TECHNOLOGY-ASSISTED AND REMOTE EVIDENCE PRESENTATION: A Practice Resource for BC Lawyers



Technology-Assisted and Remote Evidence Presentation: A Practice Resource for BC Lawyers

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SECTION I. GENERAL INTRODUCTION

A. The Project on Technology, Remoteness, Disability and Evidence

This practice aid was prepared in connection with BCLI's Project on Technology, Remoteness, Disability and Evidence. Funded by the Law Foundation, this project is one of many concurrent initiatives by the legal community, government, and social service agencies aimed at improving access to justice. One of the principal ways in which greater access to justice can be secured for sectors of the population that do not enjoy equal access is by facilitating the delivery of legal services to them, especially advocacy. That is the reason why the focus of this project is on the use of technology in presenting evidence from two groups that regularly encounter barriers as participants in legal proceedings, namely residents of rural and remote areas and persons with disabilities.

The objectives of the Project on Technology, Remoteness, Disability and Evidence were twofold. The first was to create practice support materials for the use of lawyers regarding the assistive technology and communications systems that can be used to overcome geographical, physical, and attitudinal barriers to full and effective participation by the target groups in legal proceedings. The second objective was to determine whether there are remaining legal barriers to the beneficial and effective use of assistive and other technology in court and tribunal proceedings and recommend ways to remove any that were found. This publication relates to the first of these objectives. The project did not lead to the detection of significant barriers in present law to the use of technology in legal proceedings in British Columbia.

B. The Advisory Committee

In carrying out the project, the BCLI staff were able to draw upon the knowledge and experience of an interdisciplinary Advisory Committee comprising a very wide spectrum of expertise. Its members are listed at the beginning of this publication. The assistance of the Advisory Committee was of immense value and BCLI is greatly indebted to its members. BCLI remains solely responsible, however, for the contents of this publication.

C. Contents and Structure of this Publication

This publication is intended as a source of information for lawyers on dealing with situations in which a client or other witness is unable to give evidence in the usual way in a conventional oral trial or hearing process because of barriers resulting from geographical distance, a motor or sensory disability, or combinations of these circumstances. The focus is on on trials and hearings conducted in British Columbia.

Section I is a general introduction. Section II covers the legal framework for the admission of evidence introduced by technological intermediation and the legal basis for procedural accommodation of witnesses unable to testify conventionally. Section III concerns remote appearances by technology in British Columbia courts and tribunals. The subject of Section IV is assistive technology and its deployment in evidence presentation. It is intended to familiarize counsel with the features and function of technologies that their clients and witnesses with disabilities may be accustomed to using in order to communicate, mobilize or otherwise adapt to their circumstances, or which may need to be deployed as circumstances require in order to allow them to give evidence effectively. Section V is a general conclusion.

SECTION II. PROCEDURAL ACCESSIBILITY AND ACCOM-MODATION: LEGAL FOUNDATIONS

A. Introduction

Nothing is more familiar to the lawyer than the common law trial process relying on oral evidence presented in open court by means of question and answer in the presence of the trier or triers of fact, the parties, and members of the public. The preeminence of oral evidence in the Canadian legal system was described by the Supreme Court of Canada in *R. v. Khelawon*:

Our adversary system puts a premium on the calling of witnesses, who testify under oath or solemn affirmation, whose demeanour can be observed by the trier of fact, and whose testimony can be tested by cross-examination. We regard this process as the optimal way of testing testimonial evidence.¹

Essentially the same process is employed by many quasi-judicial tribunals with varying degrees of formality. The conventional trial process is closely identified in the minds of lawyers and non-lawyers alike with the ideal of justice itself.

We seldom pause to think that this conventional, time-honoured process for presenting and receiving evidence requires both the physical presence of the person giving the evidence, and the ability of that person as well as the trier of fact to hear, see, and speak. Individuals who cannot attend in person without physical or severe economic hardship, or who have a disability that interferes with giving oral evidence, or in seeing and handling documentary and other exhibits, are at a disadvantage as participants in the proceedings.

Counsel acting for a client facing such a disadvantage, or who need to present evidence from a witness who does, may find it necessary to persuade a court or tribunal over objection by opposing counsel to receive the evidence in a non-traditional manner. This section reviews legal principles and authorities on which arguments for accommodation of this kind may be founded.

^{1. [2006] 2} S.C.R. 787, at 807-808.

B. Statutory Discretions to Receive Evidence with Technological Assistance

1. GENERAL

Provisions giving courts a discretion to receive evidence in a non-standard manner are found in both the *Canada Evidence Act*², the *Criminal Code*,³ the British Columbia *Evidence Act*,⁴ and in rules of court. Counsel making or opposing an application to present evidence with the aid of technology will likely rely on both the statutory provisions and rules of court.

The statutory provisions pertain to the admissibility of evidence given in a non-standard manner. Some may be invoked when a witness cannot testify in the usual way because of a disability, others when the witness needs to testify from a remote location, and others may be invoked in either situation. In some cases, there is a requirement for prior notice of an intention to present evidence unconventionally.

The rules of court address the manner in which trials and hearings may be conducted. They principally concern videoconferencing and telephone hearings. These rules are mentioned here briefly, and discussed in greater detail in Section III – Remote Appearances.

It is important to bear in mind that the statutory enabling provisions and rules of court empower the court or tribunal to allow evidence to be given through technology in appropriate circumstances despite objection. They are generally not obstacles to the admission of evidence through technological means by consent of the parties.

2. SECTION 6 OF THE CANADA EVIDENCE ACT

The Canada Evidence Act⁵ applies in criminal matters, in Federal Court proceedings generally, and in hearings conducted by federal boards and tribunals that are bound by the rules of evidence. Section 6(1) empowers a court to allow a witness who faces a barrier in communication due to a physical disability to give evidence in whatever manner the witness can be understood. Section 6(2) allows the same with respect to a witness with a mental disability:

^{2.} R.S.C. 1985, c. C-5.

^{3.} R.S.C. 1985, c. C-46.

^{4.} R.S.B.C. 1996, c. 124.

^{5.} Supra, note 2.

- **6.** (1) If a witness has difficulty communicating by reason of a physical disability, the court may order that the witness be permitted to give evidence by any means that enables the evidence to be intelligible.
- (2) If a witness with a mental disability is determined under section 16 to have the capacity to give evidence and has difficulty communicating by reason of a disability, the court may order that the witness be permitted to give evidence by any means that enables the evidence to be intelligible.

Intelligibility for the purposes of ss. 6(1) and (2) was interpreted in *R. v. Carlick* to mean that a witness is able to communicate to the court in a manner that "accurately and comprehensively conveys...testimony on a particular matter." Intelligibility must of course be mutual. The means used must convey counsel's questions to the witness as well as the responses of the witness. Section 6(3) states that the court may conduct an inquiry to determine if the means intended to be used are "necessary and reliable." In the course of such an inquiry into the reliability of the intended means of giving evidence, the requirements of intelligibility as stated in *R. v. Carlick* will no doubt be the threshold standard.

As ss. 6(1) and (2) refer to "any means that enables the evidence to be intelligible," they extend equally to cases where evidence is proposed to be given with human assistance such as a sign language interpreter, or with technological assistance such as a touchscreen computer running audible speech software.

3. Criminal Code Provisions Authorizing Video and Audio Evidence

(a) Section 714.1 – Video appearance of witness within Canada

Section 714.1 of the *Criminal Code* empowers a court conducting a criminal trial to order that a witness testify from elsewhere in Canada "in the virtual presence of the parties and the court" if the court is of the opinion that this is appropriate in all the circumstances. Section 714.1 contains a non-exclusive list of circumstances that the court is to take into account, namely:

(a) the location and personal circumstances of the witness;

^{6. 1999} CanLII 5547, at para. 28 (B.C.S.C.).

^{7.} Ibid.

^{8.} In *R. v. Titchener*, 2013 BCCA 64, the majority in the Court of Appeal pointed out at para. 38 that s. 6(3) is permissive and not mandatory. The Court of Appeal found no error on the part of the trial judge in proceeding with the aid of a sign language interpreter where the Crown and defence appeared equally to assume at the outset that the use of the interpreter was necessary and reliable.

- (b) the costs that would be incurred if the witness had to be physically present; and
- (c) the nature of the evidence it is anticipated the witness will give.

Some courts in Canada have enthusiastically embraced s. 714.1 and videoconferencing technology, going so far as to declare that an order permitting video appearance should be granted presumptively unless shown to be inappropriate. Most courts have taken a more cautious approach, however. In *R. v. Chapple*, a leading British Columbia decision, the court stated that s. 714.1 supplements but does not alter the established procedure of hearing witnesses testify in person, and the starting presumption is that a witness should be called to appear in person unless the circumstances warrant the use of technology. In particular, where there are serious issues of credibility, the court should be very reluctant to deprive the trial judge of the ability to see the witness physically present while giving evidence. In

R. v. Chapple is an authority that the discretion under s. 714.1 is not to be exercised on the basis of a simple balance of convenience test, and cost alone will not justify allowing remote appearance by video in a criminal case.¹²

Leave to have a witness appear by videoconference has been refused where the Crown introduced evidence only of the cost of having a witness resident in another province attend in person as opposed to the cost of videoconferencing, but did not show that the witness would be inconvenienced if subpoenaed to appear in person or would otherwise be inaccessible.¹³ Additional considerations that have been mentioned in cases decided under s. 714.1 are whether the remote appearance will impede or negatively affect the ability of opposing counsel to cross-examine, the integrity of the remote videoconferencing site in terms of freedom from interruptions and off-camera influence of the witness, the distance and logistics involved if the witness must attend in person, and whether the evidence is technical, routine or non-controversial.¹⁴

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^{9.} See *R. v. Denham*, 2010 ABPC 82, at para. 14. See also *R. v. Heynen*, 2000 YTTC 502 at paras. 311-328; *R. v. Allen*, 2007 ONCJ 209; *R. v. Oh*, 2013 ABPC 96, at paras. 13 and 43.

^{10. 2005} BCSC 383, at para. 50.

^{11.} *Ibid.*, at para. 52.

^{12.} *Ibid.*, at paras. 51 and 55.

^{13.} R. v. Young (2000), 150 C.C.C. (3d) 317 (Sask. Q.B.).

^{14.} Ibid.

Sometimes an order allowing a remote appearance will be accompanied by a direction for pre-testing of the video and audio links, particularly if there is reason for concern about the quality of a transmission from the remote location.¹⁵

An expert witness is more readily allowed to testify by video, as credibility is less likely to be an issue and the ability to observe demeanour is usually not critical. Orders under s. 714.1 have been refused in a number of cases when the evidence was that of a key fact witness whose credibility would be in issue, even when video testimony would avoid substantial cost and inconvenience. The health of the witness is a factor, however. If infirmity, illness or a medical condition makes in-person attendance risky or impossible, the court must consider this.

(b) Section 714.2 - Video appearance of witness outside Canada

Section 714.2(1) of the *Criminal Code* states that a court *shall* receive evidence given by a witness outside Canada through technology permitting the witness to testify "in the virtual presence of the parties and the court," unless either the Crown or an accused satisfies the court that the reception of the evidence in this manner would be contrary to the principles of fundamental justice.

If the Crown or the accused intends to call a witness to give evidence from outside Canada, s. 714.2(2) requires not less than 10 days' notice to the court and the other parties.

It is notable that s. 714.2(1) creates a presumption that a witness outside Canada will testify by videoconference and places the onus on the party opposing the reception of evidence in this manner to justify refusal.

(c) Section 714.3 - Audio evidence of witness within Canada

Section 714.3 enables a criminal court to order that a witness in Canada may give evidence from a remote location by means of technology that allows the parties and the court to hear and examine the witness, if the court considers it appropriate in all the circumstances. Like s. 714.2, s. 714.3 contains a non-exhaustive list of circumstances the court is to take into account. These are:

^{15.} R. v. G.M., 2013 BCPC 113. See also R. v. Burtt, 2012 NBPC 6.

^{16.} R. v. Denham, supra, note 9; R. v. Hinkley, 2011 ABQB 567.

