

ANNEX I. GUIDELINE FOR VIRTUAL HEARINGS

Article 1 – Introduction

This ***Guideline for Virtual Hearings*** is intended to serve as a guide to best practice for conducting virtual hearings in Wholesale Electricity Spot Market (WESM) Arbitration.

Whether or not a virtual hearing, in part or in full, is suitable for a particular matter remains a matter for the parties and the arbitral tribunal.

This Guideline is being made available with reference to any dealings during a circumstance that prevents physical meetings.

Although an understanding of virtual hearing includes, but is not limited to, video and audio conferences, email and offline means such as documents-only proceedings, this Guideline will focus on the use of video and audio conferencing. The parties are encouraged to primarily use combined video or audio conferencing whenever possible. This is because combined video and audio allows participants to create a “working environment” that allows participants to be more engaged in the process. Further, combined video and audio conferencing is a more efficient means of resolving complex disputes where physical hearings or meetings are not feasible.

Article 2 - Application for Conduct of Virtual Hearings

1. Health and safety considerations as well as travel restrictions may significantly affect conferences and hearings, and may even make it impossible to convene physically in a single location.
2. When faced with such a situation, parties, counsel and arbitral tribunals should consider whether the hearing or conference should be postponed, whether it can be conducted by physical presence with special precautions, or whether to proceed with a virtual hearing.
3. In deciding on the appropriate procedural measures to proceed with the arbitration in an expeditious and cost-effective manner, an arbitral tribunal should take account of all the circumstances, including those that are the consequence of a pandemic, the nature and length of the conference or hearing, the complexity of the case and number of participants, whether there are particular reasons to proceed without delay, whether rescheduling the hearing would entail unwarranted or excessive delays, and as the case may be the need for the parties to properly prepare for the hearing.
4. If the parties agree, or the arbitral tribunal determines, that convening in a single physical location is indispensable yet impossible under current conditions, arbitral tribunals and parties should make every effort to reschedule the hearing or conference in a way that minimizes delay. Parties and arbitral tribunals should in such case consider available options to make progress on at least part of the case despite the postponement, including by using the procedural tools discussed in the present Guideline.

5. If the parties agree, or the arbitral tribunal determines, that convening in a single physical location is indispensable and that doing so is possible despite current conditions, the arbitral tribunal and the parties should consult to discuss and apply the specific rules and advisory guidance at the physical location of the hearing and the appropriate sanitary measures to ensure the safety of all participants, in particular by allowing sufficient distance between participants, making masks and disinfectant gel available, and any other appropriate measures.
6. If the parties agree, or the arbitral tribunal determines, to proceed with a virtual hearing, then the parties and the arbitral tribunal should take into account, openly discuss and plan for special features of proceeding in that manner, including those addressed below and in the Appendices hereto.
7. If an arbitral tribunal determines to proceed with a virtual hearing without party agreement, or over party objection, it should carefully consider the relevant circumstances, assess whether the award will be enforceable at law, and provide reasons for that determination. In making such a determination, arbitral tribunals may wish to take account of their broad procedural authority under the following, to, after consulting the parties, "adopt such procedural measures as [the arbitral tribunal] considers appropriate, provided that they are not contrary to any agreement of the parties"¹:

- a. Section 30 of Republic Act No. 9285, otherwise known as the "Alternative Dispute Resolution Act of 2004", which states:

"SEC. 30. Place of Arbitration. - The parties are free to agree on the place of arbitration. Failing such agreement, the place of arbitration shall be in Metro Manila, unless the arbitral tribunal, having regard to the circumstances of the case, including the convenience of the parties shall decide on a different place of arbitration.

"The arbitral tribunal may, unless otherwise agreed by the parties, meet at any place it considers appropriate for consultation among its members, for hearing witnesses, experts, or the parties, or for inspection of goods, other property or documents."

- b. Articles 18 and 19 of the United Nations Commission on International Trade Law (UNCITRAL) Model Law, which state:

"CHAPTER V. CONDUCT OF ARBITRAL PROCEEDINGS

"Article 18. Equal treatment of parties

"The parties shall be treated with equality and each party shall be given a full opportunity of presenting his case.

¹ Clause 9.7.6.2 of the WESM Dispute Resolution Manual.

“Article 19. Determination of rules of procedure

“(1) Subject to the provisions of this Law, the parties are free to agree on the procedure to be followed by the arbitral tribunal in conducting the proceedings.

“(2) Failing such agreement, the arbitral tribunal may, subject to the provisions of this Law, conduct the arbitration in such manner as it considers appropriate. The power conferred upon the arbitral tribunal includes the power to determine the admissibility, relevance, materiality and weight of any evidence.”

- c. Sections 19 and 33 of Republic Act No. 9285, otherwise known as the “Alternative Dispute Resolution Act of 2004”, adopting the provisions of the UNCITRAL Model Law referred to in Article 3(b) above and their applicability hereto, as follows:

“SEC. 19. Adoption of the Model Law on International Commercial Arbitration. - International commercial arbitration shall be governed by the Model Law on International Commercial Arbitration (the "Model Law") adopted by the United Nations Commission on International Trade Law on June 21, 1985 (United Nations Document A/40/17) and recommended approved on December 11, 1985, copy of which is hereto attached as Appendix "A".

“SEC. 33. Applicability to Domestic Arbitration. - Article 8, 10, 11, 12, 13, 14, 18 and 19 and 29 to 32 of the Model Law and Section 22 to 31 of the preceding Chapter 4 shall apply to domestic arbitration.”

- d. Chapters II and III of Republic Act No. 8792, otherwise known as the “Electronic Commerce Act of 2000”, which state:

**“CHAPTER II
LEGAL RECOGNITION OF ELECTRONIC WRITING
OR DOCUMENT AND DATA MESSAGES**

“Section 6. Legal Recognition of Electronic Data Messages - Information shall not be denied legal effect, validity or enforceability solely on the grounds that it is in the data message purporting to give rise to such legal effect, or that it is merely referred to in that electronic data message.

“Section 7. Legal Recognition of Electronic Documents - Electronic documents shall have the legal effect, validity or enforceability as any other document or legal writing, and -

“(a) Where the law requires a document to be in writing, that requirement is met by an electronic document if the said electronic document maintains its integrity and reliability and can be authenticated so as to be usable for subsequent reference, in that -

“i. The electronic document has remained complete and unaltered, apart from the addition of any endorsement and any authorized change, or any change which arises in the normal course of communication, storage and display; and

“ii. The electronic document is reliable in the light of the purpose for which it was generated and in the light of all relevant circumstances.

“(b) Paragraph (a) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for the document not being presented or retained in its original form.

“(c) Where the law requires that a document be presented or retained in its original form, that requirement is met by an electronic document if -

“i. There exists a reliable assurance as to the integrity of the document from the time when it was first generated in its final form; and

“ii. That document is capable of being displayed to the person to whom it is to be presented: Provided, That no provision of this Act shall apply to vary any and all requirements of existing laws on formalities required in the execution of documents for their validity.

