html> (last visited Oct. 22, 2006).

several years before, but which, it is believed, is still applicable, defines on-line dispute resolution as, “[a]ny dispute resolution mechanism where all, or at least a significant portion, of the communications between the parties, on the one hand, and the tribunal, on the other, take place remotely through electronic means.”¹⁰²

The choice of this definition is not without certain results. Note, first, that it does not require on-line hearings. Indeed, it does not speak to the nature of the hearings, or if hearings are required at all. Many on-line dispute resolution programs dispense with hearings¹⁰³ or make them optional.¹⁰⁴

Secondly, the subject matter of the dispute is not limited to “on-line” disputes, that is, those arising from e-commerce and the Internet. The unspoken assumption of some early on-line resolution procedures, such as the Virtual Magistrate Project, was that on-line resolution was best used for disputes between parties that were familiar and comfortable with on-line technology—hence the preference for on-line subject matters. With the widespread use of the Internet, it is safe to conclude that there is no longer the need for that preference.

Thirdly, the definition does not require any specific electronic technology. Thus, a dispute resolution mechanism that included submissions, communications, and findings transmitted by e-mail over the Internet would certainly fit within the definition. But, audio or streaming video over the Internet would also fit. If so, should the definition also encompass regular teleconferencing? Clearly, there are various means of communication; all should be included within the definition.

Lastly, there is no geographic component to the definition. The parties and the panel need not be geographically distant from each other. There are many instances where the desirability of using on-line dispute resolution does not depend on the location of the participants.

As is apparent from the above discussion, on-line dispute resolution can be considered to cover a wide range of procedures, everything from only party-panel communication by email¹⁰⁵ to

¹⁰² ARBITRATION NOW: OPPORTUNITIES FOR FAIRNESS, PROCESS RENEWAL AND INVIGORATION 71 (Paul H. Haagen ed., Am. Bar Assoc. Press 1999).

¹⁰³ See *supra* note 101.

¹⁰⁴ See *infra* text accompanying notes 109–11.

¹⁰⁵ The previously discussed use of e-mail for party-panel communications is

full on-line dispute resolution. As previously noted, one currently available example of full on-line resolution procedures is the AAA's "Webfile" procedures.¹⁰⁶ The purpose of these procedures is "to permit, where the parties have agreed to arbitration under these [Webfile] Supplementary Procedures, arbitral proceedings to be conducted and resolved exclusively via the Internet."¹⁰⁷ They provide that party filings, as well as most panel-party communications including the award itself, be made on-line. Unless requested by a party and agreed to by the panel, there will be no in person hearings and the award will be made solely on the previously web filed party submissions.¹⁰⁸

Of significance to the issues under consideration here, however, are the conditions under which these Webfile Supplementary Procedures are available, or required to be used, for an arbitration. The Webfile Supplementary Procedures in essence require the active knowing consent of both parties before the Webfile Supplementary Procedures may be applicable to a dispute.¹⁰⁹ Even if the parties have agreed in their application,

another example, perhaps modest, of on-line dispute resolution.

¹⁰⁶ Supplementary Procedures, *supra* note 101; see also *American Arbitration Association Unveils New AAA WebFile Online Filing System*, <http://www.adr.org/sp.asp?id=21905> (last visited Feb. 4, 2007).

¹⁰⁷ Supplementary Procedures, *supra* note 101.

¹⁰⁸ For a more detailed description of the AAA's Webfile Supplementary Procedures, as well as other AAA on-line initiatives, see Debi Miller Moore, *ODR at the AAA-Online Dispute Resolution in Practice*, 38 TOL. L. REV. (forthcoming 2006).

¹⁰⁹ See Supplementary Procedures, *supra* note 101, which provides:

1. Agreement to Arbitrate under these Supplementary Procedures

a. The parties shall be deemed to have made these Supplementary Procedures a part of their arbitration agreement whenever they have provided for arbitration by the American Arbitration Association (the "AAA") under its Supplementary Procedures for online Arbitration. These Supplementary Procedures may also be used, by agreement of the parties and Arbitrator, in arbitrations initiated under other sets of rules. The Supplementary Procedures and any amendment to them shall apply in the form in effect at the time of commencement of the arbitration. The parties, by agreement in writing, may vary the procedures set forth in these Supplementary Procedures.

b. The Supplementary Procedures are supplemental to the AAA's Commercial Dispute Resolution Procedures, or any other set of applicable AAA rules, which shall remain applicable except where modified by the Supplementary Procedures.

c. The AAA may decide that an arbitration shall not be conducted under the Supplementary Procedures where a party lacks the capacity to participate in the arbitration in accordance with these Procedures, or where the AAA otherwise finds, in its discretion, that an arbitration should not be conducted under these Procedures. In the event that the AAA makes such a

the AAA may decide that the arbitration should not be conducted under the Webfile Supplementary Procedures, essentially for any reason whatsoever.¹¹⁰

There is little doubt that an administering body such as the AAA can make an on-line dispute resolution mechanism like the Webfile Supplementary Procedures available to parties that by their mutual agreement wish to use it. Questions more pertinent to the topics under consideration here concern the hypothetical situation where only one party wishes to use it or where the panel mandates its use without the agreement of the parties. Could and should arbitral rules provide for optional or mandated on-line dispute resolution in these circumstances and, if so, what should the scope of those procedures be?