^{17.} R. v. Raj, 2002 BCSC 193; R. v. Hostacny, 2005 BCSC 218; R. v. Cardinal, 2006 YKTC 67.

^{18.} *R. v. Chapple, supra,* note 10, at para. 54; *R. v. Gibson,* 2003 BCSC 524, at para. 7.

- (a) the location and personal circumstances of the witness;
- (b) the costs that would be incurred if the witness had to be physically present;
- (c) the nature of the evidence it is anticipated the witness will give; and
- (d) any potential prejudice to the Crown or accused caused by the fact that the witness cannot be seen.

Section 714.3 appears to be very seldom used. What authority there is strongly suggests that an order permitting audio (i.e., telephonic) appearance only will not be granted if the evidence the witness will give is extremely important and in regard to contentious matters. In *R. v. Rezansoff* an order under s. 714.3 was refused on those grounds, but the witness was allowed to appear by video instead.¹⁹ The witness had to travel some distance to the remote videoconferencing site, but not as far as if she had to attend the trial outside the province where she lived. The court stated in *R. v. Rezansoff* that orders permitting audio appearance under s. 714.3 should be granted less readily than those under s. 714.2 permitting witnesses to appear by videoconferencing, because telephone appearance is intrinsically less satisfactory from the trial perspective than full audiovisual communication.

(d) Section 714.4 – Audio evidence of witness outside Canada

Section 714.4 is the counterpart of s. 714.2 regarding witnesses outside Canada, but is permissive instead of mandatory. It states the court may receive evidence of a witness outside Canada by technological means that enable the court and parties to hear and examine the witness, if the court considers it appropriate in all the circumstances, including the nature of the evidence anticipated from the witness and any potential prejudice caused by the fact that the witness will not be seen.

(e) Ancillary provisions dealing with video and audio testimony at trial

Sections 714.1-714.4 are accompanied by several ancillary provisions. Section 714.5 requires video and audio evidence to be given under oath or affirmation either according to Canadian law, the law of the place where the witness is situated, or in any other manner demonstrating that the witness understands the duty to tell the truth. Section 714.6 deems evidence given by video or audio under ss. 714.2 or 714.4 to be given in Canada for the purpose of laws relating to evidence, procedure, perjury, and

19.	2011 SKPC 178.

contempt of court. Section 714.7 requires the cost of the technology used to provide evidence under ss. 714.1 to 714.4 to be paid by the party calling the witness.

Section 714.8 declares that nothing in ss. 714.1 to 717.7 prevents the reception of video or audio evidence with the consent of the Crown and accused.

(f) Appearance of accused by videoconference at trial

Section 650(1.1) states that during any portion of a trial other than one in which evidence of a witness is taken, the accused may appear by closed-circuit television²⁰ or other means enabling simultaneous visual and oral communication with the court, if the Crown and accused consent.

If the accused is imprisoned, s. 650(1.2) empowers the court to order that the accused appear in that manner during portions of the trial that do not involve examination of witnesses, provided that a represented accused is given the opportunity to communicate privately with counsel.

Section 800(2.1) applies to summary conviction trials and is to the same effect as s. 650(1.2), except that the authority to order that the accused appear by video is not restricted to those portions of the trial that do not consist of the examination of witnesses. In contrast to s. 650(1.2), however, the accused in custody must consent to the order.

(g) Bail hearings and preliminary inquiries

Section 515(2.2) enables a justice conducting a bail hearing to allow an accused to appear "by any suitable telecommunications device, including telephone" that is satisfactory to the justice. If a witness is going to be examined in the course of the hearing, however, s. 515(2.3) provides the Crown and accused must consent to the use of means other than closed-circuit television or another technology that allows for simultaneous visual and oral communication between the court and the accused.

^{20.} The term "closed-circuit television" or CCTV is commonly used interchangeably with "videoconferencing" because both terms denote a network in which a television signal is transmitted between a finite number of endpoints, often only two, rather than being broadcast. In this document, the terms are used interchangeably except where it is necessary to distinguish between them. Closed-circuit television technically is a system in which the television signal is transmitted by a hardwired connection or dedicated cable between endpoints that are usually only a short distance away from each other. Videoconferencing is a broader term that also denotes transmissions of a signal between a finite number of endpoints over a network such as public switched telephone lines or the internet.

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Videoconferencing is used extensively for conducting bail hearings in British Columbia to minimize the security risk and cost associated with transporting persons in custody to and from court.

Section 537(1)(j) provides that if the Crown and accused agree, the accused may appear during portions of a preliminary inquiry that do not involve examination of a witness by means of closed-circuit television or other means enabling simultaneous visual and oral communication with the court. In the case of an accused who is imprisoned, s. 537(1)(k) empowers the court to order that the accused appear in that manner during portions of the preliminary inquiry that do not involve examination of witnesses, provided that an accused who is represented is given the opportunity to communicate privately with counsel.

(h) Remote appearance by counsel

Section 650.02 provides that the prosecutor and any counsel appointed by the accused in a written designation filed with the court under s. 650.01(1) may appear by any technological means satisfactory to the court that allows the court and all counsel to communicate simultaneously.

(i) Vulnerable witnesses: s. 486.2

Section 486.2 enables the court to permit certain vulnerable witnesses to testify outside the courtroom or behind a screen or other device that allows the witness not to see the accused. The purpose of this is to protect the witness or to obtain full and candid evidence, or both. The classes of witnesses who may be allowed to testify in this manner are witnesses under 18, witnesses who may face difficulty in communicating due to a mental or physical disability, or ones who testify in proceedings relating to alleged offences listed in s. 486.2(5). If a witness is allowed to testify outside the courtroom or behind a barrier under this section, s. 486.2(7) requires that the court, jury, counsel, and the accused must be able to see the witness giving evidence by means of closed circuit television or other means.

4. Section 73 of the British Columbia Evidence Act

(a) Application

The provincial $Evidence\ Act^{21}$ applies in all civil proceedings in British Columbia courts. It also applies to quasi-criminal prosecutions for offences under provincial statutes.

21.	Supra, note 4.	

(b) General discretion to allow remote appearance: s. 73(2)

Section 73(2) of the *Evidence Act* gives a very broad discretion to a court in British Columbia to receive evidence by videoconference technology:

- (2) A court may allow a witness to testify in a proceeding by means of closed circuit television or any other technology that allows the court, the parties and the witness to engage in simultaneous visual and oral communication, unless
 - (a) one of the parties satisfies the court that receiving the testimony in that manner would be contrary to the principles of fundamental justice, or
 - (b) the technology is not available for the proceeding.

The Supreme Court of British Columbia held in *Nybo v. Kralj* that s. 73(2) is worded so as to place the onus of persuasion on a party opposing the remote appearance of a witness by video, rather than on the party seeking to present evidence in this manner.²² This is an extremely important feature that takes the law of British Columbia a considerable distance towards acceptance of a concept of the "virtual courtroom," and one not replicated elsewhere as yet in Canada.²³ It has not displaced the conventional expectation that witnesses will testify in person, however. If the court is not presented with any reasons why the witness will incur some hardship or inconvenience by having to attend in person, the court is justified in refusing an order under s. 73(2), particularly if the evidence the witness will give is contentious.²⁴

It should be noted that the wording of s. 73(2) clearly contemplates the use of audiovisual communications technology other than closed circuit television, potentially opening the door to the use of mobile, computer-based audiovisual platforms that do not require a fully-equipped videoconferencing site at each endpoint of the videolink. The essential requirement under s. 73(2) is that the technology employed must allow simultaneous visual and oral communication. Audiovisual platforms exhibiting a noticeable delay between transmission and reception that cannot be

^{22. 2010} BCSC 674. See also *Seder v. ICBC*, 2011 BCSC 823 (Master); *Campbell v. McDougall*, 2011 BCSC 1242.

^{23.} The position in Ontario, for example, is opposite. There it has been held that despite the permissive terms of Rule 1.08(3) of the Ontario *Rules of Civil Procedure*, the party calling the witness has the onus of persuading the court that the witness should be heard by videoconference: *Pack All Manufacturing Inc. v. Triad Plastics Inc.*, [2001] O.J. No. 5882 (S.C.J.)

^{24.} *Slaughter v. Sluys*, 2010 BCSC 1576.

eliminated or reduced satisfactorily may not meet this criterion. The use of alternatives to closed circuit television is discussed further in Section III.

- (c) Considerations for the exercise of discretion under s. 73(2)
- Section 73(3) sets out the circumstances the court may consider in deciding whether to allow a remote appearance of a witness:
 - (3) If a party objects to the court receiving evidence in the manner described in subsection (2), the court may consider any of the following circumstances:
 - (a) the location and personal circumstances of the witness;
 - (b) the costs that would be incurred if the witness had to be physically present;
 - (c) the nature of the evidence the witness is expected to give;
 - (d) any other circumstance the court considers appropriate.

The fact that examination in chief and cross-examination will be lengthy, or that the witness will be questioned extensively regarding documents, are not in themselves reasons to refuse to allow the witness to appear remotely.²⁵

(d) Notice requirement: s. 73(4)

Sections 73(4) and (5) require that prior notice of an intention to call a witness to give evidence under s. 73(2) be given to the court and all other parties a minimum of five days before the witness is to testify. The court may abridge the notice period.

(e) Ancillary provisions: ss. 73(6)-(8)

Section 73(6) requires evidence presented by videoconference to be given under oath in accordance with the law of British Columbia or the place where the witness is physically present, or alternatively in another manner demonstrating that the witnesses understands the duty to tell the truth. Under s. 73(7), the evidence is deemed to be given in British Columbia for the purpose of laws of evidence, procedure, perjury, and contempt of court. Section 73(8) declares that s. 73 does not prevent evidence being given through audiovisual technology by consent.

25. <i>Ibid.</i>	

C. Meaningful Access to Justice and Accommodation in Legal Procedure

1. GENERAL

In making an application to receive evidence by remote appearance or in another non-standard fashion involving technology, counsel may choose to frame the argument at least in part in terms of an issue of access to justice. Support can be found found in constitutional and international law.

The constitutional and international instruments assume more importance in situations where no clear statutory conferral of discretion like that under s. 6 of the *Canada Evidence Act* applies. Many quasi-judicial tribunals are not bound by the rules of evidence, for example. The constitutional and international instruments then take on greater importance in making an argument for a departure from the usual procedure to allow a technology-mediated witness appearance or examination.

2. CONSTITUTIONAL FOUNDATIONS

- (a) Charter procedural rights
 - (i) General

The Canadian Charter of Rights and Freedoms²⁶ contains several guarantees of procedural rights, notably the right of persons charged with an offence to be tried within a reasonable time under s. 11(b), the right under s. 11(d) to be presumed innocent until proven guilty according to law in a "fair and public hearing by an independent and impartial tribunal," the right under s. 11(f) to trial by jury in some cases, the right under ss. 11(c) and 13 against self-crimination, and the right to an interpreter if needed under s. 14. Section 14 of the Charter guarantees a party or a witness in any proceedings the right to the assistance of an interpreter if the party or witness does not understand or speak the language in which the proceedings are conducted or is deaf.

(ii) "Fair and public hearing" and procedural accommodation: s. 11(d)

The Charter guarantee of fairness under s. 11(d) may come into play in criminal proceedings in which the accused or other witness needs to give evidence in a non-standard manner. For example, a witness who is non-verbal (without speech) due to a condition such as aphasia or apraxia but who can understand and respond to questions by counsel may be able to testify by using voice output technology matched with the individual's physical capabilities. Examples of this might be a Dynavox or similar system involving a touchscreen tablet with symbols that, when touched, pro-

^{26.} Part I of the Constitution Act, 1982, being Schedule B to the Canada Act 1982 (UK), 1982, c 11.

duce audible words. If the evidence cannot be received otherwise, refusal to permit the evidence to be given in the non-standard manner could amount to denial of the Charter right of the accused to a fair hearing, as well as the related right under s. 650(3) of the *Criminal Code*²⁷ to make full answer and defence.

