

DIGITAL TRANSFORMATION IN CANADA'S CRIMINAL JUSTICE SYSTEM

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Introduction

A digital technology is one that generates, stores, and processes data in terms of zeros and ones. Digital transformation is the movement towards increased use of digital technologies in an institution or sphere of business, and it captures two broad categories of activities:

- Digitization, which is converting information into a digital format (for example, writing a document on a digital support instead of on paper); and
- Digitalization, which is reorganizing business processes over to use digital technologies (for example, meeting via video-conference instead of meeting in person).

There is of course overlap between the two, as digitalization (the reorganization of processes around the use of digital technology) will often entail digitization (the conversion of information

¹ *The views expressed in this paper are not necessarily those of the Public Prosecution Service of Canada or of the Government of Canada. This paper and accompanying presentation should not be construed as a scientific and/or exhaustive exposé on the state of the digital transformation in the Canadian criminal justice system. Instead, it contains facts and reflections, presented by a non-expert in Information Technologies or Information Management, aimed at providing a general picture of the landscape.*

into a digital format), for example, communicating by electronic mail instead of letters (the process), implies that the information being sent is in a digital format.

In the context of the criminal justice system, digital transformation therefore broadly encompasses:

- How each participants stores, process and shares information (which includes how it protects it); and
- How participants interact between one another, and with the public.

An increase reliance on digital technologies in the criminal justice system offers the following potential advantages:

- Reducing the backlog of cases in court. Imbedded in this is the notion of speed: the ability to perform functions and process information faster (which could entail a reduction of costs); and
- Increasing access to justice (through reduction of travel, but also through more accessible access to counsel, evidence, court recordings, information, transcripts, etc.).

Practically, this would include things such as:

- Provision of information about the roles, activities, of the justice participants to the public;
- Access to legal decisions by members of the legal profession and the public;
- Gathering of evidence by the investigative agencies;

- Processing the evidence by the investigative agencies and eventually the prosecution authorities (electronic discovery is the process of utilising digital tools to review electronic or paper information, going through it for relevance, to redact files and to reduce the total volume of data);
- Sharing of evidence between investigative agencies and the prosecution authorities;
- Disclosure of evidence to the accused (electronic disclosure means providing digital information by the prosecutors in a format that can be shared to the accused);
- Filing of documents in court by the parties;
- Case management by the courts (involving all parties to the proceedings), but also by the prosecutors (internally) and by the defence;
- Presentation of evidence in court by the parties; and
- Access to live legal proceedings by judges, prosecutors, defence counsel, accused, witnesses and the public.