“For evidentiary purposes, an electronic document shall be the functional equivalent of a written document under existing laws.

“This Act does not modify any statutory rule relating to admissibility of electronic data messages or electronic documents, except the rules relating to authentication and best evidence.

“**Section 8. Legal Recognition of Electronic Signatures.** - An electronic signature on the electronic document shall be equivalent to the signature of a person on a written document if that signature is proved by showing that a prescribed procedure, not alterable by the parties interested in the electronic document, existed under which -

“(a) A method is used to identify the party sought to be bound and to indicate said party's access to the electronic document necessary for his consent or approval through the electronic signature;

“(b) Said method is reliable and appropriate for the purpose for which the electronic document was generated or communicated, in the light of all circumstances, including any relevant agreement;

“(c) It is necessary for the party sought to be bound, in or order to proceed further with the transaction, to have executed or provided the electronic signature; and

“(d) The other party is authorized and enabled to verify the electronic signature and to make the decision to proceed with the transaction authenticated by the same.

“Section 9. *Presumption Relating to Electronic Signatures* - In any proceedings involving an electronic signature, it shall be presumed that -

“(a) The electronic signature is the signature of the person to whom it correlates; and

“(b) The electronic signature was affixed by that person with the intention of signing or approving the electronic document unless the person relying on the electronically signed electronic document knows or has noticed of defects in or unreliability of the signature or reliance on the electronic signature is not reasonable under the circumstances.

“Section 10. *Original Documents*. -

“(1) Where the law requires information to be presented or retained in its original form, that requirement is met by an electronic data message or electronic document if;

“(a) the integrity of the information from the time when it was first generated in its final form, as an electronic data message or electronic document is shown by evidence aliunde or otherwise; and

“(b) where it is required that information be resented, that the information is capable of being displayed to the person to whom it is to be presented.

“(2) Paragraph (1) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for the information not being presented or retained in its original form.

“(3) For the purpose of subparagraph (a) of paragraph (1):

“(a) the criteria for assessing integrity shall be whether the information has remained complete and unaltered, apart from the addition of any endorsement and any change which arises in the normal course of communication, storage and display ; and

“(b) the standard of reliability required shall be assessed in the light of purposed for which the information was generated and in the light of all the relevant circumstances.

“Section 11. *Authentication of Electronic Data Messages and Electronic Documents.* - Until the Supreme Court by appropriate rules shall have so provided, electronic documents, electronic data messages and electronic signatures, shall be authenticated by demonstrating, substantiating and validating a claimed identity of a user, device, or another entity is an information or communication system, among other ways, as follows;

“(a) The electronic signature shall be authenticated by proof than a letter, character, number or other symbol in electronic form representing the persons named in and attached to or logically associated with an electronic data message, electronic document, or that the appropriate methodology or security procedures, when applicable, were employed or adopted by such person, with the intention of authenticating or approving in an electronic data message or electronic document;

“(b) The electronic data message or electronic document shall be authenticated by proof that an appropriate security procedure, when applicable was adopted and employed for the purpose of verifying the originator of an electronic data message and/or electronic document, or detecting error or alteration in the communication, content or storage of an electronic document or electronic data message from a specific point, which, using algorithm or codes, identifying words or numbers, encryptions, answers back or acknowledgement procedures, or similar security devices.

“The supreme court may adopt such other authentication procedures, including the use of electronic notarization systems as necessary and advisable, as well as the certificate of authentication on printed or hard copies of the electronic document or electronic data messages by electronic notaries, service providers and other duly recognized or appointed certification authorities.

“The person seeking to introduce an electronic data message or electronic document in any legal proceeding has the burden of proving its authenticity by evidence capable of supporting a finding that the electronic data message or electronic document is what the person claims it be.

“In the absence of evidence to the contrary, the integrity of the information and communication system in which an electronic data message or electronic document is recorded or stored may be established in any legal proceeding -

“a.) By evidence that at all material times the information and communication system or other similar device was operating in a manner that did not affect the integrity of the electronic data message and/or electronic document, and there are no other reasonable grounds to doubt the integrity of the information and communication system,

“b.) By showing that the electronic data message and/or electronic document was recorded or stored by a party to the proceedings who is adverse in interest to the party using it; or

“c.) By showing that the electronic data message and/or electronic document was recorded or stored in the usual and ordinary course of business by a person who is not a party to the proceedings and who did not act under the control of the party using the record.

“Section 12. *Admissibility and Evidential Weight of Electronic Data Message or Electronic Document.* - In any legal proceedings, nothing in the application of the rules on evidence shall deny the admissibility of an electronic data message or electronic document in evidence -

“(a) On the sole ground that it is in electronic form; or

“(b) On the ground that it is not in the standard written form, and the electronic data message or electronic document meeting, and complying with the requirements under Sections 6 or 7 hereof shall be the best evidence of the agreement and transaction contained therein.

“In assessing the evidential weight of an electronic data message or electronic document, the reliability of the manner in which it was generated, stored or communicated, the reliability of the manner in which its originator was identified, and other relevant factors shall be given due regard.

“Section 13. *Retention of Electronic Data Message or Electronic Document.* - Notwithstanding any provision of law, rule or regulation to the contrary -

“(a) The requirement in any provision of law that certain documents be retained in their original form is satisfied by retaining them in the form of an electronic data message or electronic document which -

“(i) Remains accessible so as to be usable for subsequent reference;

“(ii) Is retained in the format in which it was generated, sent or received, or in a format which can be demonstrated to accurately represent the electronic data message or electronic document generated, sent or received;

“(iii) Enables the identification of its originator and addressee, as well as the determination of the date and the time it was sent or received.

“(b) The requirement referred to in paragraph (a) is satisfied by using the services of a third party, provided that the conditions set fourth in subparagraphs (i), (ii) and (iii) of paragraph (a) are met.

“**Section 14. Proof by Affidavit.** - The matters referred to in Section 12, on admissibility and Section 9, on the presumption of integrity, may be presumed to have been established by an affidavit given to the best of the deponent's knowledge subject to the rights of parties in interest as defined in the following section.

“**Section 15. Cross - Examination.**

“(1) A deponent of an affidavit referred to in Section 14 that has been introduced in evidence may be cross-examined as of right by a party to the proceedings who is adverse in interest to the party who has introduced the affidavit or has caused the affidavit to be introduced.

“(2) Any party to the proceedings has the right to cross-examine a person referred to in section 11, paragraph 4, sub paragraph c.

“**CHAPTER III.**
COMMUNICATION OF ELECTRONIC DATA MESSAGES
OR ELECTRONIC DOCUMENTS

“**Section 16. Formation of Validity of Electronic Contracts.**

“(1) Except as otherwise agreed by the parties, an offer, the acceptance of an offer and such other elements required under existing laws for the formation of contracts may be expressed in, demonstrated and proved by means of electronic data messages or electronic documents and

no contract shall be denied validity or enforceability on the sole ground that it is in the form of an electronic data message or electronic document, or that any or all of the elements required under existing laws for the formation of contracts is expressed, demonstrated and proved by means of electronic data messages or electronic documents.