(iii) Right to an interpreter: s 14

The s. 14 guarantee of an interpreter is an important right that may be invoked by a party or witness in either criminal or civil proceedings. In expressly mentioning the deaf, s. 14 recognizes the importance of sign language as the main and generally the preferred means of communication for the deaf community. As s. 14 requires the services of an *interpreter*, and not merely interpretational services, it does not permit substitution of a text-based device for communication such as TTY (text telephone) or text transcription, even if virtually contemporaneous, without the consent of the deaf party or witness. Many deaf persons would consider a text-based solution unacceptably inferior to sign language interpretation.

Furthermore, the interpretation must be continuously available throughout the proceeding in a criminal proceeding if an accused person needs it.²⁸

- (b) Charter equality rights and access to justice
 - (i) Equality rights under s. 15(1) of the Charter

Section 15(1) of the *Canadian Charter of Rights and Freedoms* guarantees equality before and under the law, and the equal protection and benefit of the law without discrimination, in particular discrimination on the grounds of race, national or ethnic origin, colour, religion, sex, age or mental or physical disability. Discrimination under s. 15(1) is a distinction, intentional or otherwise, based on grounds relating to personal characteristics of an individual or group in question, which has the effect of imposing burdens, obligations, or disadvantages on the individual or group not imposed upon others, or which withholds or limits access to opportunities, benefits, and advantages available to other members of society.²⁹

^{27.} *Supra*, note 3.

^{28.} *R. v. Tran*, [1994] 2 S.C.R. 951. In *Tran*, Lamer, C.J.C. stated that the principles surrounding s. 14 of the *Charter* enunciated in that case applied to the situation of an accused in criminal proceedings, and expressly left open the possibility that different rules might apply in civil or administrative proceedings.

^{29.} *Andrews v. Law Society of British Columbia*, [1989] 1 S.C.R. 143 at 174 per McIntyre J. (dissenting in the result but in agreement with the majority on the definition of discrimination).

Section 15(1) guarantees substantive and not merely formal equality.³⁰ Facially neutral laws and policies may be discriminatory if their effect is to create distinctions that perpetuate prejudice or stereotyping.³¹

(ii) Disability as an enumerated ground of discrimination under s. 15(1)

A key authority on what this entails in relation to the enumerated ground of disability is *Eldridge v. British Columbia (Attorney General)*.³² In *Eldridge*, the Supreme Court of Canada affirmed that public services mandated by legislation must be provided in a non-discriminatory manner so that all persons are able to benefit. In *Eldridge* the Supreme Court held that refusal by the provincial government to provide sign language interpretation to a deaf patient as an insured benefit under the provincial health care scheme amounted to a contravention of s. 15(1) of the *Charter*. Proper communication with the patient's physician was integral to the provision of medical care, and was the means by which deaf persons could receive the same quality of medical care as those with hearing. In other words, the *effective* benefit of services available to the general public cannot be denied to an individual or class merely because they must gain access to the services in a different manner than those without disability.

Another important decision dealing with disability and s. 15(1) of the *Charter* is *Eaton v. Brant County Board of Education*.³³ Here again the Supreme Court of Canada emphasized that s. 15(1) requires reasonable accommodation of the circumstances of an individual with disability in the provision of a legislatively mandated public service that is generally available to the public in order to avoid what it referred to

^{30.} Withler v. Canada (Attorney General), [2011] 1 S.C.R. 396. The Supreme Court explained the difference between formal and substantive equality in Withler as being that formal equality looks only to the presence or absence of differences and considers whether the claimant is similarly situated to others affected by the challenged law. Substantive equality rejects this as a test of discrimination and requires consideration not only of the characteristics on which differential treatment is based, but also of whether those characteristics are relevant to differential treatment. It focuses on the actual impact of the law alleged to be discriminatory, taking full account of social, political, economic and historical factors concerning the claimant group. Substantive equality may reveal differential treatment to be discriminatory because of prejudicial impact or negative stereotyping or conversely it may reveal differential treatment to be necessary in order to relieve the actual situation of the claimant.

^{31.} *Ibid.*

^{32. [1997] 3} S.C.R. 624.

^{33. [1997] 1} S.C.R. 241.

as "the relegation and banishment" of persons with disabilities, and allow the individual to derive the benefit of the service.³⁴

These authorities were applied in *Moore v. British Columbia (Min. of Education)* to hold that access to public education could not be denied to a dyslexic student because of a decision to cancel the school district's "special needs" programs for financial reasons.³⁵ The special needs program was the means through which the student with dyslexia could obtain access to and derive benefit from the service provided to the public, namely public education.

The Federal Court of Appeal applied the same principles in *Canada (Attorney General) v. Jodhan* to hold that standards for federal government informational and interactive websites discriminated against the visually impaired in breach of the Charter.³⁶ The discrimination consisted in the failure to require the websites to have accessibility features enabling blind persons to navigate them with the aid of screen readers and voice browsers, software which has long been in common use. As a result, visually impaired persons could not obtain equal benefit from the information and services provided to citizens online.

Earlier, the Federal Court held in *Canadian Association of the Deaf v. Canada* that the 2001 Translation Bureau guidelines for application of its Sign Language Interpretation Policy contravened s. 15(1) of the *Charter* because they were under-inclusive.³⁷ In restricting the availability of sign language interpretation to public servants and certain public events held by the federal government, when previously it had been provided if a deaf citizen needed to communicate in a private meeting with a government official, they denied the hearing-impaired population the benefit of being able to deal with government on a basis equivalent to the hearing population.

(iii) Charter equality rights in the context of legal procedure

The potential application of equality rights in the context of civil, criminal, and administrative procedure is much more complex and nuanced than the application of

^{34.} *Ibid.*, at para. 67. "Reasonable accommodation" means that the obligation to accommodate those adversely affected by facially neutral policies or rules extends to the point of undue hardship for those required to make the accommodation: *Ontario Human Rights Commission v. Simpsons-Sears Ltd.*, [1985] 2 S.C.R. 536; *Central Alberta Dairy Pool v. Alberta (Human Rights Commission)*, [1990] 2 S.C.R. 489.

^{35. [2012} SCC 61, [2012] 3 S.C.R. 360.

^{36. 2012} FCA 161, 350 D.L.R. (4th) 400.

^{37. [2006]} F.C. 971.

ss. 11-14 of the *Charter*, which are obviously linked directly with the judicial process.

The Charter applies to the federal and provincial legislatures and to acts of the executive governments of Canada, the provinces and territories.³⁸ Insofar as procedure is governed by legislation and rules of court made under statutory authority, the Charter applies to the legislation and rules as it does to all federal and provincial legislation.³⁹ The Charter probably applies indirectly to aspects of procedure governed by common law also, including non-statutory rules of evidence.⁴⁰ The relationship between the Charter and the judgments and orders of courts is not completely settled. It is fairly clear that court orders and judgments themselves are not governmental acts for the purpose of the Charter.⁴¹ In some instances, however, appellate courts in Canada have applied a Charter analysis in reviewing the orders of lower courts.⁴²

It is possible to conceive of situations in which inflexible application of procedural and evidentiary rules and norms might operate to deny equal protection and benefit of the law. This was acknowledged by the British Columbia Court of Appeal in *R. v. Pearson* when addressing the necessity of admitting hearsay statements by a complainant with mental disability:

We must, of course, ensure that those with mental and physical disabilities receive the equal protection of the law guaranteed to everyone by s. 15 of the *Canadian Charter of Rights and Freedoms*. This will sometimes require that their evidence be presented along with the evidence of others who are able to explain, support and supplement it, so that, to the extent that this is possible, the

^{38.} Retail, Wholesale and Department Store Union, Local 580 v. Dolphin Delivery Ltd., [1986] 2 S.C.R. 573.

^{39.} Section 32(1) declares the Charter applies to federal and provincial legislatures and to the executive governments of Canada and each province. The Charter applies to legislation and to governmental action based upon legislation and common law: *Retail, Wholesale and Department Store Union, Local 580 v. Dolphin Delivery Ltd., supra,* note 38.

^{40.} In *Retail, Wholesale and Department Store Union, Local 580 v. Dolphin Delivery Ltd.*, [1986] 2 S.C.R. 573 McIntyre, J. stated at 603 that the courts must develop the rules of common law in keeping with the fundamental values expressed in the *Charter*. See also *Dagenais v. CBC*, [1994] 3 S.C.R. 835 at 878, where the common law rules concerning publication bans were reformulated to conform with the *Charter*.

^{41.} Retail, Wholesale and Department Store Union, Local 580 v. Dolphin Delivery Ltd., supra, note 40.

^{42.} See R. v. Rahey, [1987] 1 S.C.R. 588; BCGEU v. British Columbia, [1988] 2 S.C.R. 214.

court will receive the account which the witness would have given had he or she not been disabled.⁴³

If the regular trial process of oral question and answer constitutes a barrier in presenting evidence crucial to a party's case because the party has a disability affecting communication or perception, to deny accommodation of the disability would deprive the party of the ability to obtain access to justice on an equal footing with others. Reasonable accommodation would appear to require allowing the evidence to be given by means the party is accustomed to using in order to perceive and communicate, even if it means employing technology unfamiliar to the court or tribunal.

For example, a quadriplegic individual who cannot move or speak but can control mouth movement to some extent may be able to produce text on a computer screen or use text-to-speech software to produce audible voice output by means of a sip-and-puff switch. In-person attendance might be impossible due to the party's condition. Reasonable accommodation of the disability would seem to require that the party be allowed to appear by videoconference to give the evidence using these means. Failure to accommodate the party's disability under these circumstances would anount to a denial of opportunity to participate in the judicial process on the same level as a person without disability. Arguably, this would deprive the party of the equal protection and benefit of the law.

If the quadriplegic individual in the example is not a party to the proceeding, but rather a witness called by a party, it is more doubtful that a refusal to depart from normal procedure to accommodate a non-standard means of giving evidence would amount to a breach of s. 15(1) of the Charter. The analysis required by the case law on the interpretation of s. 15(1) presents logical obstacles to a finding of discrimination in those circumstances. As the ground of discrimination in the example, namely physical disability, is not a personal characteristic of the party but rather of the witness, the party would not have standing to complain of discrimination within the meaning of s. 15(1). On the other hand, as it is the party and not the witness who is seeking the equal protection and benefit of the law in the proceeding, the refusal of accommodation does not deny the Charter equality rights of the witness, who simply would not testify. In the result, neither the party nor the witness would have standing to complain of a breach of s. 15(1).

^{43. (1994), 95} C.C.C. (3d) 365 per Taylor, J.A. at 378 (B.C.C.A.).

^{44.} That is not to say that the refusal to accept the evidence presented in a non-standard manner could not be challenged on another basis, e.g. on appeal as a manifestly wrong exercise of judicial discretion, or on judicial review for procedural unfairness in the case of a quasi-judicial tribunal. The refusal to receive the evidence of the quadriplegic witness would probably be inconsistent with art. 13 of the UN Disabilities Convention (see below), although legal consequences

(iv) Rural or Remote Location Not an Analogous Ground

While disability is an enumerated ground of discrimination under s. 15(1), residence in a rural or remote location is not. Furthermore, it has been held not to be analogous to an enumerated ground. Thus, disadvantages that may result from residence in a non-urban or remote location, including inconvenience and the economic hardship of attendance, probably do not provide a foundation for an argument based on Charter *equality* rights for accommodation of the circumstances of a participant in a legal proceeding. Counsel will need to rely instead on the *Canada Evidence Act* and provincial *Evidence Act* provisions that require the court to consider the degree of inconvenience to the witness in ruling on an application to permit remote appearance by means of technology, and the rules of court discussed in Section III.

3. THE UN DISABILITIES CONVENTION ARTICLE 13.

Canada ratified the *United Nations Convention on the Rights of Persons with Disabilities* (Disabilities Convention) in 2010.⁴⁶ This Convention requires positive action on the part of signatory countries to provide access to the support that persons with disabilities may need to enable them to exercise their legal capacity on an equal basis with others.⁴⁷ Article 13 of the Convention imposes an explicit obligation on adhering countries to facilitate effective participation in legal proceedings by persons with disabilities. It also requires them to supplement this positive action with appropriate training for those engaged in the administration of justice:

Article 13 - Access to justice

1. States Parties shall ensure effective access to justice for persons with disabilities on an equal basis with others, including through the provision of procedural and age-appropriate accommodations, in order to facilitate their effective role as direct and indirect participants, including as witnesses, in all legal proceedings, including at investigative and other preliminary stages.

would not flow directly from the treaty contravention in the absence of domestic implementing legislation.