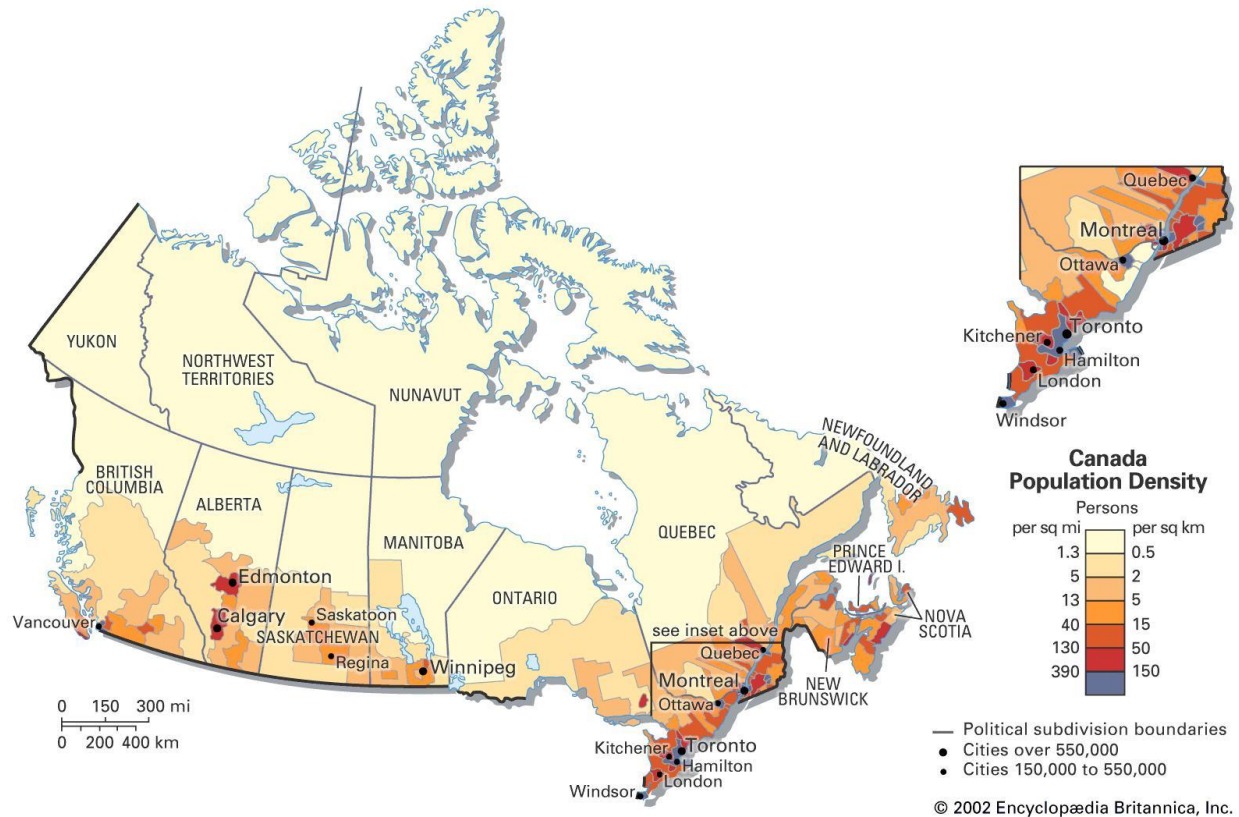
A full digital transformation would be one where all of these activities are carried out digitally. Such a complete transformation is probably neither possible nor desirable. After all, there will always be crimes entailing some physical evidentiary elements. Most likely, there might be instances where physical presence during stages of the criminal law process continues to be preferred. In fact, what we can see now is a situation where some elements are digital, whereas others are not.

The list provides a matrix view to keep track of where a given criminal justice system and its subcomponents stands at any given time on the digital transformation spectrum. Some parts of the system may be further along than others. The use of certain digital technologies today clearly does not preclude their evolution. For instance, whereas virtual appearance in court maybe through videoconference currently, it might be done through virtual or augmented reality in the future. Transitioning towards the use of digital technology is therefore not a static end state, but rather a dynamic ever-changing process.

Fundamental facts about Canada

To understand the status of the digital situation in Canada's criminal justice system, the following fundamentals are worth considering. They outline that Canada's criminal justice system has many different participants, most of them acting with a high level of independence from one another, across a vast territory legally divided into entities enjoying autonomy from one another.

Canada is geographically large (close to 10 million km²) with a relatively small geographically dispersed, ethnically, culturally and linguistically diverse population of approximately 38 million people, heavily concentrated along its southern border. Close to 5% of the population identifies as Indigenous.



Politically, Canada is a federal state, where legislative powers are shared between the federal Parliament and the 13 provincial and territorial legislative bodies. Canada is divided in 10 provinces, with populations ranging from as high as 15 million to as low as 167,000. The northern-most part of Canada, representing approximately 40% of its land area, is divided in three territories each with a population of 40,000 to 45,000 inhabitants. There is a clear constitutional distinction between provinces and territories. Suffice to say that while provinces exercise constitutional powers in their own right, the territories exercise delegated powers under the authority of the Parliament of Canada. While the federal Parliament has jurisdiction over criminal law, provinces and territories have jurisdiction over civil law, as well as the administration of justice (including criminal) within their borders.

Criminal law in Canada is inherited from the British common law tradition, and the courts use an adversarial system, i.e., judges make decisions based on evidence presented by the parties.

The *Criminal Code* is a federal law that codifies most criminal offences and procedures in Canada.

In terms of court structure and administration, and in very broad general strokes, each province and territory has a:

- Provincial/Territorial Court (the first level of trial court, that generally deals with most criminal matters at first instance);
- Superior Court (court of inherent jurisdiction, with broader criminal jurisdiction than the provincial court, typically hears some appeals from the provincial court); and
- Court of Appeal (highest provincial/territorial appellate court).

