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## The United Kingdom

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# THE UNITED KINGDOM

Jeremy Barnett\*

## INTRODUCTION

Although it is generally considered that the United Kingdom lags behind the United States in the adoption of courtroom technology, a close examination of the numerous pilot schemes and recent innovations shows that in many respects the UK is ahead of the game. However, efforts by judges, professional bodies and court administrators to continue the modernisation process are being hampered by a body of lawyers and litigants who are reluctant to embrace new technology.

In order to understand the haphazard development of information technology (IT) use both in court and in the preparation of cases, it is necessary to understand the funding of litigation, both criminal and civil in the UK. In the criminal arena, there is a move towards centralisation of operations in the police forces, including the Crown Prosecution Service, the Legal Services Commission or new Criminal Defence Service, and the new Department of Constitutional Affairs. Compilation of management information to permit performance-monitoring is high on the agenda. The Treasury keeps a keen eye upon all areas of expenditure and any new idea that is perceived to “speed up justice” or “avoid the pinch points” will find support. As I have previously written:

The backcloth to the introduction of technology into the UK legal system is the unfortunate well documented failure of a number of high profile Government IT programmes, including the Inland Revenue system to process tax credits, the online self assessment Web pages which last year suffered security breaches allowing the tax details of more than 700 people to be viewed by others on the Internet and the Defence Stores Management solution for storing the army’s inventories which was suspended in January 2002 after consuming £140m of taxpayers money. In the Criminal Justice arena, such public embarrassments have resulted in the abolition of an inter-departmental group known as IBIS and a loss of confidence amongst IT professionals

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as to whether or not such the task ahead presents too steep a mountain to climb.

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. . . [An example of IT in the Criminal Justice System is] the Libra Caseworking project for the Magistrates Court which was estimated to cost £156 million, [but] will end up costing taxpayers £390 million. As the Legal system is second only in size to the National Health Service, it is felt that a number of lessons should be learned from that arena. A recent survey has highlighted the fundamental weakness in the way in which NHS officials are managing the £2.3bn national programme for IT.

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Of more importance is the effect of the failure of these recent initiatives, which have in the main occurred, not th[r]ough lack of good intentions, effort or funding, rather a failure to fully understand the scope of the work that is required in re engineering of business process in the various agencies. The lesson that is now being learned in the Medical profession has equal validity in this market: what is required are systems designed for the profession by the profession.

Because of the climate of uncertainty, prevarication and delay that is now endemic in government procurement, compounded with the collapse of the 'dot com' bubble, the private sector is reluctant to invest in this market. Rather than supporting the development of new and innovative ideas, IT systems integrators are only prepared to react to government procurement projects, projects with potential to overrun, as being the only route to maximising profits in difficult market conditions.

The question of who should develop and finance the new technology for the legal system is one that has often been considered. Professor Richard Susskind believes that there are compelling reasons in the UK at least for proposing that new technology should NOT be financed and developed from within the public sector, bearing in mind the current climate of strict control of public expenditure and the long term nature of the change required. He called for a 10 year vision and commitment by Government to support the vision a call that was recognised in the Auld report, published in October 2001.<sup>1</sup>

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<sup>1</sup> Jeremy Barnett, *The Virtual Courtroom and Online Dispute Resolution*, in U. MASS CTR. FOR INFO. TECH. & DISPUTE RESOLUTION, *ONLINE DISPUTE RESOLUTION (ODR): TECHNOLOGY AS THE "FOURTH PARTY"* 4, 9 (Ethan Katsh & Daewon Choi eds., 2003) (footnotes omitted), available at <http://www.odr.info/unece2003/pdf/Barnett.pdf>.