- 45. Rural Dignity of Canada v. Canada Post Corporation (1991), 78 D.L.R. (4th) 211 (F.C.T.D.); aff'd (1992), 88 D.L.R. (4th) 191 (F.C.A.); leave to appeal refused 92 D.L.R. (4th) vi (S.C.C.). Per Martin, J., 78 D.L.R. (4th) at 227: "[i]n my view the fact of living in a Canadian rural community is not a personal characteristic analogous to the characteristics set out in subsection 15(1)."
- 46. 2515 UNTS 3, online at http://www.un.org/disabilities/convention/conventionfull.shtml. See also Canada Treaty Series 2010 /8.
- 47. *Ibid.*, Article 12, paras. 2 and 3.

2. In order to help to ensure effective access to justice for persons with disabilities, States Parties shall promote appropriate training for those working in the field of administration of justice, including police and prison staff.

The broad wording of the first paragraph of Article 13 of the Convention, calling for "effective access to justice for persons with disabilities on an equal basis with others" and specifically mentioning procedural accommodations in this regard, affords powerful persuasive support for flexibility in applying evidentiary and procedural rules.⁴⁸ It is also noteworthy that Article 13 speaks of access to justice by persons with disabilities parties *and* as witnesses. It requires accommodations that will facilitate their "effective role as direct and indirect participants" in either of these capacities in a legal proceeding.

While Canada has agreed at the international level to be bound by the terms of the *Disabilities Convention*, those terms do not have the force of law at the domestic level unless and until they are implemented by federal and provincial legislation. Nevertheless, it is a well-established principle that domestic laws are to be interpreted wherever possible in a manner consistent with Canada's obligations under international conventions and international customary law.⁴⁹ This principle allows for Article 13 to be cited in support of an application to a Canadian court to allow reception of evidence from a person with disability by non-standard means.

Article 13 can be invoked with equal force whether the individual with disability is a party or a non-party witness. It is specific to the legal-procedural context, and its application to individual cases does not depend on a complex, multi-stage test of discrimination like s. 15(1) of the Charter. For these reasons, it is probably much easier in the majority of cases to mount a human rights argument for procedural accommodation of a party or witness with a disability on Article 13 rather than on the basis of Charter equality rights.

4. ACCOMMODATION OF WITNESS DISABILITY UNDER THE GENERAL LAW OF EVIDENCE

The common law adversarial system universally employed in Canadian courts and also by many quasi-judicial tribunals relies predominantly on oral testimony from

^{48.} See *Yuill v. Canadian Union of Public Employees*, 2011 HRTO 126 (Article 13 of *Disabilities Convention* relied upon for conclusion that statutory grant of power to Human Rights Tribunal of Ontario to control its own procedure authorized Tribunal to appoint litigation guardian).

^{49.} Baker v. Canada (Minister of Citizenship and Immigration), [1999] 2 S.C.R. 817 at 860-861; Ordon v. Grail, [1998] 3 S.C.R. 437 at 526; Nemeth v. Canada (Minister of Justice), [2010] 3 S.C.R. 281 at 304.

witnesses examined in the presence of the trier of fact and in the presence of the parties.⁵⁰

The Supreme Court of Canada has held, however, that fundamental justice as understood in Canada does not require that a party be able to insist on the physical presence of an opposing witness, even in a criminal case. It is sufficient if the party has an adequate opportunity to cross-examine.⁵¹ Thus, there is no common law bar to the remote appearance of witnesses through the medium of technology, as long as the technology provides that opportunity to each party.⁵²

A few authorities also point to the existence of a discretion under common law evidence rules to depart from the usual procedure for receiving oral evidence and to allow it to be given in the way a material witness is able to give it, if insistence on the usual procedure would amount to excluding the evidence altogether. In the Ontario case *Mann v. Balaban*, the spouse of the deaf plaintiff was evidently allowed to mouth the words of questions put to him by counsel at trial. The plaintiff testified by reading her lips and then repeating the question together with his answer.⁵³ *Udy v. Stewart*, an older Ontario appellate decision, contains an *obiter* remark that if the speech of a witness with a mental disability could not be understood by anyone other than an immediate family member, the family member might be allowed to act as an interpreter for the witness, despite the risk of impartiality and despite the fact that the witness did not speak a foreign language.⁵⁴ As witnesses were not entitled as of right to the services of an interpreter at the time these cases were decided, the accommodation of the witness's disability through these non-traditional ways of testifying could only be based on an extant judicial discretion.

Alan W, Brant, Sidney N. Lederman and Michelle K. Fuerst, *The Law of Evidence in Canada*, 3rd ed. (Markham: LexisNexis, 2009) at 1093. See also David M. Paccioco and Lee Stuessner, *The Law of Evidence*, 6th ed. (Toronto: Irwin, 2011) at 416. See also the remarks of Dickson, C.J.C. in *R. v. Schwartz*, [1988] 2 S.C.R. 443 at 476 on this point.

^{51.} R. v. Potvin, [1989] 1 S.C.R. 525.

^{52.} Faulty operation of the technology or poor video or audio quality might put in question the adequacy of the opportunity to cross-examine or present evidence in chief and raise issues of fairness and fundamental justice, however. See *Ross v. British Columbia*, 2008 BCSC 1862; *Ganitano v. Metro Vancouver Housing Association*, 2009 BCSC 787.

^{53.} Brant and Lederman, *supra*, note 50 at 1104, quoting from the opening statement by counsel for the plaintiff at trial. The judgment of the Supreme Court of Canada at [1970] S.C.R. 74 does not deal with interpretation by lip reading at trial.

^{54. (1885), 10} O.R. 591 (C.A.). The point was not decided but expressly left open. See also *R. v. Pearson, supra*, note 43 involving a somewhat analogous situation but decided on different grounds, namely the principled basis for admission of hearsay enunciated much later by the Supreme Court of Canada.

D. Accommodation Must Be Individualized, Not Merely Pro Forma

On occasions when technology must be used to overcome a barrier that a witness with a disability faces in participating in a proceeding in order that evidence may be received from that person, the means employed must be effective for that individual. If they are not, there is a risk that properly admissible evidence will not be received or properly tested in cross-examination. This has potential to affect the outcome of the proceeding, and in the worst case scenario lead to a miscarriage of justice. The technological means used to mediate the appearance of the witness must be ones that the witness is either accustomed to using, or at the very least can use effectively without difficulty. For example, requiring a deaf witness who uses ASL (American Sign Language) exclusively and who may not have a high level of literacy to rely on a keyboard and realtime transcription displayed on a computer screen as the means of communicating with the court will only compound the barrier to communication that the witness already faces. Communication, if possible at all, will be poor. On the other hand, if the witness can see on the same screen an ASL interpreter working offsite, the witness may be able to answer counsel's questions with ease.

While this seems obvious as a matter of pure logic, it also finds support in the jurisprudence of human rights and Charter equality rights. Reasonable accommodation implies acceptance of the individual's choice of assistive means for obtaining access to a service or benefit on an equal basis with others, or at least to make reasonable efforts to do so rather than supplying a token "one size fits all" solution.

In *Council of Canadians with Disabilities v. Via Rail Canada*,⁵⁵ for example, the respondent argued that its policy of providing taxis to persons unable to use their personal wheelchairs to travel in its wheelchair-inaccessible railcars was sufficient compliance with the statutory objective under s. 5(d) of the *Canada Transportation Act*⁵⁶ of operating a transportation network "accessible...without undue obstacle...to the mobility of persons, including persons with disabilities." The Supreme Court of Canada rejected this argument and held the Act must be applied consistently with human rights legislation. Declaring that "persons with disabilities are entitled to ride with other passengers, not consigned to separate facilities," the Supreme Court held the railway was obliged to comply with a direction from the Canadian Transportation Agency to refit enough of its railcars so that every passenger train would have at least one wheelchair-accessible car.

^{55. [2007] 1} S.C.R. 650.

^{56.} S.C. 1996, c. 10, s. 5(d).

Another example from human rights jurisprudence of a *pro forma* effort repugnant to the concept of reasonable accommodation is that of a blind person who uses a guide dog being told he or she cannot enter premises with the guide dog, and offered the alternative of being guided by the arm by a sighted person.⁵⁷

The Law Society of British Columbia report *Lawyers with Disabilities: Overcoming Barriers to Equality* emphasizes that thinking about disability in terms of a permanent or long-term difficulty that an individual has in performing a particular activity or task rather than in generic categories, such as paraplegia, blindness, deafness, etc., is conducive to finding appropriate accommodation.⁵⁸ The Law Society report also stresses the crucial importance of consulting the individual with the disability regarding the means by which the barriers that individual faces can best be overcome in a particular situation. It contains this recommendation:

People with disabilities have a wide range of abilities and limitations. It is difficult, if not impossible, to generalize accommodation needs. Often the best approach can be asking questions about a person's abilities and limitations to ascertain what accommodation may be required.⁵⁹

This approach is fully in keeping with views expressed by members of our Advisory Committee in the course of consultations. Lawyers and other professionals working with a client or witness with a disability must consult closely with that person concerning the challenges the legal process will present, and determine the person's preferences regarding the means of coping with them.

E. Accommodation and Assessment of Costs

1. Party or Witness with Disability

(a) British Columbia Supreme Court

Recognition of the expenses associated with the appearance of a witness or party with disability in the assessment of costs in civil matters is an important aspect of procedural accommodation.

The criterion under Civil Rule 14-1(5) and Family Rule 16-1(4) for recoverability of disbursements in an assessment of costs is whether the disbursement in question

^{57.} Centre de la communauté sourde du Montréal métropolitain inc. c. Régie du logement, 1996 CanLII 19 at para. 3.3.1 (QC TDP).

^{58.} Disability Research Working Group, *Lawyers with Disabilities: Overcoming Barriers to Equality*. (Vancouver: Law Society of British Columbia, 2004) at 8.

^{59.} Ibid., at 15.

was "necessarily or properly incurred" in the conduct of the proceeding or the family law case. Under this criterion, the fees of a sign language interpreter to enable a deaf party who is present at a trial or hearing to fully understand the totality of proceedings are a recoverable disbursement, whether or not the deaf party actually testifies.⁶⁰ This is true even if the proceeding takes place in chambers and is based entirely on affidavit evidence.⁶¹

The cost of engaging an ASL interpreter to allow a deaf or non-verbal litigant to instruct counsel and receive advice should also be a recoverable disbursement, by analogy with a case in which the fees of an interpreter were allowed as disbursements in these circumstances for a party with rudimentary knowledge of English.⁶²

Expenses associated with the use of particular technology should logically be treated in the same way as interpreters' fees if the technology was necessary to enable a party or non-party witness to give evidence relevant to matters in issue. For example, an witness unable to speak clearly because of a condition such as aphasia or cerebral palsy, and who needs to use a touchscreen system like DynaVox or a form of text-to-speech software in order to testify audibly, is not in a significantly different position from a deaf witness who must rely on an ASL interpreter. If the evidence of the witness is important to the case of the party calling the witness and the party had to supply the technology in order to present the evidence, the disbursement should be recoverable as part of a costs award if the party is successful in the litigation.

An argument that less expensive technology might have been obtained, if raised by an opposing party in a costs assessment, may be answered by referring to the well-established principle that reasonable accommodation must have regard to the assistive means chosen by the individual with disability to deal with the barrier the individual faces. This principle should prevail unless the opposing party can demonstrate that bearing the expense amounts to undue hardship, a high standard difficult to meet.

^{60.} *Paul's Restaurant Ltd. v. Dunn*, 1996 CanLII 580 (B.C.S.C., Registrar). The plaintiff's counsel in this case was also deaf and relied on the same ASL interpreter. The question of whether a party with hearing who is represented by a deaf counsel could recover the cost of an ASL interpreter for counsel's use in a civil proceeding as a disbursement was not decided.