At the federal level, there is the Supreme Court of Canada (SCC) (the ultimate appellate court in the country), and military tribunals (which will be outside the scope of this paper and presentation).

In accord with the principle of judicial independence, Canadian courts have authority over administrative matters directly affecting the judicial functions. For other supporting administrative functions (budget, facilities, human resources, support systems such as information technology systems, etc.), the level of direct involvement from the government (generally through the federal, provincial or territorial ministry of the Attorney General or Justice) varies across the country.

The practical modalities governing court administration are typically subject to some form of arrangements between the courts and the executive branch. Simply by way of illustration, in British Columbia (one of the 10 provinces) the Ministry of the Attorney General is in charge of court administration, especially through its Court Services Branch. The Attorney General is thus

responsible for the provision, operation and maintenance of the court facilities and services for the provincial and superior courts. Subject to the direction of the Attorney General, and to the direction of the Chief Judge/Justice in matters of judicial administration, the Chief Administrator of Court Services directs and supervises facilities, registries and administrative services for the Provincial Court. The Chief Administrator of Court Services is the Assistant Deputy Minister, Court Services Branch. When it comes to the Court of Appeal in British Columbia, however, the Chief Justice is the administrative head of the court, pursuant to the *Court of Appeal Act*. A chief administrator of court services for the Court of Appeal may be appointed under provincial legislation. Subject to the direction of the chief justice in matters of judicial administration and to the direction of the Attorney General in other matters, the chief administrator of court services must direct and supervise facilities, registries and administrative services for the Court of Appeal. The Attorney General directs the preparation of the Ministry of Attorney General Service Plan, in accordance with provincial legislation. This illustrates how the decision-making authority over administrative matters related to the courts is not monolithic within a given province.

When it comes to the prosecutorial function, each province has a public prosecution service, either set up independently or as part of the Ministry of Justice or the Attorney General. Federally, there is the independent Public Prosecution Service of Canada (PPSC) and the Canadian Military Prosecution Service dealing with matters falling under military law (which will be outside the scope of this paper and presentation). There is concurrent jurisdiction between the provincial and federal prosecution services for most offences, with a practical division of responsibilities as to which service handles which types of cases. In the three northern territories, the PPSC handles all criminal prosecutions (with the exception of cases under military law) since territories do not have their own prosecution service, unlike the provinces.

Canada has three levels of police services: municipal, provincial, and federal. The Royal Canadian Mounted Police has a federal mandate (border law enforcement, drugs and organized crime, and international policing), as well as a provincial and municipal policing mandate. It

provides contract policing service in eight provinces (Ontario and Québec are the exception) and three territories, approximately 200 municipalities and 600 Aboriginal communities. Ontario, Quebec and Newfoundland and Labrador have provincial police forces. Most cities and many large towns have their own municipal police forces (there are approximately 40 across the country). Many First Nations also have their own police forces (approximately 36).

Apart from federal, provincial, municipal and First Nations police, governments in Canada authorize other forms of police with legal powers. These powers are limited to specific areas and/or specific groups of people but are like those of the public police. The Harbour Police, Military Police and Railway Police are examples.

In addition to police forces, some federal departments and agencies have law enforcement responsibilities that entail bringing forward criminal matters into the judicial system, for instance, the Department of Fisheries and Oceans, the Canadian Border Security Agency and the Competition Bureau.

The result of this is that there is not a single digital plan and/or set of tools and processes integrated into a cohesive whole. For instance, a prosecution service may adopt a certain approach and technology to share and receive evidence that may not be compatible with that used by every police forces with which it works, or a court may decide not to allow the use of a digital process despite the willingness of the other participants.

Overview of the situation in terms of disclosure/discovery and remote appearances

Electronic disclosure and discovery

The Canadian landscape for electronic disclosure and electronic discovery is maturing rapidly. Due to the ever-increasing presence of personal computers and mobile devices and the accelerating use of body-worn cameras in the field, police agencies have started adopting new

processes and software to manage this large influx of digital data. To that effect, small-scale pilots and working groups have been sprouting across the country to make headway in informing the long-term adoption of new tools to address this new reality.