“(2) Electronic transactions made through networking among banks, or linkages thereof with other entities or networks, and vice versa, shall be deemed consummated upon the actual dispensing of cash or the debit of one account and the corresponding credit to another, whether such transaction is initiated by the depositor or by an authorized collecting party: Provided, that the obligation of one bank, entity, or person similarly situated to another arising therefrom shall be considered absolute and shall not be subjected to the process of preference of credits.

“**Section 17. Recognition by Parties of Electronic Data Message or Electronic Document.** - As between the originator and the addressee of an electronic data message or electronic document, a declaration of will or other statement shall not be denied legal effect, validity or enforceability solely on the ground that it is in the form of an electronic data message.

“**Section 18. Attribution of Electronic Data Message.** -

“(1) An electronic data message or electronic document is that of the originator if it was sent by the originator himself.

“(2) As between the originator and the addressee, an electronic data message or electronic document is deemed to be that of the originator if it was sent:

“(a) by a person who had the authority to act on behalf of the originator with respect to that electronic data message or electronic document; or

“(b) by an information system programmed by, or on behalf of the originator to operate automatically.

“(3) As between the originator and the addressee, an addressee is entitled to regard an electronic data message or electronic document as being that of the originator, and to act on that assumption, if:

“(a) in order to ascertain whether the electronic data message or electronic document was that of the originator, the addressee properly applied a procedure previously agreed to by the originator for that purpose; or

“(b) the electronic data message or electronic document as received by the addressee resulted from the actions of a person whose relationship with the originator or with any agent of the originator enabled that person to gain access to a method used by the originator to identify electronic data messages as his own.

“(4) Paragraph (3) does not apply:

“(a) as of the time when the addressee has both received notice from the originator that the electronic data message or electronic document is not that of the originator, and has reasonable time to act accordingly; or

“(b) in a case within paragraph (3) sub-paragraph (b), at any time when the addressee knew or should have known, had it exercised reasonable care or used any agreed procedure, that the electronic data message or electronic document was not that of the originator.

“(5) Where an electronic data message or electronic document is that of the originator or is deemed to be that of the originator, or the addressee is entitled to act on that assumption, then, as between the originator and the addressee, the addressee is entitled to regard the electronic data message or electronic document as received as being what the originator intended to send, and to act on that assumption. The addressee is not so entitled when it knew or should have known, had it exercised reasonable care or used any agreed procedure, that the transmission resulted in any error in the electronic data message or electronic document as received.

“(6) The addressee is entitled to regard each electronic data message or electronic document received as a separate electronic data message or electronic document and to act on that assumption, except to the extent that it duplicates another electronic data message or electronic document and the addressee knew or should have known, had it exercised reasonable care or used any agreed procedure, that the electronic data message or electronic document was a duplicate.

“**Section 19. Error on Electronic Data Message or Electronic Document.** - The addressee is entitled to regard the electronic data message or electronic document received as that which the originator intended to send, and to act on that assumption, unless the addressee knew or should have known, had the addressee exercised reasonable care or used the appropriate procedure -

“(a) That the transmission resulted in any error therein or in the electronic document when the electronic data

message or electronic document enters the designated information system, or

“(b) That electronic data message or electronic document is sent to an information system which is not so designated by the addressee for the purposes.

“Section 20. *Agreement on Acknowledgement of Receipt of Electronic Data Messages or Electronic Documents.*- The following rules shall apply where, on or before sending an electronic data message or electronic document, the originator and the addressee have agreed, or in that electronic document or electronic data message, the originator has requested, that receipt of the electronic document or electronic data message be acknowledged:

“a.) Where the originator has not agreed with the addressee that the acknowledgement be given in a particular form or by a particular method, an acknowledgement may be given by or through any communication by the addressee, automated or otherwise, or any conduct of the addressee, sufficient to indicate to the originator that the electronic data message or electronic document has been received.

“b.) Where the originator has stated that the effect or significance of the electronic data message or electronic document is conditional on receipt of the acknowledgement thereof, the electronic data message or electronic document is treated as though it has never been sent, until the acknowledgement is received.

“c.) Where the originator has not stated that the effect or significance of the electronic data message or electronic document is conditional on receipt of the acknowledgement, and the acknowledgement has not been received by the originator within the time specified or agreed or, if no time has been specified or agreed, within the reasonable time, the originator may give notice to the addressee stating that no acknowledgement has been received and specifying a reasonable time by which the acknowledgement must be received; and if the acknowledgement is not received within the time specified in subparagraph (c), the originator may, upon notice to the addressee, treat the electronic document or electronic data as though it had never been sent, or exercise any other rights it may have.

“Section 21. *Time of Dispatch of Electronic Data Messages or Electronic Documents.* - Unless otherwise agreed between the originator and the addressee, the dispatch of an electronic data message or electronic document occurs when it enters an

information system outside the control of the originator or of the person who sent the electronic data message or electronic document on behalf of the originator.

“Section 22. *Time of Receipt of Electronic Data Messages or Electronic Documents.* - Unless otherwise agreed between the originator and the addressee, the time of receipt of an electronic data message or electronic document is as follows:

“a.) If the addressee has designated an information system for the purpose of receiving electronic data message or electronic document, receipt occurs at the time when the electronic data message or electronic document enters the designated information system: Provide, however, that if the originator and the addressee are both participants in the designated information system, receipt occurs at the time when the electronic data message or electronic document is retrieved by the addressee;

“b.) If the electronic data message or electronic document is sent to an information system of the addressee that is not the designated information system, receipt occurs at the time when the electronic data message or electronic document is retrieved by the addressee;

“c.) If the addressee has not designated an information system, receipt occurs when the electronic data message or electronic document enters an information system of the addressee.

“These rules apply notwithstanding that the place where the information system is located may be different from the place where the electronic data message or electronic document is deemed to be received.

“Section 23. *Place of Dispatch and Receipt of Electronic Data Messages or Electronic Documents.* - Unless otherwise agreed between the originator and the addressee, an electronic data message or electronic document is deemed to be dispatched at the place where the originator has its place of business and received at the place where the addressee has its place of business. This rule shall apply even if the originator or addressee had used a laptop other portable device to transmit or received his electronic data message or electronic document. This rule shall also apply to determine the tax situs of such transaction.

“For the purpose hereof -

“a. If the originator or addressee has more than one place of business, the place of business is that which has the

closest relationship to the underlying transaction or, where there is no underlying transaction, the principal place of business.

“b. If the originator or the addressee does not have a place of business, reference is to be made to its habitual residence; or

“c. The "usual place of residence" in relation to a body corporate, means the place where it is incorporated or otherwise legally constituted.