^{61.} Ibid.

^{62.} See *Terekhov v. Elias* (2003), 123 A.C.W.S. (3d) 31, at para. 9 (B.C.S.C., Registrar).

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(b) Tax Court of Canada

The Tax Court of Canada assumes the cost of providing ASL or other sign language interpretation or realtime transcription (close captioning) for parties and witnesses at hearings in that court under the terms of Practice Note No. 15.⁶³

2. REMOTE WITNESSES: VIDEOCONFERENCE EXPENSE

The expense of arranging for evidence to be given by videoconferencing is normally recoverable by a successful party as a reasonably incurred disbursement if it reduces cost, saves time, or allows evidence to be introduced that would not otherwise be obtainable.⁶⁴

Attendance of counsel at the remote site during a video deposition may also be compensable in costs when the witness requires assistance with exhibits or is not a native speaker of the language in which the proceedings are conducted.⁶⁵

^{63.} Issued 30 June 2007, online at http://cas-ncr-nter03.cas-satj.gc.ca/portal/page/portal/tcc-cci Eng/Process/Practice15.

^{64.} See Moon v. Golden Bear Mining Ltd., 2013 BCSC 165 (Registrar); Suveges v. Martens, 2002 BCSC 882, at para. 14; FFS HK Ltd. v. P.T. 25 (Ship), 2011 BCSC 1418.

^{65.} FFS HK Ltd. v. P.T. 25 (Ship), ibid.

SECTION III REMOTE APPEARANCES

A. General

This section deals with procedural and practical aspects of the appearance of witnesses, parties, and counsel in British Columbia courts and administrative tribunals from a remote location, meaning a location other than the courtroom or hearing venue.

British Columbia was among the first jurisdictions in Canada to introduce a video-conferencing capability into its court system to permit remote appearances. Video-conferencing is now a familiar aspect of the British Columbia court system. From early concentration on bail and remand hearings, its use expanded rapidly to civil chambers applications and case management conferences, and with increasing frequency to *viva voce* examination of witnesses at trial.⁶⁶ It is used extensively in criminal matters, but its expansion in civil proceedings is constrained to some extent by the fact that in a civil matter the cost of a videoconference appearance through the official court network is borne by the parties.

B. Remote Appearances in British Columbia Courts

1. CIVIL AND FAMILY LAW CASES IN THE SUPREME COURT

In civil cases, Rules 23-5(3) to (5) of the *Supreme Court Civil Rules* allow a hearing to be conducted by means of a technological "communication medium." In family law cases, the identically worded Rules 22-6(3) to (5) of the *Supreme Court Family Rules* allow the same.

Hearing by communication medium

(3) In case of urgency, or if the court or a registrar considers it appropriate to do so, the court or the registrar, as the case may be, may conduct a hearing and make an order or decision by telephone, video conference or other communication medium.

^{66.} Julian Borkowski, "Court Technology in Canada" (2003-2004) 12 Wm. and Mary Bill Rts. J. 681 at 681-682.

Video conferencing

- (4) On application by a party or on its own initiative, the court may direct
 - (a) that an application be heard by way of telephone, video conference or other communication medium, and
 - (b) the manner in which the application is to be conducted.

Application to registrar by communication medium

- (4.1) On application by a party or on a registrar's own initiative, a registrar may direct
 - (a) that a hearing before a registrar be heard by way of telephone, video conference or other communication medium, and
 - (b) the manner in which the hearing is to be conducted.

Application must be made by requisition

- (5) An application under subrule (4) or (4.1) for a direction that an application or a hearing before a registrar be heard by way of telephone, video conference or other communication medium
 - (a) must be made by requisition in Form 17, and
 - (b) must be supported by a letter, signed by the person or the person's lawyer, setting out the reasons why the order is sought.

These rules now explicitly recognize a very wide discretion to allow remote appearances. Before amendment in 2013, subrule (3) provided that the court or a registrar could conduct a hearing and make an order or decision by telephone or other communication medium only "in case of urgency." The subrule was nevertheless interpreted to authorize hearings and pronouncement of orders and judgments by electronic communication in order to avoid extreme inconvenience, including inconvenience resulting from expense.⁶⁷ Now Civil Rule 23-5(3) and Family Rule 22-6(3) are not limited to cases of urgency alone, but explicitly allow use of the telephone, videoconferencing or another telecommunications technology in hearings whenever the court considers it appropriate to do so. The same discretion is available to registrars conducting a hearing.

^{67.} Luis v. Haw 2011 BCSC 815, 17 C.P.C. (7th) 324, at paras. 6, 8, 10.

While subrules (4) and (4.1) are specifically limited to applications and registrar's hearings, respectively, subrule (3) is not. Subrule (3) may arguably apply to trials as well as applications, particularly as urgency is no longer the sole ground referred to in the subrule for allowing remote appearances, and the Civil Rules and Family Rules speak elsewhere of trials being "heard." As the applicability of subrule (3) to trials is not completely clear, however, it is probably advisable to cite s. 73 of the *Evidence Act* as well as the subrule when applying before or during a trial for a direction permitting remote appearance of a witness.

2. CRIMINAL CASES — PROVINCIAL AND SUPREME COURT

Several provisions of the *Criminal Code*⁷⁰ that address both the admissibility of evidence and matters of procedure authorize the appearance of a witness in criminal proceedings by means of audiovisual technology or another form of telecommunications. Under some circumstances, the appearance of the accused from a remote location is permitted during portions of a trial. These provisions are reviewed in Section II above under the subheading "Criminal Code Provisions Authorizing Video and Audio Evidence."

Videoconferencing is used extensively in pretrial matters, especially for bail applications. In the Provincial Court, the February 2009 *Practice Direction on Hearing of Bail Applications*⁷¹ specifies that bail applications may, and outside court sitting hours must, be referred to the Justice Centre in Burnaby for a hearing before a Judicial Justice of the Peace by means of any suitable telecommunication device, including telephone or closed circuit television, that is satisfactory to the justice.

^{68.} See, for example, the heading of Civil Rule 12-1 and Family Rule 14-2 ("How to Set Trial for Hearing"), Civil Rule 12-1(5) and Family Rule 14-2(5) speaking of an order for parts of a trial to be "heard" at different places, Civil Rule 12-1(8) and Family Rule14-2(7) relating to the date of trial. See also Civil Rules 12-1(6) and (3), speaking of a trial being "heard" without or with a jury, respectively, and Family Rule 14-6(1) providing that the trial of a family law case be "heard" without a jury.

^{69.} Supra, note 29. See Section II ("Section 73 of the British Columbia Evidence Act").

^{70.} Supra, note 3.

^{71.} Found on the Provincial Court website at: http://www.provincialcourt.bc.ca/downloads/Practice%20Directions/

3. COURT OF APPEAL

Rule 44 of the *Court of Appeal Rules* authorizes applications and pre-hearing conferences to be conducted by telephone or videoconference if the presiding justice or registrar considers it appropriate in the circumstances:

Hearings by telephone or videoconference

- **44** (1) A justice may hear an application under the Act or these rules, or hold a prehearing conference, by telephone or videoconference if he or she considers it appropriate.
 - (2) The registrar may conduct a registrar's hearing under the Act or these rules by telephone or videoconference if he or she considers it appropriate.

4. REQUESTING AND ARRANGING FOR VIDEOCONFERENCING IN BRITISH COLUMBIA COURTS

(a) Provincial Court

A request for appearance by videoconference in the Provincial Court is made to the Judicial Case Manager at the court location where the proceeding is taking place. The requesting party must complete and submit a Court Videoconferencing Request Form (ADM 509), used also by the Supreme Court. ⁷²

(b) Supreme Court: Administrative Notice AN-6

The use of the court videoconferencing network in the Supreme Court is governed by Administrative Notice AN-6, in effect from July 1, 2010.⁷³ The Administrative Notice emphasizes that judicial approval is required for all appearances by videoconferencing. It sets out the procedure for booking a videoconferencing session and specifies the fees payable in some instances by the requesting party.

The Administrative Notice directs that a request is initiated by contacting the Manager, Supreme Court Scheduling in the registry where the proceeding was commenced or to which it has been transferred. The requesting party must complete and submit a Court Videoconference Request Form (ADM 509) at least five business days before the date of the proposed videoconference session. If the videoconference session is to take place outside the regular hours when the registry is open, it must be submitted at least 21 calendar days in advance.

^{72.} The ADM 509 form is found on the B.C. Supreme Court website at: http://www.ag.gov.bc.ca/courts/forms/adm/adm509.pdf.

^{73.} Administrative Notice AN-6 is found on the British Columbia Courts website at: http://www.courts.gov.bc.ca/supreme court/practice and procedure/practice directions/administrative notices.

While the ADM 509 form may be submitted before or after the court has made an order or direction for the remote appearance under the relevant rule or statutory provision, the requesting party must indicate on the form whether judicial approval has been obtained.

Information required to complete the ADM 509 form includes the style of the proceeding, the name of the presiding judge if applicable, the estimate start and stop times of the videoconference session, the nature of the proceeding being videoconferenced (e.g. chambers application, case management conference, remand hearing, arraignment, witness testimony), the names of counsel and the parties or the accused, the witness, and the interpreter if there is one. The requesting party must also specify the sites (endpoints) involved in the videoconference session, and which participants will be at each site. If one of the sites is not another court registry, such as a commercial videoconferencing site, it must be identified on the form together with the name and contact information of a contact person at the non-court site. Billing information for the equipment use fees and line charges must also be supplied.

If the remote videoconferencing site is a private one rather than another court registry, the requesting party is responsible for making all necessary arrangements for its use, including paying the fees charged by the private site.

(c) Court of Appeal

A Court of Appeal Practice Directive entitled "Chambers Applications by Telephone or Videoconference" issued 19 September 2011 sets out the procedure for requesting and arranging for an application to be heard with counsel appearing remotely.⁷⁴ This Practice Directive applies in civil and criminal matters. It emphasizes that telephone and videoconference hearings are at the discretion of the judge hearing the application. A request for an application to be heard by telephone or videoconference must be made in writing and filed with all motion material at least seven days before the application is scheduled to be heard. The chambers judge determines

^{74.} The practice directive is found on the Court of Appeal website at: http://www.courts.gov.bc.ca/court of appeal/practice and procedure/civil and criminal practice directives/.

whether the matter will proceed by telephone or videoconference after reviewing the filed material. If the decision is to allow the matter to proceed by remote appearance, the judge will set the time of the hearing. Counsel are contacted by the registry official responsible for scheduling and advised of the chambers judge's disposition of the request.

(d) Videoconferencing fees

(i) Fees charged by the court videoconferencing network

There are two components to the fees charged for use of the court videoconferencing network. The first is the flat recovery charge of \$100 per hour or portion of an hour per (court network) site. The second is the line charge to cover the cost of use of a telecommunication service for the videoconference call. The applicable line charges for each hour or portion of an hour are:

within British Columbia \$65

within North America \$100

outside North America \$200 minimum

Thus, if the remote site is another court registry, the usual hourly charge for video-conference use is \$265 per hour.

In civil proceedings, the party that would incur the costs associated with an appearance in person is normally responsible for paying videoconference fees charged by the Court Services Branch for the remote appearance. Exceptions are where the court initiates the videoconference session itself or where a judicial officer appears at the remote site. In these cases, no fees are payable by the parties.

No fees are charged for videoconferencing in family law cases in either the Supreme or Provincial Courts.

In criminal proceedings, no fees are payable when an accused in custody appears by video in a matter in which that accused is the subject of charges. If a request is made by or on behalf of an accused for a witness to appear by videoconference, however, fees are payable by the accused.

(ii) Fees charged by private videoconferencing sites

If the remote site is a private, commercial or non-commercial videoconferencing facility, the requesting party is responsible for its fees in addition to the \$100 per hour

for the court registry site that is the other endpoint of the call, as well as the line charge. The fees charged by private videoconferencing sites per hour, half-day, or full day of use will vary.