In court, rather surprisingly, support for the introduction of technology has come not from the profession, but from the senior judiciary. This unlikely position has occurred as bright “early adopters” have been appointed to the High Court bench and then to the Court of Appeal. This Article will briefly trace a number of developments that show although the general view of the landscape is one of old-fashioned paper practices in both criminal and civil litigation, there are isolated pockets of activity where it seems that the UK leads the way.<sup>2</sup>

### I. COURTS AND TRIBUNALS MODERNISATION PROGRAMME

Following the testing of different applications in criminal courts, a standard specification for cabling and wiring of Crown Courts was prepared to support later introduction of technology. The Electronic Presentation of Evidence (EPE) Project has seen a number of courtrooms equipped with hardware to encourage the prosecutors of serious fraud cases to use various techniques, including real-time transcription to shorten the length of these cases and to assist the jury in understanding the issues.<sup>3</sup>

Although it is clear that great advantages can be reaped from the widespread adoption of such techniques, trials in these courts are emerging as a hybrid of paper and IT preparation and presentation. Counsel’s rows are now a curious mix of large and small computer screens, and large bookcases full of materials that have been served both in hard copy and on disk. Most practitioners would agree that the main advantage to be seen so far is in the service of “unused material.” The service of millions of pages of material on seventy-five-gigabyte hard disks now replaces the need for counsel and solicitors to sit and read archived material in draughty storage facilities for weeks on end. The materials seized are now routinely scanned,<sup>4</sup> and software with search facilities is used to help navigate around the huge bulk of documents.

Another recent pilot scheme that is generally considered to have been a success is the Virtual Plea and Directions Hearing at Manchester Crown Court, a vehicle for conducting these hearings online.<sup>5</sup> The great advantage of this scheme is that the difficult task of transporting defendants from custody to court for short directions hearings has been replaced by confidential video link conferences between the court and the prison.

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<sup>2</sup> I have been greatly assisted by a lecture given to Court 21 at Leeds University by Lord Justice Henry Brooke that dealt with a number of the following issues in great detail. See Lord Justice Henry Brooke, *The Use of Technology in the Courts*, Speech at Leeds University (May 28, 2003), available at <http://www.dca.gov.uk/judicial/speeches/ljb280503.htm> [hereinafter Speech by Lord Justice Brooke].

<sup>3</sup> See *id.*

<sup>4</sup> See *id.*

<sup>5</sup> *Id.*

XHIBIT is a new information system that was piloted at Chelmsford Crown Court.<sup>6</sup> It was designed to assist the various agencies with an interest in a criminal trial by informing them of progress. It is hoped that the general experience of many witnesses and jurors who feel that they are kept waiting for long periods can be reduced by the use of e-mail, text-messaging, and other techniques that can take advantage of a Web-based court log.<sup>7</sup> Information from the log is available on monitor screens in the public areas, robing rooms and also posted on a court service Web site.

Videoconferencing of evidence is another area of growth in both criminal and civil courts. Although the use of this technology has been limited to child and foreign witnesses in fraud cases only,<sup>8</sup> many practitioners feel that there are other occasions when remote testimony could assist their case. The Bar Council Videoconference Studio has extensive experience in the conduct of all forms of trial, and quality equipment has been installed at the Old Bailey, the Royal Courts of Justice, and numerous regional court centres. The most widespread use of this technology assists vulnerable or intimidated witnesses by allowing them to give their testimony by video link from another room in the court building.<sup>9</sup>

## II. CRIMINAL JUSTICE INFORMATION TECHNOLOGY

Criminal Justice Information Technology (CJIT) is a government organisation tasked with the delivery of IT that makes a positive difference.<sup>10</sup> CJIT is working with criminal justice agencies to support the delivery of a modern Criminal Justice System (CJS) and, through it, enable criminal justice professionals to work together more effectively. CJIT's role is to develop IT services to help criminal justice professionals to share information safely and securely while working through their existing desktop technology (provided it is reasonably up to date), and to promote the effective take-up of those services.<sup>11</sup> The key services developed by CJIT are the Secure e-Mail service (SeM) and the CJS Exchange.

SeM is intended to help criminal justice organisations such as the police, Crown Prosecution Service, courts, probation and prisons, and practitioners, including solicitors and barristers, to share sensitive information over a secure medium (the type of information that is shared in this way will be for the local area to decide in

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<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

<sup>9</sup> *See id.* (discussing a wife who would not be in the same town as her violent husband).

