USE OF ELECTRONIC APPEAL TRANSCRIPTS IN THE ALBERTA COURT OF APPEAL

Roger Philip Kerans* and Patrick Keys**

I. INTRODUCTION

A. The Publication of Transcripts

The lifeblood of the judicial appeal process is arguably the transcribed record of events at trial. The trial transcript, either in whole or in part, forms the evidence portion of an appeal and is a major component of the materials filed in advance of an appeal hearing. On appeal, the court scrutinizes the trial testimony in search of the errors alleged by the party seeking review of the trial decision.

In almost all jurisdictions, skilled court stenographers have traditionally prepared the record of the trial and published it in hard-copy format in accordance with the rules governing local court procedure. There are five critical facts about these publications:

1. Transcripts are often very long. True, the size can vary immensely, from a few pages for a brief hearing to hundreds of pages for a longer trial, but they are often very long.

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* Hon. Roger Philip Kerans retired from the Alberta Court of Appeal in 1997. He presently is Counsel to Borden Ladner Gervais LLP at Calgary. This article is an updated version of *The Evaluation and Selection of the Electronic Appeal Transcript System for the Alberta Court of Appeal*, in *Administrative Agency Practice* (Andrew C.L. Sims, Q.C., ed., Carswell Toronto 1995), which was also presented as a paper at the Fifth Court Technology Conference, National Center for State Courts, Detroit, Michigan, in September 1997.

** Mr. Keys is Senior Regulatory Counsel for TransCanada Pipelines Ltd., in Calgary, Alberta. He served as law clerk to the Court of Queen's Bench and Court of Appeal in Calgary after receiving his LL.B. from the University of Calgary in 1994.

2. Transcripts are used for the most part just for a very short time, during the appeal, and then discarded.

3. The number of copies is usually small—one copy of the materials for each lawyer and each judge, for a total of twelve or less in most cases. (In some jurisdictions, as, for example, the United States Supreme Court, there is also a market for the materials among persons not directly involved in the case. But this is rare.)

4. The transcripts are carefully studied. Lawyers "mine" the materials for possible errors and for answers to the arguments of opposing parties. Transcripts are reviewed with immense care by judges and their researchers, and these readers employ every conceivable study guide—bookmarks, annotations, marginalia, indices, and cross-indices.

5. Generally, they are not read cover-to-cover, like novels, but are studied on a selective basis, in the search for what is relevant, like an encyclopedia.

B. The Problems

The Court of Appeal of Alberta, whose system is here reported on, operates much like appellate courts the world over. As such, it has been plagued by many of the problems inherent in the use of hard-copy publishing. First, transcript preparation is often an expensive proposition costing thousands of dollars. In Alberta, trial transcripts in 1995 cost about $4.45 (Canadian) per page. Each week of trial time usually results in more than five hundred printed pages. Moreover, local procedural rules dictated that litigants prepare at least eight copies of the materials, called "appeal books" in Alberta: six to be filed with the court and at least one for each party to the appeal. Second, lengthy appeal books created handling and storage problems for court clerks, judges, and litigants. With more than one thousand appeals filed in 1994, the volume of paper that passed through the Alberta Court of Appeal was substantial. Lastly, hard-copy publishing is, in an environmental sense, a wasteful process—particularly so given the relatively short useful life of appeal books. All copies of the filed books but one are discarded, albeit for recycling, once the court renders its decision in a case.

C. A Solution

The Alberta Court of Appeal recognized a potential opportunity to resolve these and other paper-related problems through the use of electronic publishing software. Advances in computer software and technology have led to the development of inexpensive, commercially available programs that enable the production of electronic documents similar in substance to printed documents, yet read from a computer screen. Like printed documents, electronic documents can contain text and pictures, tables of contents, and indices. In addition, electronic documents offer many benefits over paper:

1. Large amounts of information can be contained on a single computer disk, thus allowing much easier storage, transport, and handling than an equivalent amount of printed material.

2. Information in electronic form can be quickly and inexpensively disseminated. Producing multiple copies of a document is a simple matter.

3. Electronic publishing provides numerous tools for information management that are simply unavailable when using paper. Key information can be quickly and easily searched, catalogued, and extracted, thereby leading to improved information management.

4. The ease of access facilitates scheduling of appeals by permitting off-site judges to review materials more expeditiously.

These and other features make electronic publishing an attractive alternative to paper, especially where lengthy documents, not subject to frequent modification, are involved.