One of the largest such working groups is the Working Group on Digital Evidence Management, headed by the Public Prosecution Service of Nova Scotia. This working group consists of more than six police agencies in Nova Scotia, including the RCMP. The PPSC also participates. The objective of the group was to develop the scope of work and common objectives for adoption of compatible digital evidence management systems and avoid runaway costs while also minding the principles of full disclosure, protecting privacy interests and the identities of confidential informants.

Some of the realities as shared by the member police agencies:

- Proliferation of physical storage mediums exists for some police services, while others have moved on digital means (hosted in the cloud) to facilitate the disclosure material;
- There is inconsistent application of encryption by those services that still deal with physical storage media;
- Those services that already collect body-camera footage are either using secured hard drives for storage or the services of a cloud service provider specializing in digital evidence management;
- There are open questions about retention periods: some agencies settled on a year for now, but are seeking guidance or the development of some sort of standard at the provincial/federal levels;

- Redaction of video footage is a fundamental requirement and so it the tracking of access of video footage and setting up a defeasible audit trail; and
- Several police services are currently engaged with or plan on engaging with Axon for its Evidence.com product.

This working group is neutral about the current market offerings and invited different vendors to present webinars and demos of their products to increase knowledge in the space. The Public Prosecution Service of Nova Scotia was in the process of conducting a request for proposals for a digital evidence management solution focusing on ways to disclosure material to the Crown securely and with a full audit trail.

Similar to the police agencies in Canada, the various court levels are well on their way in adapting new means to handle digital evidence throughout the lifecycle of a court case. Most recently, a product called Caselines, by Thomson Reuters, was implemented by the Provincial and Superior Courts of Ontario.

For the PPSC, there is a potential risk in the different levels of the courts, across the many regions in Canada, adopting solutions differing from one another, which is further complicating the environment, as the emergence of solution uniformity across Canada will become elusive.

The software offerings in this domain have a varying degree of differentiation across features like electronic discovery, secure retention, digital vetting and redaction, and sharing of digital evidence. The following vendors are developing some popular offerings: Axon (evidence.com), Opromoa (M.i2 Core), Relativity (Relativity One), Thomson Reuters (CaseLines), TitanFile (TitanFile.com), LiquidFiles Ltd (Liquid Files), Nuix (Nuix eDiscovery).

As a prosecutorial organization in the middle of it all, the PPSC needs to adopt business processes that allow seamless operability no matter the adopted solutions by its partner organizations. This need/requirement has been and continues to be on our radar.

The PPSC's technical team has performed a cursory investigation into electronic disclosure and electronic discovery solutions in late 2020 and early 2021, arranging for vendor demonstrations and conducting preliminary business requirement gathering. However, the focus on continued development of the PPSC's Legal Case Management System reduced the availability of resources and prevented the continuation of this research activity, which should pick up and move forward with our research and implementation in the coming year. That being said, the PPSC is running two pilots that will help investigate the use of Nuix eDiscovery and Liquid Files. The PPSC has also produced a limited-scope interim eDisclosure solution using Microsoft 365 cloud-based OneDrive as a means to share electronic disclosure material with defense counsel, removing the need to use physical media like hard-drives and DVDs.

In support of the electronic disclosure and discovery matters, the PPSC planning this year to continue the analysis on how to bring the provinces together so that it can interact federally with any solutions that are adopted by our key stakeholder organisations.

Some provincial prosecution services, partly because they deal with less variables, have been able to make greater strides in adopt and integrate business solutions and approaches compatible with the police services and courts within their jurisdiction.

Remote appearances

Currently, the general rule in Canada is that all persons involved in the criminal justice process must appear in person, unless otherwise specified in the *Criminal Code*.

A remote appearance is when a person appears before a judge without being physically present in the courtroom, such as by teleconference or videoconference.

In March 2018, the Government introduced Bill C-75, *An Act to amend the Criminal Code, the Youth Criminal Justice Act and other Acts and to make consequential amendments to other Acts*. Former Bill C-75 (the Act), received Royal Assent and became law in June 2019.

The *Criminal Code* of Canada included numerous provisions relating to the remote appearance of certain individuals involved in criminal justice processes. However, these were subject to different criteria depending on the individual (e.g., accused, witness, counsel) and stage of the proceedings (e.g., judicial interim release, preliminary inquiry, trial, appeal, etc.).