<sup>10</sup> *See* CRIM. JUSTICE SYS., JUSTICE FOR ALL 157–58 (2002), available at [http://image.guardian.co.uk/sys-files/Politics/documents/2002/07/17/Criminal\\_Justice.pdf](http://image.guardian.co.uk/sys-files/Politics/documents/2002/07/17/Criminal_Justice.pdf).

<sup>11</sup> *See id.* at 156.

consultation).<sup>12</sup> Criminal justice professionals will be able to obtain the right information at the right time, reduce posting and faxing costs, and keep track of communications with other agencies through the “audit trail” of e-mails.

SeM is already being rolled out across some areas of England and Wales and is due to have begun in all areas by the end of the year.<sup>13</sup> Government criminal justice organisations in the areas are likely to approach local chambers to invite them to participate in SeM. Connection to the service for those who choose to take it up was supposed to begin in late September 2003 and is intended to be free of charge (provided it takes place alongside implementation in the local criminal justice agencies), although chambers will have to fund any necessary alterations or enhancements to their software or hardware.

CJS Exchange will build on SeM, enabling criminal justice professionals, including lawyers, to share “virtual” case file information — that is, electronic case files — using their existing desktop technology in most cases.<sup>14</sup> The CJS Exchange is currently in development, but most practitioners are expected to be able to use it by the end of 2005.<sup>15</sup> More information on both Secure eMail and CJS Exchange is available on the CJIT Web site.<sup>16</sup>

### III. TECHNOLOGY IN THE CIVIL AND FAMILY COURTS

IT has long been accepted that “the delivery of justice to the citizen in the modern world need[s] the support of integrated IT systems.”<sup>17</sup> A number of strategic reviews have been conducted with many sensible recommendations emerging, such as the electronic case record, the electronic case management system, the electronic diary, and the electronic file.<sup>18</sup> Sadly, these have not gained support in the Treasury, and recent progress in this area has been limited.

The most successful civil pilot scheme is an e-filing project called Money Claims Online (MCOL). MCOL was launched in February 2002 and allows substantial claims to be issued online.<sup>19</sup> MCOL has been so successful that it is handling over 600 cases per week — as many as most busy city court centres.<sup>20</sup>

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<sup>12</sup> See Barnett, *supra* note 1, at 3–4.

<sup>13</sup> See CRIM. JUSTICE SYS., CRIM JUSTICE SYS. SECURE EMAIL SERVICE (2002), available at [http://www.cjit.gov.uk/secure\\_email.html](http://www.cjit.gov.uk/secure_email.html).

<sup>14</sup> See CRIM. JUSTICE SYS., CJS EXCH.-ENABLING CASE FILE INFO. TO BE SHARED ELECTRONICALLY (2002), available at <http://www.cjit.gov.uk/exchange.html>.

<sup>15</sup> *Id.*

<sup>16</sup> For the CJIT Web site, see <http://www.cjit.gov.uk> (last visited Apr. 1, 2004).

<sup>17</sup> See Speech by Lord Justice Brooke, *supra* note 2.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

<sup>20</sup> For the Court Service’s MCOL homepage, see <http://www.courtservice.gov.uk/mcol>.

## IV. PUBLISHING JUDGMENTS ONLINE

Since 1999, a new contract with shorthand writers permitted judgments of the Court of Appeal and High Court to be published without private copyright issues being raised.<sup>21</sup> A new practice direction was issued in January 2001 by the Lord Chief Justice that laid down neutral citation and paragraph numbering.<sup>22</sup> This was followed by the House of Lords and the Privy Council.