Community Futures BC maintains a network of videoconferencing sites from Community Futures offices in locations throughout the province.⁷⁵ Its fees are \$100 per hour for each Community Futures site to a maximum of \$500 per day per site during business hours. After-hours usage carries a fee of \$120 per hour (\$140 per hour on Saturdays).

5. THE COURT VIDEOCONFERENCING NETWORK

Videoconferencing is available from 44 court locations in British Columbia and 14 provincial and federal correctional centres. The court videoconferencing network is able to operate on two platforms: ISDN and IP / SIP.⁷⁶ Up to four separate sites can usually be connected to the same session, including the host site.⁷⁷ The court network is able to interconnect with sites outside the network operating within conventional standards. When the remote site is a commercial or other non-network one, the Court Services Branch supplies the technical information to counsel or the parties they need to pass on to the operator of the remote site to facilitate the interconnection. The technical requirements to set up a videoconference call with a non-network site may vary slightly from one court network site to another.⁷⁸

Two centrally located members of the Court Services Branch provide full-time technical support to the court videoconferencing network. At least one court staff mem-

^{75.} Community Futures offices are located on Vancouver Island, in the Interior of the province, and in Haida Gwaii. The most northerly Community Futures office is in Fort St. John. A map of Community Futures videoconferencing locations can be found online at: http://www.communityfutures.ca/resources/video-conferencing-map.php.

^{76.} ISDN (Integrated Services Digital Network) is a set of standards used for digital transmission of audio, video, and data signals over circuit-switched telephone lines simultaneously. Videoconferencing is one of its applications. IP stands for Internet Protocol. When videoconferencing takes place on the IP platform, the video, audio and data streams are transmitted as packets of data over the internet. IP is gradually supplanting ISDN as a mode of videoconferencing. SIP stands for Session Initiation Protocol. It is a signalling communications protocol used to initiate, control, and terminate messaging over IP networks.

^{77.} Information supplied by the Court Services Branch. More than four sites can be connected if an outside service provider is engaged.

^{78.} Information supplied by the Court Services Branch.

ber at each site is designated to co-ordinate local technology matters, including use of the videoconferencing equipment.⁷⁹

A list of court locations and correctional facilities in the province at which videoconferencing is available appears in Appendix A.

6. Mobile Desktop Videoconferencing Platforms in Court – Future Possibilities

Videoconferencing is possible now not only by means of closed-circuit television, but also through computer software in common use by members of the public. The rules of court permitting remote appearances (see above) do not appear to restrict the court to using any one form of video technology.⁸⁰

Apart from a few rare exceptions, however, videoconferencing in British Columbia courts takes place exclusively by means of television technology. Low-cost, computer-based audiovisual platforms available in the consumer market are not employed because their video and audio quality is not considered satisfactory for court use. This is generally the case in courts across Canada, although low-cost popular audiovisual platforms are occasionally used in some jurisdictions for mediations and pre-trial proceedings.⁸¹

The Court Services Branch continues to experiment with numerous software-based audiovisual platforms in an effort to find ones that are technically satisfactory and

^{79.} See Erich P. Schellhammer, *A Technology Opportunity for Court Modernization: Remote Appearances* (Victoria: Canadian Centre for Court Technology and Association of Canadian Court Administrators, 2013) at 110.

^{80.} In Ontario, rule 1.08(3) of the Rules of Civil Procedure empowers the court to direct a "telephone or video conference." The use of Skype to receive oral evidence of witnesses has been allowed in Ontario in a few instances: Yunger v. Zolty, 2011 ONSC 5943 at para. 120 (witness in Switzerland refusing to come to Canada to give evidence); Paiva v. Corpening, [2012] O.J. No. 771 (QL), sub nom. P. v. C., 2012 ONCJ 88 (trial cross-examination of party and party's common law partner in Denmark; allowed on balance of convenience because of the expense of travel and the best interests of children vs. minimal prejudice to respondent in conducting cross-examination; Aly v. Halal Meat Inc., 2012 ONSC 2585 at para. 30 (example of balancing of prejudice to opposing party if witness not available in person for cross-examination. vs. inconvenience and cost of attendance in person; one of two witnesses outside Canada allowed to testify by Skype because the evidence was peripheral and the cost and convenience high in relation to importance of the evidence; other witness required to attend in person because the evidence of that witness was important and travel cost was not significant in relation to the amount in issue); Braafhart v. Braafhart, 2011 ONSC 270 (Dutch notary testifying by Skype from Netherlands about contents of financial schedule he prepared). Arguably, the B.C. rules are even broader than Ontario Rule 1.08(3) because they refer to "telephone, video conference or other communication medium."

^{81.} Supra, note 79 at 47, 90, 101, 104, 112, 120, 121.

reliable enough for court use, and also to find a means of making the official court videoconferencing network interoperable with them.

C. Remote Appearances in Federal Court and the Tax Court of Canada

1. FEDERAL COURT OF CANADA AND FEDERAL COURT OF APPEAL

In the Federal Court and Federal Court of Appeal, Rules 32 and 33 of the *Federal Courts Rules*⁸² authorize the use of technology for remote appearances in a "hearing":

Remote conferencing

32. The Court may order that a hearing be conducted in whole or in part by means of a telephone conference call, video-conference or any other form of electronic communication.

Technological assistance

33. The Court may give directions to facilitate the conduct of a hearing by the use of any electronic or digital means of communication or storage or retrieval of information, or any other technology it considers appropriate.

A "hearing" includes a conference (case management, pre-trial, or dispute resolution) held under the *Federal Courts Rules*. The rules are not clear as to whether the term "hearing" extends to a trial. In *Farzam v. Canada (Minister of Citizenship and Immigration)* the court did not decide the point specifically but said that whether or not the term "hearing" comprises trials, the rule should be interpreted liberally.⁸³ There is a precedent for evidence to be given by telephone by consent in a trial. In *Prior v. The Talapus*, the plaintiffs testified by telephone from Australia with the consent of the opposing parties in the trial of their claims for unpaid wages.⁸⁴

^{82.} S.O.R./98-106.

^{83. [2005]} F.C. 1453. The motion before the court was to allow two witnesses in Iran to testify by telephone. It was not based on Rule 32 but on a general rule dealing with the ability of the court to give directions on how evidence could be presented. The court nevertheless considered Rule 32 as if it applied to trials, and in the result dismissed the motion principally because it involved many documents, the credibility of the witnesses would be prominently in issue, and the proposed mode of giving evidence would deny the court the opportunity to observe their demeanour under cross-examination.

^{84. [2000]} F.C.J. No. 1182 (T.D.).

In *The Nel*, where counsel requested to be heard by telephone on a motion, it was said that the Federal Court tries to proceed as often as possible by telephone where it is suitable and practical, but there is no absolute right to be heard by telephone.⁸⁵

2. TAX COURT OF CANADA

Rule 6 of the *Tax Court of Canada Rules (General Procedure)*⁸⁶ allows for the hearing of any matter in the Tax Court to be conducted by telephone or videoconference:

Hearings by Videoconference or Teleconference

6. The Court may direct that any step in a proceeding be conducted by teleconference, by videoconference or by a combination of both and may specify the party responsible for establishing the communication.

D. Remote Appearances Before Quasi-Judicial Tribunals

A significant number of British Columbia boards and commissions that conduct hearings regularly hear witnesses and counsel by videoconference or telephone. A few conduct their hearings almost exclusively through remote appearance of parties and witnesses, normally by telephone.

Jurisdiction is derived in some cases from the statute governing the tribunal.⁸⁷ In other cases, the authority to hear witnesses and counsel appearing remotely is derived from the *Administrative Tribunals Act.*⁸⁸ Section 36 of that Act, if made applicable to a provincial tribunal by its governing legislation, confers authority to hold "any combination of written, electronic, or oral hearings." Section 38 supplements this with an express grant of authority to call, examine and cross-examine witnesses in an electronic hearing.

^{85. (1998), 144} F.T.R. 53. The application was refused because the equipment available to the court was unsuited to a telephone hearing involving numerous counsel present in person. The refusal was upheld on appeal.

^{86.} SOR 90/688a.

^{87.} For example, s. 246(1) of the *Workers Compensation Act*, R.S.B.C. 1996, c. 492 authorizes the Workers Compensation Appeal Tribunal to conduct hearings or "by means of teleconference or videoconference facilities or by other electronic means." Section 74(2) of the *Residential Tenancy Act*, S.B.C. 2002, c. 78 empowers the director appointed under the Act to conduct dispute resolution proceedings by similar means.

^{88.} S.B.C. 2004, c. 45.

The procedural rules of some tribunals address remote appearances expressly.89

Many tribunals rely heavily on teleconferencing for preliminary and final hearings and case management conferences, but a significant number also use videoconferencing regularly. For reasons of cost, at least two provincial tribunals have begun to use popular computer-based platforms for videoconferencing rather than television technology. One of these is the Human Rights Tribunal, which has employed two popular videoconferencing software platforms in combination with a document camera to conduct a hearing with a large number of participants at numerous end-points.⁹⁰

E. Optimizing Remote Appearances

1. Some Technical Factors

(a) General

Video and audio quality of a remote appearance are dependant on numerous factors including the characteristics of the camera, microphone, and codec at each endpoint, available bandwidth, and the architectural, lighting and acoustic features of the physical site at each endpoint of the call.

Counsel will often have little control over these factors because of the need to make use of infrastructure that is in place. It is important nevertheless to know how they can influence the overall efficiency of a remote appearance.

(b) Codecs

The device or software program that make videoconferencing possible is the codec at each endpoint of the videoconferencing call. "Codec" is an abbreviation of "code/decode" or "compression / decompression." A codec may have the form of a software program in a computer or it may be housed in an external device. In either case, codecs compress streams of audio and video data for transmission over a network to the other endpoint(s) of the call and decompress incoming streams of data to allow the participants at the local endpoint to see and hear the participants at the other endpoint(s).

^{89.} See, for example, the *Dispute Resolution Proceedings Rules of Procedure* of the Residential Tenancy Branch, Rules 11.9 (parties to have witnesses available in person or by conference call), 11.0 (request for witness to give evidence from remote location), and 15.1 (rules applicable to in-person proceedings applicable to proceedings by conference call).

^{90.} Information provided by the British Columbia Human Rights Tribunal.

The codecs at each endpoint must be interoperable (compatible) in order for video-conferencing to take place. Industry standards for the encoding and compression of data streams have been developed to facilitate this. A video standard currently in wide use is H.264. Audio standards in wide use in videoconferencing are G.711 and G.722.

(c) Data transmission speed

The data transfer speed (bandwidth) is one of the factors affecting image and sound quality. The generally accepted minimum data transmission speed for videoconferencing is 384 kbps (kilobits per second). At 512 kbps the image quality and audio approximates the quality of an in-person appearance. The minimum transmission speed for high-definition video is 768 kbps. Many systems can operate at higher speeds.⁹¹

(d) Pixel count (pixel resolution)

A pixel is the smallest controllable portion of the display of a digital image. The number of pixels that the video monitor is set to display affects the quality of the image. Pixel count is often expressed as the number of pixels displayed in the horizontal axis of the screen multiplied by the number of pixels displayed in the vertical axis, e.g. 1280 x 1024. Pixel count is often called "pixel resolution," although this is a misnomer.

(e) Spatial resolution

Spatial resolution is the extent to which individual pixels are addressed in a visual image. It is often expressed in terms of the number of pixels displayed vertically on a screen, e.g. 1080p. Spatial resolution is a major factor affecting image clarity.

(f) Frame rate

The number of times an image is refreshed per second influences how well motion is displayed. The higher the frame rate, the more fluid and natural the motion that will be displayed. A lower frame rate will show more spasmodic movement. Thirty frames per second (30 fps) is a frame rate often used. Frame rate is also called "temporal resolution."

(g) Display aspect ratio

The display aspect ratio is the proportion of width to height of the image. Depending on the aspect ratio, an image will appear either properly proportioned, or

^{91.} Schellhammer, *supra*, note 79, at 13.

stretched or flattened. The standard display aspect ratio for high-definition video is 16:9. Older video systems may use a ratio of 4:3.