“Section 24. Choice of Security Methods. - Subject to applicable laws and /or rules and guidelines promulgated by the Department of Trade and Industry with other appropriate government agencies, parties to any electronic transaction shall be free to determine the type of level of electronic data message and electronic document security needed, and to select and use or implement appropriate technological methods that suit their need.”

- e. Clause 9.7 of the WESM’s Dispute Resolution Manual as provided herein above.

8. While Clause 9.7.9.2 of the WESM Dispute Resolution Manual provides that after studying the written submissions of the parties and all documents relied upon, the arbitral tribunal "shall hear the parties together in person if any of them so requests," this language can be construed [as the International Chamber of Commerce (ICC) does in paragraph 23 of its *Guidance Note on Possible Measures Aimed at Mitigating the Effects of the COVID-19 Pandemic* issued on 9 April 2020] “as referring to the parties having an opportunity for a live, adversarial exchange and not to preclude a hearing taking place ‘in person’ by virtual means if the circumstances so warrant.”

9. Clause 9.7.9.1 of the WESM Dispute Resolution Manual broadly provides that the arbitral tribunal "shall proceed within as short a time as possible to establish the facts of the case *by all appropriate means*" (emphasis added). In context, Clause 9.7.9.2 thereof is structured to regulate whether the arbitral tribunal can decide the dispute based on written submissions and documents only or whether there should also be a live hearing. Hence, whether the arbitral tribunal construes Clause 9.7.9.2 as requiring a face-to-face hearing, or whether the use of video or teleconferencing suffices, will depend on the circumstances of the case. Accordingly, an arbitral tribunal may, in appropriate circumstances, adopt different approaches as it exercises its authority to establish procedures suitable to the particular circumstances of each arbitration and fulfills its overriding duty to conduct the arbitration in an expeditious and cost-effective manner.

1. Service of Documents and Notifications
 - a. The parties may be required that new requests for arbitration (including pertinent exhibits) and other initiating documents be filed with the Secretariat in electronic form. The Secretariat thereafter to promptly liaise with the claimant parties to ascertain whether notification of the request for arbitration by email is feasible.
 - b. Arbitral tribunals and parties are encouraged to sign the Terms of Reference in counterparts and electronic form.
 - c. To mitigate the current difficulties for the submissions of hard copies, arbitral tribunals should encourage the parties to use electronic means of communication for the submissions and exhibits to the full extent possible. It is here required that communications with and from the Secretariat be in electronic form.
 - d. Timely notification of awards to the parties requires proactive communication between arbitral tribunals and the Secretariat. To minimize delay, arbitral tribunals should promptly alert the Secretariat as soon as they have begun signing originals of the award. The Secretariat's counsel in charge of the file shall thereafter indicate to the arbitral tribunal the office of the Secretariat to which the originals should be sent.
 - e. Subject to any requirements of mandatory law that may be applicable, the parties may agree that: (i) any award be signed by the members of the arbitral tribunal in counterparts, and/or (ii) all such counterparts be assembled in a single electronic file and notified to the parties by the Secretariat by email or any other means that provides a record of the sending thereof. Parties are encouraged to agree, whenever possible, to the electronic notification of the award. The Secretariat shall in principle not proceed with an electronic notification of the award unless explicitly agreed by the parties.
2. To ensure that parties are treated with equality and each party is given a full opportunity to present its case during a virtual hearing, the arbitral tribunal should consider:
 - a. Different time zones in fixing the hearing dates, start and finish times, breaks and length of each hearing day;
 - b. Logistics of the location of participants including but not limited to total number of participants, number of remote locations, extent to which any participants will be in the same physical venue, extent to which members of the arbitral tribunal may be in the same physical venue as one another and/or any other participants, availability and control of break out rooms;
 - c. Use of real-time transcript or another form of recording;
 - d. Use of interpreters, including whether simultaneous or consecutive;

- e. Procedures for verifying the presence of and identifying all participants, including any technical administrator;
 - f. Procedures for the taking of evidence from fact witnesses and experts to ensure that the integrity of any oral testimonial evidence is preserved;
 - g. Use of demonstratives, including through shared screen views; and
 - h. Use of an electronic hearing bundle hosted on a shared document platform that ensures access by all participants.
 - i. For further efficiency, parties should utilize electronic bundles for cross examination of witnesses and experts. Electronic bundles may be shared immediately before the commencement of the cross examination, operating the facilities for which in a manner that best preserves the integrity of the arbitral process, preserves confidentiality and ensures proper data protection.
 - j. Ensuring with the parties that any videoconferencing platform that is used for virtual hearings is licensed and is set to maximum security settings e.g., Zoom, Microsoft Teams, Google Meet, BlueJeans, Cisco, and Skype for Business, preferably with technical support to assist arbitral tribunals with using such platforms, joining a meeting (or hearing), operating in-meeting audio and video functions, and operating screen sharing functions.
 - k. Considering documents sharing platforms for electronic bundles. Like videoconference platforms, these also range from customized hearing solutions offered by some hearing centres and/or service providers (such as Opus, Transperfect and XBundle). Customised or licensed, fee-based document sharing platforms may offer greater security, confidentiality and data protection than free-to-use, public platforms.
- l. (The DRA does not endorse or make any representation or warranty with respect to any of the third-party vendors mentioned in this Guidance Note. Parties, counsel and arbitral tribunals should make their own due diligence as to the suitability of each of them in any given case.)

Article 4 – Definition of Terms

Agree Bundle of Documents- shall mean the agreed and indexed documents submitted to the Arbitral Tribunal for the purposes of the hearing.

Hearing Venue - shall mean the site of the hearing, being the site of the requesting authority, typically where the majority of the participants are located.

Observer - shall mean any individual who is present in the Venue other than the Parties, Arbitral Tribunal, Witness, interpreter.

Party/ Parties -shall mean the party or parties to the arbitration.

Remote Venue- shall mean the site where the remote Witness is located to provide his/her evidence (i.e. not the Hearing Venue), typically where a minority of the participants are located.

Tribunal - shall mean the arbitral tribunal.

Venue - shall mean a video conferencing location, including the Hearing Venue and the Remote Venue(s).

Witness- shall mean the individual who is the subject of the examination by video, including fact witnesses and experts.

APPENDIX A CHECKLIST FOR A PROTOCOL ON VIRTUAL HEARINGS

1. Pre-hearing Plan, Scope and Logistics
 - a. Identifying whether and which issues are essential to be on a hearing agenda and which can be dealt with on "documents only";
 - b. Agreeing the number and list of participants (arbitrators, parties, counsel, witnesses, experts, administrative secretaries, interpreters, stenographers, technicians, etc.);
 - c. Agreeing the number of participants per virtual room and whether a 360° view for all participating rooms is required or necessary;
 - d. Agreeing regarding virtual rooms that will permit the arbitrators, and each side in the case, to confer privately amongst themselves during the hearing;
 - e. Identifying all log-in locations and points of connection;
 - f. Agreeing that each individual present in each virtual room will be identified at the start of the videoconference; and
 - g. In light of the above, consulting and agreeing among parties and arbitral tribunal on the hearing date, duration and daily timetable taking into account the different time zones.