The amendments in the Act modernize and facilitate the appearance by audioconference or videoconference of all persons involved in criminal cases, including a judge or justice, throughout the criminal justice process, under certain circumstances and, in some situations, in consideration of certain factors.

These amendments serve the proper administration of justice, including by ensuring fair and efficient proceedings and enhancing access to justice for all Canadians. These amendments set out the situations in which a remote appearance can occur, which depends on the individual circumstances and stage of the process and, in some situations, such factors as: the accused's right to a fair trial; the nature of the witness's anticipated evidence; the inconveniences to the witness to appear physically; the seriousness of the offence; and costs. In certain situations, the court is required to record the reasons for refusing to order a remote appearance or for holding a hearing remotely.

The amendments in the Act expands the use of technology to facilitate remote appearances by all persons involved throughout the criminal justice process, including in remote and isolated communities. These amendments responded directly to a parliamentary committee

recommendation to invest in technological solutions to the problems presented by small, scattered populations in remote and isolated communities. That recommendation specifically called for increased use of videoconferencing technology so that court appearances such as bail hearings and interlocutory applications could be conducted remotely and without the need for an accused person to be removed from his or her community.

These changes proved useful in the context of the COVID-19 pandemic, when health concerns led to a drastic reduction in the ability to gather individuals in the same space. The adoption and use of digital technologies allowing remote appearances was swift in most courts across Canada following the outbreak of COVID-19 in 2020. This allowed the system not to grind to a complete halt. Since then and with the reduction of health risks, however, most courts have returned to a situation that is similar to the pre-pandemic days.

Bill S-4, is another proposed law introduced in the Canadian Senate (the upper, unelected, chamber of the federal parliament) in March 2022. This Senate bill is awaiting first reading in the House of Commons (the lower, elected, chamber of Parliament).

The amendments would expand and clarify the existing measures found in the *Criminal Code* concerning remote appearances in criminal proceedings to respond to the needs of the criminal justice system as highlighted by the pandemic. For example, the reforms would clarify the law by providing an explicit legislative mechanism to permit accused persons to appear at preliminary inquiries and at indictable and summary conviction trials by videoconference for the entirety of the trial, except where evidence is being taken before a jury.

The reforms would also clarify that an accused person can enter a plea or appear at a sentencing hearing by a video or audio appearance. The ability to appear by audio would be clarified to apply only where videoconferencing is not readily available. Before an accused person or offender would be able to appear by videoconference or audioconference, a judge must be of the opinion that appearances by these means would be appropriate in the

circumstances, including in consideration of the right of the accused person or offender to a fair and public hearing. Courts also would have to ensure that accused persons who do not have access to legal advice during the remote proceedings are able to understand the proceedings and that accused who are represented by counsel can consult privately with their counsel. In addition, the reforms would give courts discretion to allow prospective jurors to participate in the jury selection process by videoconference under certain circumstances.

The provisions on remote proceedings would be subject to judicial approval and supervision. This judicial control over the powers includes ensuring that they are exercised in accordance with the Charter, including the right of an accused person to make full answer and defence and to have a fair and public hearing. The judicial powers are set out with numerous requirements and conditions. With few exceptions, the ability to allow for remote proceedings would be subject to the consent of accused persons.

Overview of the situation across Canada – selected illustrations

Province of Alberta

The police services and other investigative agencies in Alberta are not consistent in their approach to providing electronic disclosure. For instance, the Edmonton Police Service provides disclosure to prosecutors several times a day via email to a general in-box. Confidential and large packages are delivered twice a week via secure USB by its Disclosure Unit staff. Media and special team disclosure packages are provided on CD, DVD, USB or hard drive, depending on the size.

The Calgary Police Services provides disclosure through a direct link to a program/computer. This is extremely beneficial as it permits the timely receipt of disclosure and requested material is usually updated within hours of the request.

The RCMP is the most inconsistent in their delivery of disclosure. Depending on the detachment disclosure may arrive in one or more ways, including:

- Via email to a general in-box (this practice is ceasing);
- Via email to the assigned prosecutor (this practice is ceasing);
- Via USB, which contains one or several files and the USB is to be returned to the detachment;
- Via USB, which contains one file and can be retained on the file;
- Via hard drive (large project files); and/or
- Hard copy.