2. Perceptual Factors

(a) Image size

It is important for the image of the witness to appear sufficiently large and at a sufficient distance from the camera so that the trier of fact can observe all the usual visual cues that allow for a proper assessment of the demeanour of the witness. ⁹² Certainly, the witness should appear far enough away from the camera so that more than the head and shoulders of the witness are visible. ⁹³ An extensive Australian study aimed at developing best practices for courtroom videoconferencing recommended a minimum distance of 1.5 to 2.5 metres between the camera and the witness at the remote site, depending on the focal length of the camera. ⁹⁴

The Australian study also recommended that the courtroom screen image of a remote witness should be life-sized.⁹⁵ This recommendation coincides with a finding from a controlled experiment conducted in the U.S. involving mock juries. The U.S. experiment indicated that when expert witnesses testifying remotely were presented life-size on a screen behind the witness stand, juries would reach the same verdict as when they appeared in person.⁹⁶

(b) Camera position and angle

The video camera should be positioned in the line of sight of the witness to view the participants in the distant courtroom. If the camera is positioned above the witness, the courtroom observers will see the witness as if looking down and avoiding eye contact, although the witness will assume he or she is looking directly at the examining counsel or other courtroom participant with whom the witness is engaged in an exchange.⁹⁷ This would have obvious implications for the assessment of witness demeanour and perception of truthfulness.

^{92.} See the comments on screen and image size by Davies, J. in *R. v. Gibson*, 2003 BCSC 524, at para. 5.

^{93.} Emma Rowden et al., *Gateways to justice: design and operational guidelines for remote participation in court proceedings* (Sydney: University of Western Sydney, 2013) at 59.

^{94.} Ibid., at 84 and 125.

^{95.} Ibid., at 107.

^{96.} Lederer, Fredric I. "Wired: What We've Learned About Courtroom Technology" (2010) 24 Criminal Justice 18 at 22.

^{97.} Rowden, supra, note 93 at 108.

The Australian study found that simulation of eye contact in videoconferencing can be replete with problems, particularly in multi-screen or multi-view configurations. For example, if the witness has one view of examining counsel and another view of the bench, the witness will appear to courtroom observers to be shifting eye position or looking away from the camera when addressing counsel or the judge, again with implications for credibility assessment. The authors of the Australian study recommended that cameras and display monitors be positioned "sensitive to eye direction" to avoid unintended effects that could cause the witness to be perceived negatively. In other words, they should be positioned so as to minimize the occasions when the witness would look away from the camera, creating the impression of "shiftiness." 100

(c) Physical configuration of remote videoconferencing site

The controlled experiments with mock jurors in Australia revealed that the surroundings in which the witness was seen had an influence on whether the jurors perceived the witness in a positive or negative light.¹⁰¹ The authors of the study emphasize that the physical environment at the remote site should present the witness in a dignified setting.¹⁰²

3. Preparation of the Witness

It is crucial that copies of documents on which the witness will be questioned be available at the remote site or that high-quality images of documents and other exhibits be transmitted to the remote site so the witness can see them clearly when testifying. This may be done by means of a document camera in the courtroom or hearing room with interconnections to the network over which the videoconference session is taking place.

Before the videoconferencing call is initiated, the witness should be told what he or she will see of the distant courtroom or hearing room when the videoconference session starts, and who will be there. 104

^{98.} *Ibid.*, at 58.

^{99.} Ibid.

^{100.} Ibid., at 108.

^{101.} Ibid., at 42.

^{102.} Ibid., at 48.

^{103.} Ibid., at 54.

^{104.} Ibid.

Counsel should ensure that any technical support the witness may need during the session is available at the remote site. 105 Obviously, if the witness will need to operate any equipment, such as a document camera, the witness must be familiarized with it. 106

Witnesses should be made aware that they should call attention to any loss or deterioration of video or audio at the site from which they are testifying, or any other technical failure that takes place during the videoconferencing session.¹⁰⁷

Witnesses should be told to avoid wearing heavily patterned clothing, as this is visually distracting. White or brightly coloured clothing should also be avoided, as it tends to make facial features less distinct when viewed on screen. Solid darker colours are better for image clarity.

4. Precautions Against Technical Failure

Counsel should consider having in readiness an affidavit by the witness summarizing the evidence in chief that could be used if technical failure interrupts the testimony and the connection with the distant courtroom or hearing room cannot be restored quickly, making it impossible for the witness to continue to testify from the remote location.¹⁰⁹

Under Civil Rules 12-5(59) to (65) and Family Rules 14-7(59) to (65), a judge or master may permit evidence in chief to be given by affidavit in a trial in the Supreme Court of British Columbia, and extend or abridge the usual notice periods under the rules for seeking an order allowing this.

Rule 285 of the *Federal Courts Rules*¹¹⁰ also allows for an order permitting an affidavit of a witness to be read in at a trial in the Federal Court of Canada. Rule 143(1)(a)

106. Ibid., at 54.

107. Ibid., at 70.

108. Ibid., at 54.

110. *Supra*, note 81.

^{105.} Ibid., at 55.

^{109.} This precaution should also be considered when a witness is testifying in person but has a disability that impedes oral communication: M. Gilsig, J. Hadley, and D. Wintermute, "Clients with Disabilities that Affect Communication" (CLE-TV webinar, 2011). See Section IV.

Technology-Assisted and Remote Evidence Presentation: A Practice Resource of the *Tax Court of Canada Rules (General Procedure)*¹¹¹ allow for a similar order in a

111. Supra, note 85.

hearing in that court.

Section IV Assistive Technology and Legal Proceedings

A. What Is Assistive Technology?

"Assistive technology" is a term used to refer to any device or system that allows persons with disabilities to perform tasks they might otherwise not be able to perform, or which increases the ease or safety with which they can perform tasks.¹¹²

Obvious and familiar examples are eyeglasses, magnifiers, the wheelchair and the hearing aid. Less familiar to most people who do not need to use them are the more complex assistive technologies that enable persons with disabilities to communicate without hearing or speech, or to use all forms of information technology without having the benefit of sight or the manual dexterity to operate a keyboard. A vast range of assistive technology is now available. Improvements to them are continually being made and entirely new assistive devices and systems are constantly in development.

B. Why Do Lawyers Need to Know About Assistive Technology?

When persons with disabilities participate in formal legal proceedings as parties, witnesses, counsel, or adjudicators, they generally rely on their personal assistive technology as they do in other situations. The setting may not place any special or unusual demands on their personal assistive technology, and they may be able to cope in their respective roles without additional technological support. In other cases, they may have extra needs for assistive technology in that setting in order to fulfil their roles in the legal process. For parties and witnesses, the need for extra technological support to give evidence is a one-time occurrence. They will not necessarily anticipate the need for extra technological support, and will rarely be will-

^{112.} Gary Andrews and Debbie Faulkner, *Glossary of Terms for Community Health Care and Services for Older Persons*, WHO/WKC/Tech.Ser./04.2 (Geneva: World Health Organization, 2004) at 10. A similar definition is contained in § 2432 of the U.S. *Assistive Technology Act of 1998*, (P.L. 105-394): "'assistive technology device' means any item, piece of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities."

ing or able to incur personal expense to procure additional assistive technology for use on a single occasion.

When representing a client with a disability that affects communication or perception of sight and sound, or intending to call a witness who has one, counsel must be alert to the possibility that additional technological support may be needed for that individual to be an effective witness and arrange for the support to be in place. For this reason, it is useful for practitioners to have some familiarity with the major kinds of assistive technology in common use to overcome barriers encountered by persons with motor, perceptual, and communications disabilities. It is also useful for practitioners to be attuned to new assistive technologies in the course of development and which may be available in the near and intermediate future.

C. One Size Does Not Fit All: Assistive Technology Use Is Individualized

Use of assistive technology is individual, not generic to a category like blindness, deafness, or paraplegia. Individuals with a disability experience it in different ways and to different degrees, and as a result there is no single way of accommodating the disability. The ways in which persons with disabilities address an environment that presents barriers to them differs from individual to individual. This reality applies to their preferences regarding assistive technology, a fact of which counsel, court and tribunal staff, judicial officials and tribunal members should be aware.

"Just ask them" is a cardinal rule. When working with clients or other witnesses with disabilities that may interfere with giving testimonial evidence, counsel should always inquire into their abilities and limitations to learn the extent to which the disability affects them as witnesses, and their individual preferences for means of receiving information and communicating. Counsel should always ask them as well about the capabilities and limitations of their own assistive technology and determine what additional technology, if any, is needed to enable them to testify effectively.

Having assessed the needs of the client or witness in terms of additional assistive technology or any other special requirements, counsel should then inform the court or tribunal staff of how the witness will testify and any implications for time or other logistical considerations. This should be done not later than at a trial management

^{113.} ARCH Disability Law Centre, "Providing Legal Services to People with Disabilities" (Toronto: ARCH, 2011) at 19, online at: http://www.archdisabilitylaw.ca/?q=providing-legal-services-people-disabilities-0.

conference or any similar pre-hearing conference in a proceeding before a quasijudicial tribunal, regardless of where the responsibility rests for supplying any additional technology.

D. Some Commonly Employed Types of Assistive Technology

1. Assistive Technologies for Visual Impairment

(a) General

Visual impairment can range, of course, from slight myopia to complete blindness. When a witness with impaired or no vision must be questioned on, or about, the contents of paper or digitalized documents, the technology that the witness will prefer to use to prepare to testify and while testifying will likely correspond to the degree of impairment. Those with some vision can use magnifiers or magnifying software. Those with little or no vision will generally need to rely on text-to-speech software and screen readers, or refreshable braille displays and other braille-based equipment.

(b) Screen magnification software

Screen magnification software enlarges digital text, icons, and graphics on a computer screen to enable it to be read or discerned by persons with partial or low vision. Simple screen magnifiers are built into the Microsoft Windows and Apple OSX operating systems as part of their accessibility features, but other available software has both more powerful magnification and more features, such as colour reversal and selectable full-screen or lens-type magnification. A popular screen magnifier program is Zoomtext, but there are others. A version of Zoomtext also has a screen reader function. (See below regarding screen readers.)

Hard copy documents used in court or a hearing can be scanned into digital versions to be used with screen magnification before a witness with low vision testifies.

(c) Optelec amplifier

The Optelec amplifier is used to greatly magnify a hard copy document placed on its base onto a screen that is the size of a computer monitor. It resembles an overhead projector in shape and has approximately the footprint of a desktop computer.

(d) Screen readers (voice output software)

Persons who are blind or who have very little vision can use a screen reader to access digital text. Screen readers convert text on a computer screen to sound. A

simulated voice "reads" the text aloud. Keystroke input is also converted to audible sound, allowing blind persons to hear what they are typing.

Some PDF documents are not directly accessible to screen readers because they are only images of printed pages without the underlying digital text characters, while others do not contain the tags that allow screen readers to navigate within the document. The necessary structure must be added to these PDF files before they can be read by voice output software. The accessibility features that screen readers require can be built into a PDF document when it is created.

Voice browsers are a subcategory of screen readers used to read internet webpages. A voice browser can be set to read only the main content of a webpage and omit the extraneous details like copyright information and currency dates. Accessibility features must be built into a website in order for a voice browser to work. International standards on web accessibility have been developed and are periodically upgraded. Newer sophisticated websites have these accessibility features built into their architecture.

(e) Refreshable Braille displays

Refreshable Braille displays convert text displayed on a computer screen to braille text reproduced by an array of pins (tactile pin units or TPUs) that rise up through a perforated surface to form Braille characters that the blind user can read by touch as the cursor moves through the digital text. The position of the cursor in the text is indicated by vibration of the Braille keys in some models. The braille display unit is connected to the computer by a USB cable and may be used in conjunction with a regular keyboard.

A screen reader can be combined with a refreshable Braille display to convert displayed text into Braille.