2. Technical Issues, Specifications, Requirements and Support Staff
 - a. Consultation between the arbitral tribunal and the parties regarding:
 - i. the preferred platform and technology to be used (including legal access to such platform and technology);
 - ii. the minimum system specifications and technical requirements for smooth connectivity (audio and video), adequate visibility and lighting in each location;
 - iii. whether certain equipment is required in each location (phones, back-up computers, connectivity boosters/extenders, any other equipment or audio-visual aids as deemed necessary by the parties);
 - b. Preliminary check on compatibility of selected platform and technology to be used;
 - c. Considering the need for tutorials for participants who are not familiar with the technology, platform, applications and/or equipment to be used in the hearing;
 - d. Consultation between the arbitral tribunal and the parties regarding the contingency measures to be implemented in case of sudden technical failures, disconnection, power outages (alternative communication channels and virtual technical support for all participants); and

- e. Running a minimum of two mock sessions within the month preceding the hearing to test connectivity and streaming, with the last session being held one day before the hearing to ensure everything is in order.

3. Confidentiality, Privacy and Security

- a. Consultation between the arbitral tribunal and the parties on whether the virtual hearing will remain private and confidential to participants;
- b. Agreeing an access and confidentiality undertaking that binds all participants;
- c. Consultation between the arbitral tribunal and the parties on:
 - i. the recording of the virtual hearing (audio-visual recording, confidentiality of the recording and value of recording compared to any produced written transcript, etc.);
 - ii. any overriding privacy requirements or standards that may impact access or connectivity of certain participants; and
 - iii. the minimum requirements of encryption to safeguard the integrity and security of the virtual hearing against any hacking, illicit access, etc.

4. Online Etiquette and Due Process Considerations

- a. Consultation between the arbitral tribunal and the parties on the practices needed to safeguard the rights and obligations of participants in a virtual environment. This includes: identifying lead speakers, non-interruption, observing reasonable and responsible use of the platform and bandwidth, avoiding use of equipment that interferes with connectivity or allows illicit recording, agreeing a procedure for objections, etc.;
- b. Obtaining written statements from the parties/counsel that the tested platform and technology are adequate as tested by the parties;
- c. Confirming the parties' agreement on proceeding with a virtual hearing or identifying the legal basis for proceeding with a virtual hearing absent such agreement by the parties; and
- d. Advising the parties on their duty to cooperate on technical matters prior to and during the virtual hearing.

5. Presentation of Evidence and Examination of Witnesses and Experts

- a. Consultation between the arbitral tribunal and the parties on the organization and presentation of oral pleadings;
- b. Identifying whether counsel will be using multi-screens for online pleadings, presentation of evidence and agreeing the modalities for submitting and showing demonstrative exhibits in a virtual environment;

- c. Consultation between the arbitral tribunal and the parties on the examination of witnesses and experts (order of calling and examining witnesses/experts, connection time and duration of availability, virtual sequestration, the permission/prohibition of synchronous or asynchronous communications between witnesses and parties/counsel in chat rooms or through concealed channels of communications, interaction between the examiner and the witness/expert in an online environment, etc.); and
- d. Consultation between the arbitral tribunal and the parties on virtual transcription and the use of stenographers and interpreters that are capable and able to deliver the necessary level of service in a virtual environment.

APPENDIX B **SUGGESTED CLAUSES FOR VIRTUAL HEARINGS PROTOCOLS AND PROCEDURAL ORDERS DEALING WITH ITS ORGANIZATION**

1. **PARTICIPANTS**

"The tribunal confirms and directs that the hearing scheduled for (*insert date and time*) shall be conducted by videoconference.

Based on the information currently provided by the parties, the following participants ("**Participants**") shall take part in the hearing from the locations specified herein below:

- a. **Claimant**
(List names and log-in location(s) and point of connection)
- b. **Claimant's Counsel**
(List names and log-in location(s) and point of connection)
- c. **Respondent**
(List names and log-in location(s) and point of connection)
- d. **Respondent's Counsel**
(List names and log-in location(s) and point of connection)
- e. **Tribunal**
(List names of members of the tribunal and their location(s) and point of connection)
- f. **Witnesses / Experts / Transcription Provider / Support Staff & Technicians / Other participants (as applicable)**
(List names and log-in location(s) and point of connection)

Each Participant will promptly notify, by email communication circulated to all Participants, any change to their log-in location or connection details."

2. **TECHNICAL ISSUES, SPECIFICATIONS, REQUIREMENTS AND SUPPORT STAFF**

"The parties shall each secure a reliable video link connection of sufficient quality that will enable all Participants to participate effectively in the hearing through the chosen platform. The parties shall discuss amongst themselves and shall furnish the tribunal with a joint list of agreed providers of reliable video conferencing services within _____ days from the date hereof, and the tribunal shall consult the parties on their preferred choice from the list of agreed providers prior to selecting a provider.

The parties shall consult and seek to agree on the following within _____ days from the date hereof:

- (i) the minimum system specifications and technical requirements for continuous and adequate audio-visual connectivity (*types of operating systems to be used, processors' speeds, RAM capacity, transmission speeds, network bandwidth, etc.*);
- (ii) any hardware, equipment (*display screens, high-resolution webcams, noise cancelling microphones or headphones, phones, back-up computers, connectivity boosters/extenders, any other*

- equipment or audio-visual aids as deemed necessary by the parties)*
and software applications required for the hearing; and
- (iii) any location-specific requirements with respect to any location from which a connection is initiated.

If no agreement is reached regarding the points listed above, the parties shall communicate to the tribunal their separate proposals together with an explanation of technical reasons for the specifications and requirements they contend are reasonably required for the selected videoconference provider/platform within _____ days from the expiry of the date set in the prior paragraph. The parties' separate proposals shall be submitted to the tribunal.

The tribunal shall consider the parties' joint proposal or separate proposals and confirm or determine the reasonable requirements and technical specifications to be adopted for the hearing. In determining the said reasonable requirements and specifications the tribunal may be assisted by two party nominated IT experts or a tribunal appointed expert (at the parties' cost), acting independently and objectively assist the tribunal to facilitate the determination of the reasonable requirements and specifications. If needed, the tribunal shall, following consultation with the parties, issue any necessary protocol to set out the work and assistance to be provided by the IT experts.

When agreeing all or part of the specifications and requirements listed above, or when the parties communicate to the tribunal their separate proposals, the parties shall consider the compatibility of their reasonable requirements and specifications with (i) any requirements of the selected provider/platform and (ii) any location-specific requirements for all other participants.

Any tutorials needed for effective and efficient utilization of the services of the selected video conference service shall be promptly scheduled. The parties shall furnish to the tribunal, within _____ days from the date of selection of the video conference provider/platform, a proposed schedule for such tutorials. The said tutorials will provide an overview of the features and tools available to Participants.