While many detachments use the E-Crim portal utilized by the provincial Alberta Crown Prosecution Service, the PPSC does not have access to E-Crim.

The Alberta Law Enforcement Response Teams (ALERT) is an organisation that integrates members from various police agencies who have expertise in intelligence, enforcement and support services, with a mission to combat organized and serious crime. It provides disclosure via USB. Disclosure can be reviewed using ALERT's software called Dossier. Comments are entered through the software and sent back to ALERT who then apply the redactions. The process can be slow and cumbersome. Prosecution and defence copies are then created and again, provided via USB or hard drive.

The PPSC receives sensitive confidential disclosure receives via USB or in hard copy. Electronic disclosure is placed onto a standalone secure laptop or computer for the prosecutors'

review. Hard copies are scanned on a standalone scanner, then placed onto a secure USB and then transferred onto the confidential computer. Once reviewed and downgraded, the evidence is removed from those computers and placed onto a shared drive and then disclosed.

In the city of Edmonton, disclosure is typically provided to defence via email. In the instances where the packages are too large for email, CDs, DVDs, USBs or hard drives are routinely used. The PPSC in Calgary primarily uses OneDrive. OneDrive provides another method to provide disclosure that saves time and reduces costs. There have been, however, many instances where defence had not been able to download it, which results in duplicating work. Further, with OneDrive there are concerns about the tracking of when and if disclosure has been downloaded. While defence is asked to confirm receipt of disclosure, they routinely do not and there is no way to confirm if disclosure has been received.

Electronic filing has been a beneficial change and has made things much easier, as the provincial court system has quite a few circuit points. Prosecutors can quickly send material to a courtroom if need be through email. However, there are size limits as to what the courts will accept electronically. Additionally, responses by the courts and filed copies are either not provided or not provided in a timely fashion. Further, depending on the Judge or Justice, hard copies are still being requested.

The Alberta Court of Appeal has transformed its practice and has successfully moved to an entirely electronic system.

In terms of remote appearances, matters before the provincial court in Alberta are conducted in person with the exception of uncontested or simple docket matters, which could be done through videoconference using WebEx (although courts have been less permissible with remote appearances in circuit courts – courts where the judges travel to different locations – in the southern part of the province).

Saskatchewan

The PPSC in Saskatchewan receives disclosure in a wide range of systems. For instance:

1. The city of Regina's Police Service delivers media files (photos, video, audio) via a cloud based system using Axon (Evidence.com), and documentary disclosure through a cloud based program called Barracuda;
2. The City of Saskatoon's Police Service delivers its material on USB daily or twice daily, using courier. Since last winter, the provincial prosecution service has established an electronic sharing system with the Saskatoon Police Service. The request for the PPSC to adopt such a system is currently with its technical team;
3. The RCMP (provincial policing detachments) deliver paper package and DVDs via commercial courier or mail service. Some of the busier detachments use unencrypted email attachments;
4. The RCMP (federal policing) uses USBs or mini-hard drives, typically hand-delivered; and
5. The Canadian Pacific Railroad Police sends its material via encrypted email attachment.

Generally speaking, most agencies will deliver material containing more sensitive information (for instance relating to confidential informers) in paper form in a double sealed envelope.

The redaction and organization of the material is done through PDF tools, manually. It is rare that any of the electronic material that the PPSC receives from the police is printed. This is in marked contrast with the provincial prosecution service in Saskatchewan, which continues to print all material received from the police.

Most of the PPSC's disclosure to the defence disclosure is delivered via OneDrive. That system has been well-received by the defence bar. Self-represented persons receive their disclosure in paper form.

In terms of remote appearances in Saskatchewan, the approach varies between courts.

At the provincial court level, there is some variation as each administrative Judge sets their own practice directives for their respective area. Generally speaking counsel appearances are presumptively in person. Regina counsel conduct all appearances in person. Saskatoon counsel have approval to appear by phone for some functions: adjourn, set dates, withdraw charge, case management. For all other purposes, counsel must apply for leave to appear by phone. The municipality of North Battleford has reverted to pre-COVID practice and gave counsel approval to do all docket appearances (appearances to deal with routine matters such as setting dates, adjournments, and guilty pleas) by phone. Generally speaking, there is still heavy use of Closed Circuit Television (CCTV) in the urban centres for prisoner appearances.