The Alberta Court of Appeal recently completed a pilot project to test the viability of electronic appeal books. This article chronicles the efforts of the court to implement the project and discusses the mechanics of the software the court selected for the task. It concludes with a general discussion of the court's experiences to date with electronic publishing and its future plans for the medium within the judicial appeal process.

II. PROJECT HISTORY

After some occasional test cases as early as 1989, some members of the court developed a considerable interest in electronic data reading. In early 1992, the Chief Justice of the Alberta Court of Appeal requested an investigation into the feasibility of using electronic publishing for appeal books and related materials submitted to the court. A Steering Committee and a Working Committee, each composed of appellate judges, court services personnel, court reporters, and lawyers, were formed to investigate, develop, and implement a proposal.

We pause here to emphasize that, in Alberta, the judges do most of their own preparation for appeals. They have limited staff assistance. To prepare for an appeal, the judge typically reads carefully the written argument of both parties to the appeal, the relevant cited authorities, and the relevant Reasons for Decision, or decisions, or Jury Charge of the trial court. While they rely on the trial decision and the "fact summaries" filed by the counsel for the basic facts about the suit, the judges must also, depending on the ground of appeal, read the actual trial evidence. Sometimes the nature of the case is such that the judge must read the trial transcript from start to finish. But this is rare—and almost impossible—in this age. More often, judges read selectively. They read those passages that are of importance to the issues raised in the appeal by the parties. Lively and sometimes lengthy oral argument yet occurs in Alberta, with many references to the transcripts.

A. Working Committee

Initially, the Working Committee examined the viability of securing trial transcripts in electronic form. Fortunately, the Court Reporters' Office, responsible for recording trial evidence in Alberta, had for several years been using computer-aided transcription to generate trial transcripts in electronic format. Unfortunately, not all court stenographers in that office used the same system nor provided an end product in the same format, although all were capable of supporting basic ASCII text files (American Standard Code for Information Interchange—a universal standard that can be easily accommodated by most text

reading computer programs). Similarly, court stenographers in private industry also prepared appeal materials for clients. Again, however, the court discovered a wide difference in work methods, but a general ability to work with ASCII text files.

The Working Committee next solicited reaction and opinion on the use of electronic publishing within the judicial appeal process from lawyers, judges, and court clerks. Persons familiar with computers and associated technology embraced the idea: a sort of merge onto the information superhighway. Several law firms were, in fact, already using text readers to manage large litigation files. The committee also discovered, however, that some lawyers and judges remained largely unversed in computer use. These persons sought reassurances that hard copy format would remain an alternative, at least for the near future. As well, it became obvious that the court should not require the use of any particular software. The committee felt that law firms should have free choice from the variety of available products dependent on their individual needs. Finally, the committee noted that most lawyers, like the judges, were already thoroughly committed to personal as opposed to mainframe computer hardware.

B. Computer Standards

The Steering Committee quickly decided to employ a PC-centred system, with possible reliance on local area network ("LAN") in the future. Materials were to be loaded into the judge's individual computers. This was because judges and lawyers each work in their own way and at their own speed, even in the courtroom during a hearing, and the committee felt neither would be satisfied with a shared screen and a common display. More importantly, judges usually prepare for cases privately and would need to access materials on their personal computers. The committee noted also that most of the judges used laptop computers. While these were regularly upgraded, and a LAN system was promised for the near future, the committee accepted certain limitations and problems for the choice of system to accommodate this office arrangement. The limits on selection of a system then were three: the need for "sneakerware" distribution, a limit on both RAM and ROM

memory, and the need for user-generated display.

Ultimately, the Steering Committee settled on the need for an ASCII-based system. This choice permitted the court to build on the existing system, and it permitted court stenographers, both public and private, to continue providing transcription services with little change. As well, most text readers and document managers employed by lawyers could accommodate ASCII files and this choice in no way impaired that ability.

C. Graphics

Trial materials routinely include paper exhibits as well as transcriptions of evidence. Many of these paper materials also could be reproduced in electronic form. However, the Working Committee became concerned, after initial tests, about the quality and cost of scanning for conversion to electronic form. Moreover, the display of graphics files by many applications was disconcertingly slow. After some hesitation it decided not to add scanned documents as part of the original project, but it was hoped this feature could be added later. This decision was driven largely by practical limitations. The official court reporters lacked the ability, at that time, to produce more than the trial transcript in electronic form. However, the committee also hoped that this move would result in a smoother introduction of electronic documents generally for both litigants and the court. Notwithstanding these minimum requirements, the committee encouraged litigants with the inclination and ability to file more of the book in electronic form.