The parties shall consult and agree (or make separate proposals) on detailed contingency measures to be followed in case of technical failures, disconnection, power outages, or other interruptions to the hearing within _____ days from the date hereof.

Representatives of the parties, each of the members of the tribunal and any other Participants in the hearing shall participate in a minimum of two test runs to (i) establish that the equipment and technical requirements adopted for the hearing are functional and adequate, and (ii) simulate the connections for hearing conditions within the month preceding same. The parties shall coordinate and agree with the tribunal the dates, times and duration of such test runs.

For the avoidance of doubt, it is understood and agreed that the parties, in fulfilling their obligations herein, shall use competent support staff possessing the requisite expertise.

The above requirements shall apply regardless of the type of videoconferencing used, including point-to-point videoconferencing, multi-point video conferencing, web-based videoconferencing, videoconferencing over ISDN, etc.).”

3. CONFIDENTIALITY, PRIVACY AND SECURITY

"As a matter of principle, attendance at the hearing will be restricted to the Participants identified in this PO No. _____ or in accordance with its terms. For the avoidance of doubt, any technical consultants/support staff working with the Participants to facilitate the conduct of the hearing shall also be considered to be attending the hearing and shall be identified as Participants. In the event that a party wishes any other person to attend any portion of the hearing, it shall raise a request well in advance with the reasons such attendance is necessary or desirable. The parties shall attempt to reach agreement on such requests, failing which the tribunal shall decide whether to authorize the request.

No recording of any part of the hearing (including the audio track) may be made unless authorized in advance by the tribunal. An audio recording of the hearing shall be made by the stenographers retained for the purposes of preparing a common transcript. Any other proposed recording shall be requested at least 48 hours in advance of the relevant portion of the hearing.

In any event, the official record of the hearing shall be the written transcript as corrected or commented upon by the parties.

The parties are responsible for jointly considering and raising well in advance of the hearing (no less than two weeks) any laws applicable at the location of any Participant that may present an obstacle or issue of legal compliance with privacy, confidentiality, data protection and security requirements. After consulting the parties, the tribunal shall decide on what measures, if any, to take to address any applicable privacy and security requirements or standards that may impact the access or connectivity of any of the Participants.

In the event that any party considers that further security measures are required to safeguard the integrity of the hearing or reduce the risk of cyber attacks, infiltration or unauthorized access to the hearing, that party must raise such concerns immediately upon learning of the reason for such concerns. After consulting the parties, the tribunal shall decide what further measures, if any, shall be taken in this regard."

4. ONLINE ETIQUETTE AND DUE PROCESS CONSIDERATIONS

"To achieve the necessary level of cooperation and coordination for a successful hearing by videoconference, each Participant undertakes to observe the following:

- (i) identify its lead speaker(s);
- (ii) refrain from interrupting any speaker;
- (iii) reasonable and responsible use of the video conference facilities;
- (iv) avoid using equipment that interferes with connectivity;
- (v) refrain from any unauthorized recording;
- (vi) avoid wasting time during the hearing;
- (vii) mute microphones when not speaking;
- (viii) require the Participants which it brings to the hearing to observe the same obligations; and
- (ix) take whatever measures or practices are necessary to support the procedural efficiency of the hearing.

The tribunal - in consultation with the parties - shall set the mechanism for objections on the first hearing day during the introductory discussion of housekeeping matters.

The parties shall each, within _____ days from the date hereof, confirm in writing that (i) they have conducted the test runs envisaged above and (ii) the service provider, equipment, technical specifications and requirements are adequate for their participation in the hearing."

5. PRESENTATION OF EVIDENCE AND EXAMINATION OF WITNESSES AND EXPERTS

"The tribunal understands that the parties' oral pleadings will include the use of demonstrative exhibits and presentation of certain evidence on record. Accordingly, the parties should ensure that the demonstrative exhibits will be clear and visible on a screen to all tribunal members, the other party [parties] and any Participants authorized to attend that portion of the hearing. If multi-screens are required for the presentation of demonstrative exhibits and evidence, the parties should ensure that such multi-screens are included in the list of required equipment.

The parties shall coordinate amongst themselves, with a view to agreeing the following within _____ days from the date hereof:

- (i) order of calling and examining witnesses/experts;
- (ii) connection time and duration of availability for each witness/expert;
- (iii) modalities for virtual sequestration of witnesses/experts (if any);
- (iv) permissibility/prohibition of synchronous or asynchronous communications between witnesses/experts and parties/counsel in chat rooms or through concealed channels of communications;

- (v) whether the witness/expert will be sitting in his/her location together with anyone else and whether he/she will be assisted by anyone whilst giving his/her testimony; and
- (vi) whether a witness/expert will require the assistance of an interpreter and the arrangements needed to ensure that the interpreter is able to provide his/her services virtually, and whether interpretation will be simultaneous or consecutive, and whether certain additional equipment is needed to ensure that the examination process is efficiently well managed.

In case no agreement is reached regarding any or all of the items listed above, the parties shall communicate to the tribunal their separate proposals within _____ days from the expiry of the date set above.

The tribunal shall consider the parties' joint proposal or separate proposals with a view to making its determination.

The parties agree that the hearing shall be transcribed and the parties undertake to jointly propose a virtual transcription provider/stenographer who is capable and able to promptly deliver its service via video conference. If the use of transcription requires further additional equipment, then parties shall agree with the tribunal on the additional equipment which shall be included in the list of required equipment established per the above.

The tribunal may agree with the parties or require them to make their witnesses/experts available for a hot-tubbing session. If so agreed or required, the parties should ensure that their witnesses/experts are readily available at the time and for the duration of the hot-tubbing and the process shall proceed as instructed by the tribunal."

APPENDIX C Enhanced Technology and Logistical Considerations / Checklist (Optional)

1. Preliminary considerations

- 1.1. Procedures to be followed, schedules and deadlines, as well as participants to be involved in the remote proceeding should be planned and agreed in advance.
- 1.2. Technology, software, equipment and type of connection to be used in a remote proceeding should be agreed upon by the parties and tested with all participants in advance of any meetings or hearings.
- 1.3. Sufficient Time Frames should be allocated to eliminate possible connection or other technical failures once a meeting or hearing has begun. Technical assistance and monitoring of the status of connection at all stages of remote proceedings should be provided for wherever possible and arranged in advance.
- 1.4. The highest possible quality of audio and/or video connection available to parties should be used. Connections should be capable of showing a full image of the persons involved and clear audio of their pleadings and interventions. This will not only ensure more dynamic proceedings, but also eliminate prolongation of time frames needed for due process observance.
- 1.5. The level of cybersecurity and security technology required to cover remote proceedings should be taken into consideration and agreed by the parties in advance of any remote meeting, conference, or hearing.
- 1.6. In the case of a semi-remote hearing, parties should discuss and agree in advance whether a party and a neutral may be physically in the same room. This can arise where one party and one or more neutrals are located in a jurisdiction where they are not subject to social distancing restrictions. In the interests of equality, it is preferable that if one party must appear to the arbitral tribunal remotely, both parties should do so. However, parties may agree otherwise.