At the superior court level, all matters are presumptively dealt in person, but lessons learned from the earlier stages of the COVID-10 pandemic have led the court to encourage use of technology (telephone, videoconference through Webex, CCTV) on application by counsel. Hearings before the Court of Appeal are presumptively in person, but on having regard to access to justice concerns more so than COVID-19-related health ones, counsel may apply to appear by videoconference using Webex.

Ontario

As is the case elsewhere in Canada, a number of police services operate in Ontario, with varying capabilities and processes to deliver evidentiary material to the prosecutors. This requires a hybrid approach to manage digital evidence and electronic disclosure depending.

Generally speaking, Ontario has made significant advances in integrating the digital tools provincial participants use.

Because the PPSC is a national operating across a range of provinces using different digital solutions, it does not currently have the same access to many of those in use in Ontario. Consequently, the PPSC lags behind its counterparts in terms of having access to the tools the courts and other agencies use.

The PPSC uses various tools and associated processes, such as electronic portals, electronic file sharing systems such as Enterprise Attachment Transfer Services (EATS) and OneDrive, DVD disks, usb keys, hard drives, drives, the PPSC T-Drive, VLC Media Player, FOXIT, and paper. The disclosure medium utilised by law enforcement is not always compatible with the PPSC tools, which has necessitated the purchase licences for video editing/converter software.

The agencies which use cloud-based storage systems like Evidence.com or Axiom, have provided the PPSC access through a secure portal allowing staff to retrieve items by opening an icon installed on the computer desktop. The disclosure is then uploaded to an internal shared drive, reviewed, and delivered to defence counsel. The download process is slow and time consuming due to download speed on our computers. Furthermore, counsel are required to use the VLC media player on our desktops, which is not the proper viewer supplied by the Evidence.com cloud storage system, making the review of the footage less than optimal for counsel.

The provincial prosecution service has a prosecution management system named SCOPE (Scheduling Crown Operations Prepared Electronically), used to track cases, input information accessible to all provincial prosecutors (like return dates, positions taken, officer leave dates, etc) and used by the police upload disclosure to it. The PPSC does not have access to SCOPE, which creates delays for obtaining information/disclosure.

The provincial prosecution service email encryption is compatible with that of the Ontario Provincial Police (OPP), but not with the PPSC's, making direct encrypted electronic exchanges between the federal and provincial prosecution services challenging (a work around involves sending communications through the OPP which has access to the federal email encryption).

The Court accepts warrants through the EATS system (including sensitive material). The provincial prosecution service has access to this program: the PPSC does not, which necessitates hard copies being delivered to the court. This can be inconvenient depending on timing and the location of the courthouse.

Out of necessity, the PPSC has developed a hybrid process of receipt and delivery of disclosure depending on the capabilities of the enforcement agency. The processes work, but are not optimally efficient for staff and counsel.

Some files with self-represented accused (or defence counsel) who have no internet access, require the copy of disclosure material onto USB drives and delivery by courier. Some disclosure by paper, which must be scanned to be uploaded, copied onto a USB key or hard drive or uploaded to OneDrive for disclosure purposes. Currently, electronic disclosure tools cannot be used for sensitive materials related to confidential informers. This material is produced in hard copy and must be stored in a secured manner. Special off line laptops and off line scanners are required to access and process this sensitive material electronically.

The shift to electronic disclosure has created storage and retention issues, as the space on servers is limited. Intercept communications, in car camera videos, booking videos, body worn camera videos, cell phone data and data from computer extractions cannot be stored on the internal shared drive due to size constraints. These are stored on hard drives, USB keys or DVDs. These storage mediums create additional safety concerns. Digital storage media necessitate encryption. It takes time to encrypt devices. A person needs to attend the office in

person to access these materials as they are kept with the physical file. There is a significant cost associated to purchasing hard drives, thumb drives and DVD.

The courts in Ontario have adopted Zoom as the digital platform to conduct remote appearances.

In a general way, since the first waves of the COVID-19 pandemic, the courts have returned to in-person appearances, subject to exceptions.

Typically, in both the provincial and superior courts, pleas, trials, and preliminary hearings are expected to be in person. Exceptions can be permitted with the consent of counsel and the court.