The British and Irish Legal Information Institute (BAILII) has driven access to legal information over the last few years.<sup>23</sup> Members of the judiciary, the professions, the academic world, publishers and others joined together to give access to primary sources of law, both statute and case law, free at the point of entry.<sup>24</sup> BAILII quickly became the single largest free-access law site following its launch in April 2000.<sup>25</sup>

## V. THE BLOODY SUNDAY INQUIRY

On Sunday, January 30, 1972, thirteen people died and a similar number were wounded in a civil-rights march at Londonderry that became known as "Bloody Sunday." Lord Saville of Newdigate, an English Law Lord who sits in the House of Lords as the highest court of appeal in the UK is presiding over an Inquiry into the events. Sir Edward Somers, a former Judge of the Court of Appeal of New Zealand and Mr. Justice Hoyt, a Canadian judge who is Chief Justice of the Province of New Brunswick are also involved in the Inquiry.<sup>26</sup>

The Inquiry is now in its fifth year and is presently in session in London, following the taking of live evidence from bystanders at the Guildhall, Londonderry. The object of the Inquiry is to seek the truth about what happened on Bloody Sunday with fairness, thoroughness and impartiality under the Tribunals of Inquiry (Evidence) Act 1921.<sup>27</sup> This Inquiry involves consideration of an earlier Inquiry conducted by Lord Widgery, which was subject to some criticism, as well as fresh evidence taken some twenty-eight years after the incident.<sup>28</sup>

In order to conduct the hearing, a customised courtroom was built in the Guildhall, Londonderry, and then a further facility was built at the Methodist Central Hall at Westminster, which dates back to 1898. The facility at Westminster

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<sup>21</sup> Speech by Lord Justice Brooke, *supra* note 2.

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> See Prime Minister Tony Blair, The Bloody Sunday Inquiry, Statement to Parliament (Jan. 29, 1998), available at <http://www.bloody-sunday-inquiry.org.uk/index2.asp?p=1>.

<sup>27</sup> *Id.*

<sup>28</sup> *Id.*

consists of a hearing chamber that can accommodate between thirty to forty counsel, together with instructing solicitors, a public and press gallery, a families gallery and an IT section.

The design of the hearing chamber incorporates modern IT floors, a lighting gantry and other facilities including a press centre, a family room and an extensive back office operation that are all linked to the main facility. An important lesson that has been learned is that the chamber has a stepped design so that the judge can see all counsel and vice versa. Great efforts have been made to ensure that all parties, including the press, the families and the media, can follow the proceedings whilst permitting some sensitive evidence to be given in camera.

### *Technology in Use*

The main applications in use by the Bloody Sunday Inquiry are:

#### 1. TrialPro Evidence Display System

“Every piece of documentary evidence used by the Inquiry has been uniquely numbered and scanned to ensure that the documents may be quickly and easily displayed in electronic format on the Evidence Display screens located in the [hearing chamber, the public gallery, the press rooms, and family areas].”<sup>29</sup> The screens are touch screen and allow enlargement and annotation of the document by counsel.

#### 2. LiveNote: Real-Time Transcription

“LiveNote is a Real-Time Transcription application, providing a ‘live’ transcript of the proceedings to laptop computers used by the various legal teams . . . [who can] annotate and highlight their individual copies . . . .”<sup>30</sup> A corrected version of the transcript is provided and published on the Web site as a PDF file within two hours.

#### 3. Virtual Reality

The Bloody Sunday incident centred upon a civil-rights march that developed into a riot involving between 5,000 to 10,000 people. All present were potential witnesses. Much evidence has been gathered over the years from film, television interviews, and other sources.

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<sup>29</sup> The Bloody Sunday Inquiry, at <http://www.bloody-sunday-inquiry.org.uk/index.htm> (last visited Dec. 25, 2003).

<sup>30</sup> *Id.*



The main focus of the Inquiry is to reconstruct that Sunday's events, often from live evidence of people doing their best to remember where they were and what they saw some twenty-eight years later. The main problem facing those residents who still live in the area is that many buildings have been replaced thereby making accurate recollection difficult. The main incidents took place near three 1960s-constructed tower blocks at Roseville Street, which have been pulled down and replaced by a row of mews-styled houses. The park opposite, called Glen Fara, is however, still there.