2. Procedural documentation

- 2.1. In a remote proceeding, a list of documents to be presented in the remote hearing, including, but not limited to, memorials, witness statements, exhibits, slides, and graphics, should be available to all parties in digital form.
- 2.2. A procedure and a digital platform for transmission and storage of documentation for a remote proceeding should be agreed by parties before commencing the proceeding. This is to prevent duplicate communication of documents and to ensure the accessibility of all documentation that has been made available to neutrals.
- 2.3. Parties should agree and list which documents can be shared with all or with only certain participants during the proceedings and to create secure digital

platforms to this end. It is recommended to choose platforms which allow files to have permissions set to allow or restrict the ability to download and / or print the documents shared.

- 2.4 The use of electronic bundles is also encouraged to allow participants to share content concurrently (for instance, in a “share screen” mode).

3. Documents

- 3.1 All documents on the record which the Witness will refer to during the course of his/her evidence must be clearly identified, paginated and made available to the Witness.
- 3.2 The Party whose Witness is giving evidence by video conference shall provide an unmarked copy (without any annotations, notes or mark-ups) of the Agreed Bundle of Documents (or such volumes of the Agreed Bundle of Documents as the Parties agree or are required) at the start of the examination of the Witness.
- 3.3 The Parties may agree on utilizing a shared virtual document repository (i.e. document server) to be made available via computers at all Venues, provided that the Parties use best efforts to ensure the security of the documents (i.e. from unlawful interception or retention by third parties).
- 3.4 If available, a separate display screen/window (other than the screen/window used to display the video transmission) shall be used to show the relevant documents to the Witness during the course of questioning.

4. Video Conferencing Venue

- 4.1 To the extent possible, and as may be agreed to by the Parties or ordered by the Arbitral Tribunal, the video conference shall occur at a Venue which meets the following minimum standards:
 - a. The Parties shall use best efforts to ensure that the connection between the Hearing Venue and the Remote Venue is as smooth as possible, with sounds and images being accurately and properly aligned so as to minimize any delays. This principle applies equally to situations where there is more than one Remote Venue. Where a connection between additional Venues is required (for example when an interpreter is connected from a third location), the connection may be established through the use of a third party video conferencing bridge service, such as multi-point control units or third party router vendors that interlink and connect multiple video conferencing systems together in a single conference.
 - b. The Venue shall have at least one on-call individual with adequate technical knowledge to assist in planning, testing and conducting the video conference.

c. Venue shall be in a location that provides for fair, equal and reasonable right of access to the Parties and their related persons, as appropriate. Similarly, cross-border connections should be adequately safeguarded so as to prevent unlawful interception by third parties, for example, by IP-to-IP encryption.

4.2 The Parties shall use their best efforts to ensure the security of the participants of the video conferencing, including the Witnesses, Observers, interpreters, and experts, among others.

4.3 Virtual hearing rooms are the preferred way to conduct hearings remotely. These are organized via the use of commercial digital platforms and can be equipped to create an atmosphere approximating face-to-face proceedings. All participants should be visible and audible in the chosen virtual hearing room. Simultaneous access to shared documentation through means such as screen sharing should also be provided.

4.3.1 A breakout room, or a separate meeting from the virtual hearing room, can be used for caucus proceedings. The other party should not have the ability to hear or view muted caucus proceedings as body language of participants, important in mediation proceedings.

4.3.2 Separate virtual breakout rooms for arbitral tribunal deliberations and caucusing by parties are recommended. However, party breakout rooms should never be visible or audible to neutrals to prevent the possibility of inadvertent ex parte communication. Likewise, arbitral tribunal deliberations should never be visible or audible to parties. Should a neutral or party find that they are able to hear a separate caucus within a breakout room, they should report this to all participants immediately and sever the connection.

5. Technical Requirements

5.1 The video conference shall be of sufficient quality so as to allow for clear video and audio transmission of the Witness, the Arbitral Tribunal and the Parties, and there shall be compatibility between the hardware and software used at the Venues. While the Parties and the Arbitral Tribunal may agree on the technical requirements for the video conferencing, as a guide, minimum transmission speeds should not be less than 256 kbs/second, 30 frames/second, and the minimum resolution should be HD standard. The Hearing Venue should also be equipped with both ISDN and IP communication line capabilities and all Venues should be equipped with appropriate portable equipment in the event of unforeseen technical complications.

5.2 For any individual participating in the video conference, there shall be sufficient microphones to allow for the amplification of the individual's voice, as well as sufficient microphones to allow for the transcription of the individual's testimony as appropriate. There shall also be adequate placement and control of the cameras to ensure that all participants can be seen.

- 5.3 There shall be appropriate microphones and connections to allow for the amplification of the relevant persons at the Hearing Venue so that the Witness and Observers may adequately hear the relevant individual(s) at the Hearing Venue.
- 5.4 Under appropriate circumstances, Parties may agree to use web-based video conferencing solutions instead of ISDN or IP communication lines. When using a web-based video conferencing solution, the Venue should provide for a sufficiently large screen that can project the video transmission displayed through the video conferencing solution and ensure that the Ethernet or wireless internet connection is secure and stable throughout the proceedings.
- 5.5 If the Witness is located in the Remote Venue and is giving testimony through a web-based video conferencing solution, the audio output device in the Hearing Venue should be of sufficient quality and volume so as to ensure that the testimony can be accurately transcribed or recorded in the Hearing Venue.

6. Confidentiality, Privacy and Security

- 6.1 Any virtual hearing requires a consultation between the arbitral tribunal and the parties with the aim of implementing measures sufficient to comply with any applicable data privacy regulations. Such measures shall also deal with the privacy of the hearing and the protection of the confidentiality of electronic communications within the arbitration proceeding and any electronic document platform.
- 6.2 It is imperative to ensure that the technology used allows the participants to feel secure about the confidentiality of the information they disclose in a remote hearing. Access to all virtual hearing rooms and breakout rooms should be strictly limited to their allocated participants.
- 6.3 Full names and roles of all participants to a remote proceeding including, but not limited to, council, parties, witnesses, interpreters, tribunal secretaries and computer technicians as well as their allocated virtual hearing and breakout rooms should be circulated between parties and neutrals in advance and strictly adhered to.
- 6.4 Physical rooms occupied by participants in a remote proceeding, either at homes, offices, or in special hearing venues, should be completely separate from non-participants to the remote proceeding, soundproofed where possible, and have sufficient visibility to eliminate possibility of the presence of undisclosed non-participating individuals in the room and/or any audio/video recording equipment that has not been agreed to. The use of headsets is recommended to increase both privacy and audibility of participants.
- 6.5 To achieve the foregoing, it may be necessary for:
 - a. all cloud-based video conferences should be password protected;

- b. a list of participants, their full names, roles, professional affiliation, and details of the locations from which they will be joining the hearing, should be agreed and circulated to the parties and the arbitral tribunal in advance;
- c. the arbitral tribunal or hearing manager shall only allow individuals on the approved list of participants to join the hearing. Any change to the list of participants shall be immediately circulated to the parties and the arbitral tribunal and notified to the hearing manager

where the parties and/or the arbitral tribunal have separate virtual break-out rooms facilitated by separate video-conferencing sessions, these shall be password protected. Separate lists of participants to those rooms shall be provided to the hearing manager, who shall adhere to them strictly.