In the provincial court, bail hearings are to be dealt with in person, although first appearances can be handled virtually.

Other matters where no evidence is to be called or which are administrative or procedural in nature can generally be dealt with virtually. They would include things like remand courts, assignment court, judicial pre-trials, case management conferences and first appearances following an overnight arrest.

There may be some variations to this in different communities based on the views of the local judiciary or depending on available technology.

In Northern Ontario, where communities are only reachable by flight, different procedures may apply or some courts may not have yet opened back up for in-person appearances.

Canada's northern territories

The following provides a broad illustration of the situation in Canada's three northern territories.

The PPSC's office for Nunavut has tried to establish a SharePoint system with the RCMP. Unfortunately, the RCMP in that territory uses a Government of Nunavut network, which does not communicate with the PSPC's Federal government network. A fix was being developed, but bandwidth limitations having to do with the robustness of the internet network in that part of the country makes it near impossible currently for remote detachments to send material electronically given the volume of data involved.

This is in contrast to the situation in the Northwest Territories where the PPSC's office has moved towards e-disclosure as much as possible from the RCMP. The amount of files sent via paper or disk is limited as much as possible.

In the Yukon, most disclosure from the RCMP comes to the PPSC either in hard paper copy, on disk or USB. The bulk of this material is then printed to a hard copy file.

Disclosing evidence electronically to the accused can prove challenging. In Nunavut, 99,5% of all accused are represented by Legal Services Board of Nunavut, a legal aid service. Attempts to set up a SharePoint or similar system have so far run against security challenges, as the Government of Canada's security policies make setting up such a system with an outside organization impossible.

In the Northwest Territories, a relatively "low tech" digital approach is used to share disclosure. OneDrive, a cloud-based storage solution, is the main platform used to send large disclosure. The RCMP send its material to the PPSC via an electronic mail address which is accessible to a number of legal assistants, who will perform their own functions and pass it on to counsel. The

sensitivity of the information associated with these files in that region typically allows for their sharing through that platform. Cell guard footage/security cameras and other vide material is usually too large to be sent electronically: it is put on DVDs and sent by mail.

In the Yukon, Legal Aid has expressed concerns about the security of its network and ability to process electronic disclosure, but discussions continue on that front. In the meanwhile, the PPSC provides paper copies or disks, and USB keys for larger files.

Whereas the courts in Nunavut accept electronic filing of documents, this is not the case in the Yukon. The courts in the Yukon briefly allowed email filing during a portion of the pandemic, but have since returned to requiring material in hard copy. In the Northwest Territories, the Court of Appeal shows some openness to electronic filing, but not the territorial or superior courts.

In terms of remote appearances in the north, some have occurred in Nunavut, but aside from the court of appeal, there is a general reluctance on the part of the judiciary to rely on them, even when the technology would allow it. In the Yukon, the territorial and superior courts accept video appearances by witness on application only and it has not adopted any video platform for virtual trial (they will authorize phone appearances by counsel on special request only). The Court of Appeal allows a mix of in person and video appearances through Zoom. In the Northwest Territories, courts will be open to counsel from outside of the territory to appear remotely via videoconference, but do not extend that openness to counsel residing in the territory.

Conclusion

An evolution towards increased digitization and digitalization with the Canadian criminal justice system is undeniably afoot. Although it is clearly underway, the digital transformation appears still to be in early stages and some key factors reduce its speed. Beyond the fact that the legal

profession may be rather conservative in its adoption of new ways of doing things, the speed of progress is tributary to the fact that the Canadian system is comprised of many participants, acting under their own authority, largely independently from one another. Resources and priorities vary across the country and participants in terms of adoption and use of certain digital technologies and products. What is more, industry standards are still evolving, with many service providers competing for their share of the market, with different products that are not always compatible with one another, with capabilities that can still grow and mature. This produces a patchwork landscape, rather than a unified and homogeneous one.

As provinces move forward with their own courts digital transformation initiatives and strategies (notably in Ontario and British Columbia), and as the products mature and become even more accessible, we can predict further acceleration of the transformation in the decade to come. Indeed, the pressures onto the system (including the volume of data generated by the commission and investigation of crimes) will force it to increase its efficiency, lest it collapse under its own weight. A digital transformation will continue to be a logical and unescapable part of the response.