D. "Reader" Software

Perhaps the most important task facing the Working Committee was the assessment of commercially available software packages to determine which ones, if any, could provide the tools sought by the court at an acceptable cost. In total, more than thirty "document manager," "electronic publishing," and "text database" programs were identified for initial consideration. The committee was of the view that a broad search was warranted because the project did not fall squarely inside any accepted software category, and, in any

event, these categories were not well-defined. The criteria the evaluators used to assess these programs were ease of use, the ability to generate text with minimal hands-on effort, avoidance of impairment of original text, emulation of the paper product, and variety and effectiveness of document-handling tools. Each requires fuller discussion.

1. Ease of use

Both the stenographers who prepare the books and the end-users, judges, and court clerks considered ease of use particularly important; this is because most of these persons had minimal computer experience. The electronic documents had to be easy to read and simple to manipulate. Moreover, the electronic product had to be easier to use than the current paper system. This eliminated many programs.

The committee also quickly learned that products which use a graphical interface are much more intuitive to use. Such products have pop-up windows and icons, often in a Microsoft Windows format, that are easily manipulated. Persons familiar with other Windows applications can acclimate easily to such programs. The committee therefore considered them much superior to MS-DOS-based programs.

2. Automatic generation

The capacity for automatic and flexible generation of the final electronic document, including accompanying tables of contents and indices, was also considered important given the relatively large number of appeals heard each year and the relatively short active life of the information. Essentially, the software needed the ability to quickly create, with minimal user setup, a standard yet malleable end-product. The committee sought to dedicate the least human resources possible to the preparation of documents to keep production costs at a minimum.

Many of the software programs considered contemplate the preparation of documents or a library expected to have some permanence. The committee deemed inappropriate programs that required significant hands-on effort by users.

3. No impairment of original text

The court decided that, for the purpose of the pilot project, counsel and judge should be free to employ paper copies if they prefer them. Further, the committee expected that even later stages of any electronic appeal book program would likely entail a period of mixed paper and electronics, or different "reader" software. For example, in the course of a public hearing, some lawyers and judges might be looking at the printed page, while others read a screen. Those looking at the screen would not all necessarily use the same software. Yet, when somebody said, "Now, let us look at line 190 on page 1354," everybody must be able to find the same spot without confusion or delay. The court therefore required that the chosen program maintain the integrity of the original trial transcript and other documents when assembled into electronic format. It was also extremely important that the electronic copy exactly duplicate the text of the original documents without easily allowing inadvertent alteration. A word processor for that reason, and many others, would not do.

This condition proved in the end to be the most difficult to meet. In Alberta, the formats for transcripts put into "appeal books" are rigourously regulated by the court. Each page required special headers and footers, and there were other sophisticated format requirements. The court needed a document reader that could "see" and respect format commands used in the paper world.

In that regard, the court started with the great advantage of the cooperation of the official court stenographers, called in Alberta the court reporters. This office was charged with the recording of trial proceedings by tape or shorthand typewriter, and the paper production of transcripts when requested. The reporters had, for some years, used computers in this process. Thus, an electronic ASCII-based text already was available. In some cases, as in rural areas, the only software used was a word processor. But the reporters had already succeeded in establishing systems for publication that had led to the creation of electronic documents that met the court formatting standards. The new challenge was to adapt these systems for an electronic display. Fortunately, the court standards could be met within the

ASCII limits, although the reporters had developed some clever work-arounds for some problems.

4. Emulation of paper aids

The Steering Committee believed it desirable that the product ultimately selected provide equivalents to the reading aids that exist in the paper world: indices, bookmarks, annotations or marginal notes, tables of contents, pagination, line numbers, etc. The committee felt that such emulation might reduce the resistance to electronic documents anticipated from some users.

The committee also sought a program with features that augmented traditional paper reading aids. The capacity to rapidly search and manipulate information and the availability of aids to organize and cross-reference text were important factors in evaluating the various programs.