7. Witness Examination Generally

- 7.1 The Parties shall ensure, to the extent practicable, that any and all Venues meet the logistical and technological requirements as stated in this Guideline.
- 7.2 The video conferencing system at the Venue shall allow a reasonable part of the interior of the room in which the Witness is located to be shown on screen, while retaining sufficient proximity to clearly depict the Witness. It may be necessary:
 - a. to arrange, where possible, for a hearing invigilator to attend at the same premises as the witness or expert, to ensure the integrity of the premises (i.e., that there is no person or recording-device present that was not approved or agreed);
 - b. to arrange for a 360-degree viewing of the room by video at the beginning of each session of the virtual hearing to ensure the integrity of the room;
 - c. for the arbitral tribunal to recall the witness's or expert's obligation of truthfulness including by presenting their evidence in the manner agreed and without improper influence (by administering an oath, declaration, affirmation or otherwise).
- 7.3 The Witness shall give his/her evidence sitting at an empty desk or standing at a lectern, and the Witness's face shall be clearly visible.
- 7.4 As a general principle, the Witness shall give his/her evidence during the course of the hearing under the direction of the Arbitral Tribunal. Only under exceptional circumstances and subject to the direction of the Arbitral Tribunal would evidence from a Witness be given/ conducted outside of the hearing.
- 7.5 A computer with email facilities and a printer should be located at all Venues.
- 7.6 The parties shall ensure that an agreed translation of the oath to be administered is placed before the Witness in the remote hearing room.

7.7 The Arbitral Tribunal may terminate the video conference at any time if the Arbitral Tribunal deems the video conference so unsatisfactory that it is unfair to either Party to continue.

8. Online Etiquette Generally

8.1 Remote proceedings inherently limit personal connections between all participants to a dispute. Therefore, active listening and verbal engagement, expressive body language and clear speech, as well as any other step necessary to create a comfortable professional environment should be used. This is particularly important for neutrals who should take every opportunity to assure parties of their full attention to proceedings.

8.2 Neutrals in remote arbitration proceedings should make themselves visible and audible to all the parties in the proceeding at all times, save in cases of deliberations and/or discussions between members of the arbitral tribunal.

8.3 When appearing by video conference, participants should:

- a. mute microphones unless speaking;
- b. use physical gestures to announce that they wish to speak, e.g., by raising a hand and keeping it raised, or use the raise hand function on the electronic system if available;
- c. avoid speaking at the same time as any other participant;
- d. avoid back-lighting such as sitting in front of a window or bright light. Back-lighting will prevent the participant being seen clearly on screen;
- e. ensure their camera is positioned at eye-level;
- f. look at the camera, not their screen;
- g. use a headset with integrated microphone where possible to protect the privacy of the proceedings at their location and improve audio quality for all participants;
- h. avoid wearing a face-mask when cameras that automatically track speakers by facial movement are being used. If that is not possible, manually operated cameras should be used.

9. Technical Specifications Generally

9.1 Video conferencing equipment used should ideally meet minimum industry standards in order to ensure the efficient and smooth operation of each hearing.

- a. Channels, bandwidth and bridging
 - i. Minimum of six channels for room video-conferencing systems using ISDN that has the capacity to use 3 ISDN lines. If Integrated Services Digital Network (ISDN) is not available, Digital Subscriber Line or DSL may be used as connectivity to the internet with ideally a backup line.
 - ii. Standards for Codecs:

- o H.261 (full motion video coding for audiovisual services at p x 64 Kbps);
- o H.263 (video coding for low bitrate communication i.e. less than 64 Kbps); or
- o H.264 (new video codec standard that offers major improvements to image quality. Picture quality standard of 30 frames per second Common Intermediate Format (CIF) at between 336 and 384 kbps).

For DSL, the ideal bandwidth is 10Mbps for both upload and download.

- iii. Bandwidth On Demand Inter-Networking Group (BONDING) standards (ISDN and H.320 only) for inverse multiplexers.

Although bandwidth on demand is ideal for optimized use, 10Mbps stable bandwidth can also be recommended.

- iv. H.243 (the H.320/H.323 Standard for Bridging Technology).

b. Video

- i. For ISDN-based networks:
 - o H.320 Standard (umbrella recommendation for narrow-band video conferencing over circuit-switched networks i.e. N-ISDN, SW56, dedicated networks); and
 - o H.310 Standard (wide-band (MPEG-2) video conferencing over ATM and B-ISDN)

DSL is also recommended using secured video/voice over IP or VoIP. At least 720P resolution at 30fps minimum should be supported for quality video.

- ii. For video over Internet/LAN-conferencing:
 - o H.323 Standard (narrow-band video conferencing over non-guaranteed quality-of-service packet networks (Internet, LAN, etc.))

c. Data Conference / Data Collaboration

- i. T.120 Standard.

d. Audio

- i. Standards for audio coding:
 - o G.711 (3kHz audio-coding within 64 kbit/s)
 - o G.722 (7kHz audio-coding within 48 or 56 kbit/s)
- ii. Echo-cancellation microphones with a frequency range of 100-7,000 Hz, audio muting, on/off switch and full-duplex audio.

- iii. H.281 (umbrella standard for local and far-end camera control protocol for ISDN (H.320) video conferencing calls, with camera(s) that have the ability to pan, tilt and zoom, both manually and using pre-sets).

e. Picture

- i. H.263 (video coding for low bitrate communication i.e. less than 64 Kbps);
- ii. H.264 (new video codec standard that offers major improvements to image quality. Picture quality standard of 30 frames per second Common Intermediate Format (CIF) at between 336 and 384 kbps);
or
- iii. H.239 (Picture-in-picture (PIP) or DuoVideo H.239. H.239 defines the role management and additional media channels for H.300-series multimedia terminals, and allows endpoints that support H.239 to receive and transmit multiple, separate media streams).
- iv. H.460 (the standard for the traversing of H.323 videoconferencing signals across firewalls and network address translation (NAT)).

10. Test Conferencing and Audio-Conferencing Backup

10.1 As a general principle, testing of all video conferencing equipment shall be conducted at least twice: once in advance of the commencement of the hearing, and once immediately prior to the video conference itself.

10.2 The Parties shall ensure that there are adequate backups in place in the event that the video conference fails. At a minimum, these should include cable backups, teleconferencing, or alternative methods of video/audio conferencing.