It was, therefore, necessary to build an interactive three-dimensional reconstruction of the area using a combination of graphics and photographs. "With a choice of 80 locations, the user can look around 360 degrees, zoom in and out or choose to walk through the scene. On selection of the latter, 'stepping stones' are used as an aid to navigation."<sup>31</sup> Oral evidence as to location and movement is then recorded, saved and exported to a mark-up system.<sup>32</sup> That information can be stored for use by the tribunal in building a three-dimensional reconstruction as part of its judgment, based on pieces of evidence that the court had deemed to be reliable.

#### 4. Video Distribution/Closed Circuit Television

The TrialPro evidence display and the Virtual Reality application are distributed to a number of screens throughout the main hearing chamber by an encrypted Virtual Private Network.<sup>33</sup> In addition, the participants in the hearing are filmed and relayed to the public gallery, press rooms, back offices, and also to an additional four locations in Londonderry. The judge has control over the camera operation.

The evidence includes seventy video recordings of various types, including ten taken on the day. Still photographs from these recordings are also relied upon by many counsel to present their cases.

#### 5. Sound System

"A sophisticated sound system is used, in conjunction with the [closed circuit television] system . . . to ensure that the current proceedings in the main chamber are distributed to all locations . . . . The sound system is also used to automatically switch the cameras in the main chamber to display the current speaker . . . ."<sup>34</sup>

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<sup>31</sup> *Id.*

<sup>32</sup> *Id.*

<sup>33</sup> *Id.*

<sup>34</sup> *Id.*

## 6. Communications Network

“All of these applications are integrated via the use of a high-performance data communications network, which ensures the distribution of the applications to all locations in real time.”<sup>35</sup>

## 7. Technical Support

The Integrated Circuit Technology infrastructure is supported by a team of nine technicians who deal with the sound, evidence handling, the video production and the LiveNote stenographers. The service level agreement was drawn up by Deloitte Touche and service provided by Fujitsu. The equipment is owned by the Northern Ireland Office and will be redeployed when the Inquiry is complete. The cost of the IT infrastructure is approximately £2 million for installation in Londonderry and London, and the daily support cost to include LiveNote is in the region of £15,000 to £20,000 per day.<sup>36</sup> A statistic that stands out is that there have been only fifteen minutes down time throughout the life of the Inquiry.<sup>37</sup>

## 8. Web Site

The Inquiry supports a Web site — <http://www.bloody-sunday-inquiry.org> — that not only carries a great deal of information about the background to the incident, and an overview of the technical nature of the IT infrastructure, but also carries a full library of the transcripts of the hearings. It is used to post recent transcripts for daily consumption by the press and interested parties.

Also on the site is a full body of legal rulings made during the life of the Inquiry, all press notices of great interest to practitioners, and a complete library of 885 witness statements given by those interviewed in relation to the incident. The site also gives a full description of the virtual reality package used during the inquiry and includes a number of screen shots demonstrating the mix of graphics and photographs used to construct the virtual scene. There is also a full specification of the technology in use.

## 9. Effectiveness

It is generally accepted that without the IT infrastructure described above, the Inquiry would probably have ground to a halt because of the sheer weight of the

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<sup>35</sup> The Bloody Sunday Inquiry, at <http://www.bloody-sunday-inquiry.org.uk/index.htm> (last visited Dec. 25, 2003).

<sup>36</sup> Interview with Christine Pulford, Secretary to the Inquiry, and David Stephenson, Deloitte Touche (Oct. 16, 2003).

<sup>37</sup> *Id.*

material involved. Technology increases the speed of the hearing and also increases the capacity to conduct a full and accurate investigation of the affairs so long after the events.

This is truly an open hearing where the public and participants are given full access to the hearing and a great deal of the core material — unlike a criminal trial where the public can only observe matters from the public gallery without being allowed to see the evidence for themselves.