5. Document handling capacity

As noted, electronic transcripts are often very long. The committee sought a program that could accommodate massive files without appreciable adverse impact on its ability to perform routine tasks such as jumping to locations within the text (for instance, through an index or table of contents entry) or searching for key words. Lawyers and judges would need to find a particular page within the electronic book at least as quickly as they could with paper. In this respect, the committee found some of the software packages tested, particularly those that incorporated word processors, to be unsuitable.

III. FEATURES OF THE SELECTED SOFTWARE—SMARTEXT™

The Steering Committee ultimately selected the document reader SmarText, offered by Lotus Development Corporation, as suitable for initial trial use. SmarText is a micro-computer based application that operates in the Microsoft Windows environment. It conforms to all Windows standards and therefore offers all of the advantages of the Windows graphical interface, including pull-down menus, multiple windows, icons, and mouse-activated buttons. Persons familiar with other

Windows applications are easily able to understand its basic operation.

SmarText analyzes the structure of source files using artificial intelligence techniques and automatically builds an electronic document with an outline, an index, and cross-referenced text links. It presents the information on screen in a form that emulates a printed book format. All of the familiar things that can be done with printed documents, such as accessing information from a table of contents or index, taking notes, inserting a bookmark, or copying a section of text, can be done through SmarText.

The SmarText program is composed of two basic components: a build function and a read function. Each function is discussed in turn below.

A. Building Documents Using SmarText

The SmarText build function allows users to create a single electronic document from a variety of user selected text and graphic files. The program supports a number of common word processing and graphics packages, including WordPerfect, Microsoft Word, AMI Professional, DrawPerfect, and AmiDraw. In assembling the final electronic document, the program automatically analyzes input documents, using user-specified standards, to create outlines and indices. The program also allows users to establish hypertext links, either manually or automatically, to connect occurrences of text or illustrations. The finished document maintains the integrity of the source files, displaying them in the order in which they were selected during the build process. SmarText maintains the integrity of the source files throughout the build process, but the new index files almost double the amount of data.

SmarText automatically generates an outline, equivalent to a table of contents in book format, using either direct or indirect methods of analysis. Using the indirect method, SmarText can discern headings based on the occurrence of capitalized text, numbered text, or specially punctuated text within the source files. Using the direct method, SmarText generates headings based on occurrences of user-specified text strings or paragraph styles within the source files. A SmarText user can also prepare

templates for repetitive build applications to provide consistency between documents and to save time. SmarText searches for such occurrences of text during the build process and lists them as headings in the final outline. Multiple levels for headings, comparable to the paper world, are also permitted. In this regard, the court has prepared files containing standard text strings usually found as headings in criminal and civil trial transcripts.

The word index created during the SmarText build process is comparable to an index found in a standard book. As with outlines, SmarText creates an index using direct or indirect analysis. The indirect method adds words to the index based upon the frequency with which they appear within the source files. Using the direct method, SmarText creates a default index based only upon the contents of user-specified keyword and stopword files. Keyword files contain words or phrases that the user wants included in the index, whereas stopword files contain those sought to be excluded. The court has set up several keyword files, consisting of words or legal phrases commonly found within trial transcripts that are of interest to judges, for use in preparing electronic appeal books. As familiarity with the SmarText program and the use of electronic appeal books progresses, the court may allow lawyers to submit case-specific keyword files. Litigants can freely copy and distribute electronic documents created with the builder component of SmarText without the hindrance of licensing or royalty payments.

B. Reading Documents

The read function of SmarText allows users to access previously built documents. When the program is first activated, a "bookshelf" appears containing icons that represent created documents available for viewing. A SmarText user can open a particular electronic "book" by selecting the representative icon.

Electronic documents are displayed in three separate windows: "text," "outline," and "index" windows. As is the case with other Windows-based programs, a user may display windows individually or may tile or cascade multiple windows.

SmarText provides a number of ways to navigate within a document. In the text window, a user can browse by page or

jump to specific locations using a number of "shortcut" functions. Using the SmarText outline, a user can quickly display the particular section of text in the open document or an illustration that corresponds to a heading or subheading in the outline. Similarly, the index can be used to access the section of text in the open document that contains an instance or occurrence of the term or phrase identified in the index. Specific terms or phrases that do not appear in the index can still be located within the document using SmarText's powerful search function. Searches utilize Boolean logic to evaluate the search terms and define their relationships to one another. SmarText identifies occurrences of text in the document that match the search terms and allows a user to access quickly and display the text that contains a selected occurrence. SmarText also allows searches to be done across multiple documents. Unfortunately, however, full "fuzzy" searches cannot be performed.