Recall that on-line dispute resolution may encompass many types of procedures. It may include only the on-line filing of the parties' submissions, the award, and other communications between the parties and the panel. It may extend to include on-line hearings by web-cast. Or, it may, like the Webfile Supplementary Procedures, assume that the matter can be resolved "on the papers" and without hearings. The first case is essentially party-panel e-mail communications and considered above. The last case involves a party's right to a hearing. If done without the party's consent, the abrogation of the right to a hearing likely implicates a jurisdiction's rules on minimal procedural fairness. If so, for this last case the answers to the questions we are considering are easily arrived at.

Accordingly, let us consider as this case study a hypothetical set of proposed arbitration rules similar to the Webfile Supplementary Procedures, *except* that they provide for on-line web-cast hearings and are applicable either if elected by either party in its first submission or if the panel, on its own motion, orders them. Let us also assume that the normative question has been answered affirmatively; that is, let us assume that the hypothetical administrative body has decided that this set of

determination, the arbitration shall be conducted in accordance with the Commercial Dispute Resolution Procedures or other applicable AAA rules.

d. By agreeing to the Supplementary Procedures, the parties also agree to the Portal Terms in effect at the time of commencement of the arbitration.

e. When the parties agree to arbitrate under the Supplementary Procedures, they thereby authorize the AAA to administer the arbitration.

Id. at Procedure 1.

¹¹⁰ *See id.*

rules is desirable and wishes to implement them.¹¹¹ What impact do the basic principles have in these circumstances?¹¹²

Principle 6 would permit the administering body to promulgate these rules unless (i) their use involves an unreasonable security risk, (ii) applicable privacy protocols can not be implemented, (iii) the web-filing procedures are unreliable or, (iv) the rules deprive a party of the minimal procedural fairness or equal treatment required by applicable law or are prohibited by that law. Each of these exceptions needs to be considered by the administering body in either or both the rules themselves or the design and implementation of the on-line site.

Security is, in significant part, but not exclusively, a site design question. To be sure, the site must be constructed with appropriate safeguards to ensure against unauthorized access or tampering. In addition, however, the administering body may wish to cover the security of transmissions between the parties or the panel, on the one hand, and the on-line dispute resolution site, on the other. If so, the rules should require, and the site be constructed to only accept, transmissions which have been encrypted to a standard appropriate for such use.

Acceptable privacy, in this context, would require not only that the site be protected from unauthorized access—basically a security issue—but also that communications posted on the site be available only for the intended recipients. Thus, transmissions between a party and the administrator may not be intended for the panel, and transmissions between the panel and the administrator may not be intended for the parties. Protocols and site procedures need to be incorporated to make sure that messages do not run astray.

¹¹¹ For example, the hypothetical administrative body might have concluded that such an on-line procedure is an appropriate alternative method of dispute resolution for simple claims or those whose amounts in controversy do not justify the cost of in-person hearings. One benefit of an on-line filing procedure, even if the hearings are to be in person, is that it can provide a central electronic depository for all filings, documentary evidence, and other documents pertinent to the dispute. Such a depository can be an authoritative central copy of this material accessible from anywhere in the world with Internet service and eliminating the need for each member of the panel to keep his or her own copies.

¹¹² For a discussion of potential issues and considerations for an on-line ADR system for e-commerce disputes, see SOLOVAY & REED, *supra* note 32, at 9-1. See generally *Issues When Using IT*, *supra* note 14 (discussing factors that should be considered when planning to use technology in arbitration).

Reliability, to a great extent, is also a technical implementation issue. The administering body must take steps to ensure that the site is “up” and available on the Internet during its hours of operation, that the documents which are filed by the parties and the panel on the site are contained in computer files which are “backed-up,” as appropriate, and so on.

Security, privacy, and reliability are implementation issues. Currently existing technology is available to solve any security or privacy issue which may be of concern.

The requirement of minimal procedural fairness (or equal treatment) may not be so easily addressed. In today’s environment, it is easy to assume that all parties to an arbitration must have reasonable and relatively equal access to the Internet so as to be easily able to use an on-line dispute resolution site. That may or may not be the case. Generally speaking, but particularly if there are to be web-cast hearings, high-speed, unrestricted access is required. It is possible, either because of government regulation or the unavailability of high speed service in a party’s country of residence, that the parties may have unequal, and materially unequal, access to the Internet. Any mandatory rules that the hypothetical administering body may promulgate must take this into account. Equally so, the rules cannot mandate a procedure that may be illegal in an applicable jurisdiction. That having been said, rules mandating the use of an on-line dispute resolution site in other than these circumstances should be supportable.

CONCLUSION

Appropriate use of technology can significantly aid in the arbitral process and should be encouraged. It can increase the speed of an arbitration, decrease its cost, and generally improve its efficiency. For example, software can analyze large amounts of documentary evidence in ways that would not be possible by hand; video technology is an alternative to traditional in-person hearing based procedures when those procedures prove to be overly costly or just plain impossible to implement; e-mail can be a reliable, secure, and fast means of party-panel communications, and on-line filing sites can provide safe, authoritative, and convenient repositories for all documents pertinent to an arbitration.

Many technical aids are easily available at low or no cost and in a very real sense they can be a win-win for the arbitral process. Low cost and equal availability, accessibility, and usability are, however, not universal “givens” for all technical aids in all situations. Panels will be increasingly called upon to make decisions to permit the use of technology in arbitrations in situations where the arguments favoring its use are not so clear. Those determinations need to be made in a way that is fair to both sides and that takes into account purposes of the arbitral process.