(f) MIT Fingerreader prototype

The Fingerreader is a highly compact voice output device that is being developed at MIT. The ring-like device is placed on the reader's index finger and reads hard copy text aloud as the reader passes the finger over the text. The Fingerreader overcomes the need to scan a document into a digitalized version for use in connection with

^{114.} See "Accessing PDF Documents with Assistive Technology: A Screen Reader User's Guide" online at: http://www.adobe.com/content/dam/Adobe/en/accessibility/pdfs/accessing-pdf-sr.pdf at 10-11.

^{115.} Ibid., at 2.

other voice output technology, or create a Braille version before it can be read by a blind person.

2. Assistive Technologies for the Deaf and Hard of Hearing

(a) General

The deaf and the hard of hearing are two distinct communities, and their means of communication tend to differ. Many deaf persons in British Columbia use American Sign Language (ASL) to communicate and consider it their first language. ASL is not merely a version of English communicated by gestures. It is a distinct language with its own vocabulary, grammar and syntax.

Members of the deaf community who use ASL for daily communication would likely want to rely on an ASL interpreter in a courtroom setting rather than a text-based system like realtime reporting (captioning). Due to the dominance of ASL within the deaf community, counsel should not assume without inquiring that ASL users have a high level of literacy skills in English and can easily deal with written material.

The hard of hearing and those who have lost hearing are less likely to employ sign language. They will often rely instead on technology that amplifies sound, or may be comfortable with realtime reporting as a primary or auxiliary aid. Realtime reporting allows them to read an on-screen transcript of what is said in court or before a tribunal almost as soon as it is said, and respond orally to questions by examining counsel. Realtime reporting is also a safeguard against errors in the testimony resulting from the witness misunderstanding what is heard.

(b) Remote sign language interpretation

ASL or other sign language interpretation can be provided by means of a videoconferencing link if an interpreter cannot be physically present in the courtroom or venue of the tribunal. Conversely, the interpreter may be in the courtroom or tribunal venue and the witness may testify remotely. The image of the interpreter must be of adequate size to give the witness a proper view.

Even when all interpretation takes place in person, counsel should consider having a video recording made of evidence given through a sign language interpreter to supplement an audio record or transcript. This may be of importance for appeal purposes if an issue arises in connection with the evidence or with the interpretation. In

^{116.} ASL is used throughout North America, including Anglophone communities in Québec. The deaf in francophone communities in Québec employ Langue des signes Québécoise (LSQ). British Sign Language (BSL) is used in the U.K. These sign languages are not mutually intelligible.

R. v. Titchener, the Court of Appeal held there was no requirement for a video recording of sign language interpretation as part of the record for appeal purposes and the record of trial was complete without one, but the case points to the desirability of videorecording the evidence.¹¹⁷

(c) TTY

The TTY, also called TDD ("telecommunication device for the deaf") is a text telephone that can be used by persons who are deaf, hard of hearing, or who have speech impairments. It is operated by placing a telephone handset in an acoustic cup and typing a message on the keyboard of the TTY. Some TTY models can be connected directly to a telephone line. The typed message is transmitted over the telephone line and is read by the other party to the conversation.

A TTY call can be made to a voice telephone user by means of the relay service provided by the major telephone companies. A specially trained operator reads the text message to the voice user and transcribes what the voice user says for transmission to the TTY user, either by typing it as it is heard or by using voice recognition software. The transcribed response of the voice user appears on a small text display viewer on the TTY machine. Some TTYs were developed for analog telephone systems and do not function well over IP connections. With the expansion of voice-over-internet (VOIP) telephones, the TTY is gradually being supplanted by IP relay services that can be accessed with a personal computer or mobile telephone.

(d) Assistive listening systems

(i) General

Assistive listening systems can be used by the hard of hearing in conjunction with their hearing aids or cochlear implants to enhance their hearing perception in public settings, including courtrooms and tribunal venues. The three main types of assistive listening systems are FM radio, infrared, and the induction loop.

(ii) FM radio

FM assistive listening systems are usually personal ones, but they can also be built into a venue's sound system ("large area FM system"). A transmitter microphone is placed at a point where speakers will be located, e.g. the witness box or the podium used by examining counsel. A receiver is worn by the user on a neckloop or as a headset. The microphone transmits sound via an FM radio signal. The microphone is set as unidirectional to reduce or eliminate background noise. To use the FM sys-

117. 2013 BCCA 64.

tem, users will usually select the inductive telecoil of their hearing aids, turning off the hearing aid's external microphone. This eliminates feedback and helps to isolate the sound transmitted via the FM signal from background noise.

(iii) Infrared

Infrared assistive listening systems transmit sound via light waves in the infrared range of the electromagnetic spectrum. They work best over short distances. Unlike radio waves, the infrared signal does not penetrate walls. It is less affected by electronic "noise" from other electronic equipment and wiring.

The Vancouver and Victoria Law Courts have mobile infrared assistive listening equipment available that can be deployed in a courtroom at the request of counsel or a party.

(iv) Induction loop

The induction loop system is used only in public venues, such as a courtroom. A wire loop is permanently installed in the structure of the venue with a connection to microphones. Speaking into one of the microphones generates an electrical current in the wire loop, which in turn induces an electromagnetic field within the room or area. A hearing aid user turns on the telecoil of the hearing aid to pick up the sound from the microphone.

3. Assistive Technologies for Communication Disabilities

(a) General

Many conditions lead to loss or impairment of speech, including stroke, cerebral palsy, amyotrophic lateral sclerosis (ALS), epilepsy, autism, Parkinson's disease, and cancer, to name a few. In addition, some persons are non-verbal (without speech) from birth. While persons without speech or dysfunctional speech obviously face great difficulty in a world highly dependent on spoken language, there are numerous well-developed technologies and systems to aid them in communicating. These aids are collectively termed *augmentative and alternative communication*. They include systems based on manual signing, graphic symbols on a communication board or screen, finger spelling, and technological aids like voice output software.

Counsel intending to call evidence from a witness who faces difficulty in communicating orally should obviously become familiar with the communication aids the person customarily uses in order to be in a position to explain them to the court or tribunal. Communicating with persons who must rely on augmentative and alternative

tive communication is often time-consuming.¹¹⁸ The court or tribunal should be forewarned of this.

(b) Voice output technology

Various software-hardware combinations such as Dynavox produce audible speech from symbols on a computer screen or specialized touchscreen tablet. MyVoice, an application developed in Canada, produces audible speech from symbols and phrases displayed on an iPhone or generic android tablets.

Other text-to-speech software is available for those who can make use of written language and use a standard keyboard.

Thotra, a new technology developed at the University of Toronto, allows persons who have dysfunctional speech to be heard clearly and fluently in their own voice rather than a robotic synthesized voice. The Thotra software eliminates dysfunctional features of speech like stuttering and corrects distorted phonetics, while preserving the content of the speaker's words. Thotra can be operated on a mobile telephone as well as a computer. It is still experimental.¹¹⁹

4. Assistive Technologies for Restricted Mobility

(a) General

There is a great variety of assistive devices to enable those with mobility-related disabilities to use virtually the full range of communications and information technology. Special switches, keyboards, and movement trackers allow a person with very little dexterity or movement to operate a computer and other electronic devices. With the aid of this equipment, a witness with even severely restricted mobility could testify from a remote location and deal with documentary evidence presented on-screen, even annotating images for the record in the course of examination in chief or cross-examination. Some examples of this category of assistive technology already available or in the course of development are described below.

(b) On-screen keyboards

A virtual keyboard appearing on the computer screen may be used by those without sufficient dexterity to use a regular physical keyboard. The on-screen or virtual keyboard is used in conjunction with a pointing device within the physical capabili-

^{118.} Supra, note 113, at 24.

^{119.} Patchen Barss, "New software will help people with speech problems be more clearly understood" (2014) 41 University of Toronto Magazine 24.

ties of the user. The user would type text by selecting keyboard characters with the pointing device. The pointing device could be a mouse or trackball, or in the case of the more severely restricted, a sip-and-puff switch operated by mouth or an eye movement tracker.

The Dynamic Keyboard is an adaptation of the on-screen keyboard developed by the CanAssist program at the University of Victoria that provides greater ease of use. It is a free downloadable program that allows selections of characters or words from a touchscreen computer by means of a pointing device compatible with the mobility restrictions of the user.

(c) Headband-operated electromyography switch

The headband-operated electromyography switch, also developed by CanAssist at the University of Victoria, allows persons with little or no neuromuscular control over the rest of their bodies to operate devices by contracting their facial muscles. When electrical signals from muscle contractions exceed a predetermined threshold, a switch is activated. A variant called the "headband-operated switch with mouse click" allows the user to operate a computer by facial muscle contractions.

(d) Possibilities for the intermediate future: the brain-computer interface

Considerable progress has been made over several decades towards the development of brain-machine interfaces that allow an individual to operate devices, including computers, by means of learning to control the patterns of electrical signals from the brain associated with imagined or intended movement. Brain-computer interfaces have been created that allow a paralyzed individual to control a computer cursor and enter text with a virtual keyboard. 120

The brain-computer interface holds great promise for improving the quality of life for persons who have very little or no neuromuscular control due to such causes as traumatic spinal cord injury, ALS, or stroke. In particular, it holds great potential for aiding those who have suffered severe neurological injuries and are in the condition

^{120.} Sergio Machado, Leonardo Ferreira Almada, and Ramesh Naidu Annavarapu, "Progress and Prospects in EEG-Based Brain-Computer Interface: Clinical Applications in Neurorehabilitation" (2013) 1 *Journal of Rehabilitation Robotics* 28 at 32. A UBC-based team working in conjunction with the Neil Squire Society has designed and tested a system combining a brain-computer interface with an eye-movement tracker that allows users to enter text by looking at letters on a virtual keyboard. It could be used by paralyzed persons who have retained some control over eye movement to communicate by entering text on a computer screen: see Xinyi Yong, Mehrdad Fatourechi, Rabab K. Ward and Gary E. Birch, "The Design of a Point-and-Click System by Integrating a Self-Paced Brain-Computer Interface With an Eye-Tracker" (2011) 1 *IEEE Journal on Emerging and Selected Topics in Circuits and Systems* 590.

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known as "locked-in syndrome." These are persons who are fully aware of what is happening around them, but who cannot move or speak. The brain-computer interface will give a voice to these most unfortunate individuals and allow them to communicate with the outside world.

SECTION V CONCLUSION

The expanded use of technology in courts and quasi-judicial tribunals reflects an increasingly digitalized world. More than merely keeping pace with the growth of the electronic highway, however, the embrace of technology by these institutions holds potential for increasing access to justice. It is hoped that this publication will contribute in some measure towards the fulfilment of the significant role the legal profession must play in achieving that result.

APPENDIX A

British Columbia Court Videoconferencing Network Court Locations

Vancouver Island

Abbotsford Campbell River Ashcroft¹²¹ Courtenay Chilliwack Duncan **New Westminster** Masset North Vancouver Nanaimo Port Coquitlam Port Alberni Powell River Port Hardy Richmond Victoria Robson Square, Vancouver Western Communities (Collwood) Sechelt Surrey Vancouver – Community Court

Interior North

Vancouver - Court of Appeal Vancouver - Law Courts Vancouver - Provincial Court

Lower Mainland

Cranbrook	Dawson Creek
Kamloops	Fort Nelson
Kelowna	Fort St. James
Nelson	Fort St. John
Penticton	Prince George
Revelstoke	Prince Rupert
Rossland	Quesnel
Salmon Arm	Smithers
Vernon	Terrace
	Vanderhoof
	Williams Lake

^{121.} Not a court location but has videoconference equipment for court use.

Correctional Centres and Penitentiaries

Lower Mainland - Provincial

Allouette Correctional Centre for Women Burnaby Youth Secure Custody Centre Fraser Regional Correctional Centre North Fraser Pre-Trial centre Surrey Pre-Trial Services Centre

Vancouver Island - Provincial

Vancouver Island Regional Correctional Centre

Victoria Youth Secure Custody Centre

Lower Mainland - Federal

Fraser Valley Institution for Women Matsqui Federal Penitentiary Kent Federal Penitentiary Pacific Institution and Regional Treatment Centre

North

Prince George Regional Correctional Centre

Prince George Youth Secure Custody Centre

Interior - Provincial

Kamloops Regional Correctional Centre

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