SmarText also enables a user to navigate within a document using hypertext links. Links are similar to cross-references in a printed book and provide a connection between text or an illustration in one part of a document and related information located elsewhere. SmarText can generate links automatically when a document is built or a user may add custom links later.

When reading an electronic document, a user can annotate it a number of ways. Text can be copied to a word processing application, specified by the user, where it can be edited, printed, or saved to another file. Alternatively, bookmarks and notes can be posted to specific locations in the document.

Finally, SmarText emulates a printed page. With a smaller font, it reproduces on screen the exact duplicate of the printed page. Moreover, it permits alteration in fonts, and thus improved display, without any disruption of the page-search capacity, that continues to search on the page numbers inserted by the original document.

IV. IMPLEMENTATION OF A PILOT PROJECT

In April 1994, the Alberta Court of Appeal commenced a pilot project utilizing electronic appeal books. It encompassed appeals scheduled for hearing at the Alberta Court of Appeal in

Calgary where the trial evidence was five days or more in duration. The simple objective of the project was to determine the real-life feasibility of electronic appeal books. The court anticipated a one-year trial period.

For this project, the court did not require litigants to file a complete appeal book in electronic form. As has been mentioned, appeal books usually contain a transcript of trial events, copies of trial paper exhibits, reasons for judgement of the trial judge, and various opening and closing court documents. As an initial step, the court decided that only the trial evidence portion of the appeal books need be submitted to the court in electronic form. Litigants were free to file the remainder of the appeal book contents, called the "truncated appeal book," in hard-copy format.

In addition to the electronic submission, litigants were required to file at least one complete hard-copy appeal book. The Steering Committee decided access to a hard copy should always be possible in order to protect litigants from any unforeseen jeopardy that might befall initial use of the electronic books.

In initiating the pilot project, the court and the committee gave full consideration to the needs of counsel and judges unfamiliar or simply uncomfortable with using electronic documents. Thus the court provided litigants the option of receiving their own copies of appeal books in either electronic or hard-copy form.

The copy of the electronic appeal book filed with the court was to be accompanied by SmarText support files so that judges could "read" it without a "build." Litigants could obtain these materials from the official court reporters or private court stenographers for a fee, or could request only the trial evidence in electronic form, again for a fee, and build the appeal book themselves. The court made available to anybody who asked copies of the SmarText keyword files and setup parameters.

It was expected, at least during the hearing process, that most judges would use computers in the courtroom to access and refer to transcript evidence. Monitors were placed on the benches, and the clerks each day took on the task of collecting the judges' computers and installing them for hearings. Counsel

were allowed to utilize computers as well, and a computer at the counsel table became ordinary, if not routine.

Notwithstanding a number of growing pains, the court and the committee obtained favourable results with the pilot project. In January 1995, the court decided, therefore, to extend the pilot project to encompass all Alberta Court of Appeal cases, heard in either Calgary or Edmonton, where the trial evidence was five days duration or more. The court made plans to make the final assessment in July 1995. This deadline, however, was not met.

V. THE COURT'S EXPERIENCE WITH ELECTRONIC APPEAL BOOKS

The court heard the first case utilizing an electronic appeal book in September 1994. To the end of March 1995, a total of fifteen electronic appeals had been heard. The long delay between the filing of materials and the inscription of a case for hearing explains this limited number. This delay had nothing to do with the project. Rather, it arose because lawyers needed to find preparation time. The court was still hearing "paper" appeals in Alberta throughout 1996 because the transcripts had been prepared before the project began. And many "electronic" transcripts prepared in 1995 only reached the judges in late 1996. In the end, the use of electronic documents spread more slowly than had been forecast. It was only by late 1996 that every judge on the court had a sufficient experience to make a final decision about the innovation.

The Steering Committee, now called the Electronic Document Reading Committee, made its final assessment in 1996. It decided that real progress had been made towards resolution of the problems that initially spurred the court to consider electronic appeal books.

A. Savings

A primary objective of the program was to reduce the volume of paper used on appeals, thereby reducing costs and paper waste and facilitating material storage and handling. In this respect, the program achieved positive results. Appeal books filed for electronic appeals were, on average, 50% to 75% shorter in length than conventional hard-copy appeals. For

litigants, the reduction in volume translated to lower costs. On average, the Calgary pilot project reported a 20% reduction in the cost to parties using electronic appeal books.