The true measure of success of the introduction of IT in the courtroom arises when the technology ceases to become the big issue and is used in a seamless fashion by counsel and the judge to fulfill their functions. Because of the amount of thought that has clearly gone into the design of the physical chamber as well as the IT systems, that aim has clearly been fulfilled.

It is however worth remembering that this leading example of the IT-based hearing is still a long way from being a “paper-free trial.” The majority of evidence in the Inquiry was captured in written form, is stored in the chamber in thousands of ring binders, and is still used by counsel to prepare and cross-examine witnesses. It is only when the *preparation* of such an investigation is conducted using document-management software with a workbench for the profession, that the true “paper-free trial” with all of its predicted savings in efficiency and effectiveness will be achieved.

## VI. SECURITY

Lawyers hold a great deal of confidential information on their servers, both internal material relating to the management of their practices, but also client material, which is often highly sensitive and confidential. The move to online storage and exchange of information between lawyers and [Courts], creates a whole new area of working practice that has to be addressed by all professionals, that of security evaluation and protection.

Even the best designed end to end secure networks are vulnerable to attack by ‘social engineers’, ie hackers, who engage upon attacks on networks for numerous reasons, from economic blackmail to disgruntled ex employees who wish to cause maximum damage where ever possible. It is generally accepted that the reporting of such hacking attacks is limited as banks, e-commerce businesses and professionals wish to avoid public loss of confidence by disclosure of unsafe networks. Reformed hacker Kevin Mitnick said,

*‘As developers invent continually better security technologies, making it increasingly difficult to exploit technical vulnerabilities, attackers will*

*turn more and more to exploiting the human element. Cracking the human firewall is often easy: requires no investment beyond the cost of a phone call and involves minimal risk.*<sup>38</sup>

The National Hi-Tech Crime Unit was formed in 2001 to deal with this new threat.<sup>39</sup> Funding of £25 million has been granted to establish local forces and a centre of excellence.<sup>40</sup> It targets “new crimes” against computer systems (hacking attacks, denial of service and spoof Web sites), as well as “old crimes” (blackmail, cyber porn, identity theft, and cyber stalking).<sup>41</sup> Much security training work will be required over the next five years as CJIT and other modernisation programmes start to take effect, and the majority of participants in modern trials increase their reliance on IT systems to prepare and conduct their cases.

## VII. CONCLUSION

A great deal of progress has been made over the past decade to place IT in the course of both criminal and civil litigation. Gone are the days when a young barrister would be ridiculed by his colleagues and insulted by the judge for taking his laptop into an old-fashioned courtroom. IT is becoming part of the furniture of the courtroom, at least in the high-profile or complex cases or inquiries.

We are moving into a new phase of activity that in many ways is far more complex and uncertain. The task ahead is to move from paper-based processes to the exchange of digital information so that IT will become the norm in every case that moves through the criminal and civil justice systems. There are no easy wins in this arena, as the stakeholders have entrenched views as to the way they currently do things, formed over many years. Furthermore, large organisations with established contractual relationships with different major systems integrators are intent on retaining their share of the lucrative government-procurement market.

The holy grail of courtroom technology is the paper-free trial, where all participants do away with their notes and highlighter pens and work on their personal computers. Courtrooms will be wired for “Wi-Fi”<sup>42</sup> so that lawyers can be in constant touch with their offices; appeals will be conducted with judges in remote locations to avoid delay; and trials will be broadcasted on the Internet. The subject matter of trials will change as criminals think up new crimes and interfere with individuals’ online rights.

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<sup>38</sup> Barnett, *supra* note 1, at 13.

<sup>39</sup> For more information, see The National Hi-Tech Crime Unit, at <http://www.nhtcu.org/>.

<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

<sup>42</sup> “Wi-Fi” stands for Wireless Fidelity and deals with interoperability of wireless products.

There is a great deal of work to be done to understand not only what is possible, but also to consider whether the new advances are being properly dealt with in the trial. We may not see cheaper justice, but if the Bloody Sunday Inquiry is right, we may have better justice.