B. Ease of Use

Participants commented favourably on the speed and efficiency with which information may be accessed and manipulated using the electronic books as compared to the printed version, particularly when information sought is spread throughout the text. This benefit has been most useful to judges, as they tend to read selectively in preparation for court, during hearings and in writing judgments. They no longer need to flip through the heavy appeal books, nor do they have to refer to the table of contents and look up information manually. They are also able to prepare for appeals and write their judgments from any work-site.

C. Problems

The introduction of electronic appeal books was not, however, without difficulties. Many were simply "teething" problems associated with the initial setup of the program such as establishing working standards by which the court reporters processed the books, familiarizing litigants with the court's filing requirements, and setting up courtrooms for computer use. The committee anticipated most problems and many were resolved through simple trial and error.

The court encountered only one significant formatting problem. SmarText could not read the page breaks in the standard text prepared by the court reporters. With the aid of the court's technical resources, and the generous cooperation of the reporters, a small formatting change solved the problem.

One of the more significant difficulties the court and committee encountered in instituting the use of electronic books was the "technophobia" of some lawyers and judges. Users who were not computer-literate displayed a reluctance to use the new technology and often fell back on old ways. However, initial diffidence has slowly given way as familiarity with the new process has increased. It is hoped that all users will show

increased interest as electronic books become more commonplace.

Another difficulty was the confusion attendant on being in both the paper and electronic document reading ("EDR") worlds at the same time. As judges prepared for hearings they had to move back and forth. Clerks sometimes forgot to load the text-files for the judge. And the judges who were serious computer users were reluctant to give up their computers while the clerks performed this task.

Despite some expressed apprehensions by those relatively unfamiliar with the EDR option, there were no complaints by regular users about eye-strain or other problems associated with extended time before a computer monitor. In fact, one judge, who had a problem with his eyes found that the ability of the software to display large fonts was a boon. In addition, some judges spoke of the advantage of not having to carry about the heavy printed books. In general, the reaction of each judge to this new way seemed to be a direct reflection of his or her general attitude toward computerization. Those who viewed the trend with alarm were not enthusiastic about this project. Those who had embraced computers as valuable working tools were highly enthusiastic. But one judge had a challenge the EDR Committee could not meet: She liked to read the materials in bed!

D. The Decision

The EDR Committee suggested to the court that EDR become the standard means of access to appeal books, and that the court extend this to all appeals. It also suggested the continuation of the preparation of a "truncated" paper appeal book to accompany the electronic text, to include any material the reviewing judge was likely to read from cover-to-cover, like the pleadings, significant rulings, and the trial Reasons for Decision or Jury Charge. For the same reason, there is no plan to move to EDR of written argument. The committee also resolved that it would continue to study the preparation of exhibits for EDR. Counsel would be free to use or not use the new system. Also, the committee undertook a general review of future formatting standards. The court agreed to adopt the idea with the

proviso that a judge who had any difficulty with the new system could call for a print copy. So far none has, although judges may borrow the Registrar's one print copy that is kept for archival reasons.

In 1998 the court accepted this report and the project became permanent and routine. The program has now been a regular feature of the work of the Alberta Court of Appeal since that year. Almost all judges now prepare almost all cases employing this tool, and the judges also routinely access it privately in court during oral argument by using their laptop computers on the bench. Increasingly, counsel also employ the same software to access the electronic transcripts during oral argument.

VI. FUTURE DIRECTIONS

A. A New Project—The Fully Electronic Appeal

In 2000, the court moved on to experiment with a totally electronic appellate argument. In this mode, a CD-ROM is prepared and available to the court and counsel that contains:

- the transcript,
- authorities (the law reports and other material relied upon by counsel),
- the trial exhibits and other special material if capable of graphical reproduction,
- and the written briefs of all parties—complete with hypertext connections to the transcript, authorities, and exhibits.

Again, all of this is available both for preparation and oral argument.

As of the day of publication, there have been three experiments in this mode. The Registrar, Ms. Lynn Varty, reports that the feedback received from both the bar and the court so far is very positive, although some judges still prefer the old ways. This experiment will continue, with a fourth appeal in this mode targeted to be heard in the spring of 2001. A committee continues to assess the project.

B. Technical Issues

1. 32-bit EDR software

After IBM bought Lotus, it withdrew SmarText from the market. There are no upgrades and no future support. The court undertook a second review of new programs in the 32-bit universe with the idea of moving to a new Reader in 1998. For now, it continues to use SmarText, but is looking very carefully at Adobe *Acrobat* v.4., and has moved to that application for the new project. (The British Columbia Court of Appeal in 1996 adopted Folio *Views* for this purpose, and the Manitoba Court of Appeal is looking at ISIS.)

2. Sneakerware

Today, the new texts are loaded on computers from 3.5" floppies by the court clerks who also distribute the paper books. The EDR Committee is looking at a possibly better means, including the establishment of a central server that readers can access either to read or to download texts. If that is not feasible, and in light of recent price reductions for CD-ROM publishing machines, it may employ CD-ROM disks instead of floppies. CD-ROM is used for the new project, and the court may move to an even larger medium for appeals with huge graphics files.

3. Graphics and OCR

At present, the court is tapping only a small fraction of the foreseeable potential for electronic documents, both in terms of the scope of the submissions and the use parties can make of them. The new project represents the next major step in the move towards fully electronic appeal books. Newer technology can offer graphical reproduction of the opening and closing court documents and trial exhibits. These documents often include forms, pictures, or handwritten notes available only in hard-copy format. However, such material is optically scanned and converted into electronic form. Recent advances in technology and software have made conversion a cost effective and thus viable option.

4. Law

At present, previously decided cases upon which litigants rely in support of their legal position are submitted in printed form. Almost always they are photocopies of existing print publications. These copies are made because, in Alberta, there is discussion of cases between counsel and judges in open court. Optical scanners—and access to the court's new online judgment database[1]—make it a fairly simple matter to obtain the text of cases in electronic form. With the advent of more and more publicly accessible electronic databases containing past legal decisions, it is even possible the court may simply go "online" in the courtroom. Alternatively, it may choose a system that combines all these features. The new project involves a study of these options.

5. Integrated written arguments

The submission to the court of written arguments, or factums, in electronic form also seems a natural progression towards fully electronic hearings. This step should be relatively straightforward given that most factums are now prepared using word processing programs. It would be a simple matter to combine the factums with the appeal book to form a single electronic submission. That step, also using HTM computer language and its "hypertext" feature, could facilitate the development of written arguments integrated with other material to simplify the analysis of issues. That also is part of the new project. Nevertheless, these plans will be tempered by the experience of the judges that the printed word bound in book form remains the most convenient way to read material from cover-to-cover.

6. Better notes

As users of electronic appeal books become more familiar with the capabilities of the software, it is anticipated they will make better use of the available software tools. For example, users might build special indices or outlines to suit their

1. <http://www.albertacourts.ab.ca/webpage/jdb/current_judgments-ca.htm>.

particular needs, add cross-references between text or graphics passages, or make electronic notes annotated to portions of the case under appeal or within a separate linked file.

7. Staff use

In a development contemporaneous with the EDR project, the court has engaged more research assistants. Increasingly, these assistants read the materials to help the judges in their preparation. They also use the EDR facilities. Nevertheless, most judges in Alberta consider preparation to be a personal and private effort.

8. New format standards

As the court moves out of the paper world, the paper-based formatting standards can be changed. For example, the court already has dropped pagination as a prime means of reference, and gone to standardised line and paragraph numbering relying on new standards suggested by the Canadian Judicial Council.[2] With the new project, it has also moved into the HTML world. And, as the world moves to the new standard of SQML for basic texts, the EDR project must be ready to take advantage of the new formatting possibilities.

VII. SUMMARY

The implementation of electronic appeal books was undertaken to benefit the Court of Appeal of Alberta and litigants alike through reduced costs, easier material handling and storage, and improved access to, and manipulation of, evidence and argument. The pilot project proved these to be realistic and economically achievable goals. Electronic appeal books have been permanently integrated into the Alberta judicial appeal process. Moreover, the court has now moved to test out a comprehensive format to include all opening and closing documents, trial evidence, and exhibits. Notwithstanding initial

2. Canadian Judicial Council, *Standards for the Preparation, Distribution and Citation of Canadian Judgments in Electronic Form* <http://www.cjc-ccm.gc.ca/english/cjc_standards.htm> (accessed Oct. 30, 2000).

reluctance displayed by some users, it is believed that those who take advantage of the new process will eventually find it a more effective and flexible medium for document management.