

The Electronic Filing System in Singapore – Tackling the “Human” Elements

A. What is EFS?

1. The Electronic Filing System (EFS) in Singapore is a nation-wide court document filing and handling system. Deployed in stages from 1997, the EFS today covers all civil litigation processes in Singapore. The EFS enables lawyers to commence proceedings by filing of writs or summonses from outside the courts through the internet. All documents that are required to be filed subsequently are also done electronically. With this system, lawyers no longer have to present paper documents to commence or to further court proceedings. The EFS also eliminates, to a large extent, the use of paper in the Courts saving not only trees but also physical space to store paper and physical effort in transporting physical files within the courthouse. To our knowledge it is first nation-wide paperless court document system in the world.
2. Once a writ or summons is electronically filed, a case file is created in the court’s computer system. Service of the writ or summons on the lawyers representing a defendant may be effected electronically by the EFS service module; indeed service of all other documents in the litigation process may be similarly effected such that no paper need be exchanged between solicitors acting for the parties to the litigation. Communications by letter among solicitors and the court registry may also be effected via the system. The EFS system provides Judges and Registrars with access to case files from any location, be it the office or courtroom or home. Each step of the litigation process and every decision are recorded on the system. Affidavits of evidence are also filed in the EFS as are transcripts of testimony given in trials.
3. From the point of view of the lawyer, he is able to commence a suit 24 hours a day, 7 days a week and so is not constrained by the opening hours of the court registry. He is able to file and serve any document from his office (or home or hotel room overseas) and so is not constrained by the vagaries of geography or local traffic conditions.
4. Billing information provided to law firms by the system can be integrated with their in-house accounting system for greater efficiency and accuracy in the management of client accounts. For law firms or litigants-in-person who do not have the requisite computer facilities, filing may be effected at Service Bureaux which will process paper documents and assist in the electronic filing of the documents for a fee.
5. The Electronic Service of Documents Service allows law firms to serve court documents electronically over the Internet to one or more law

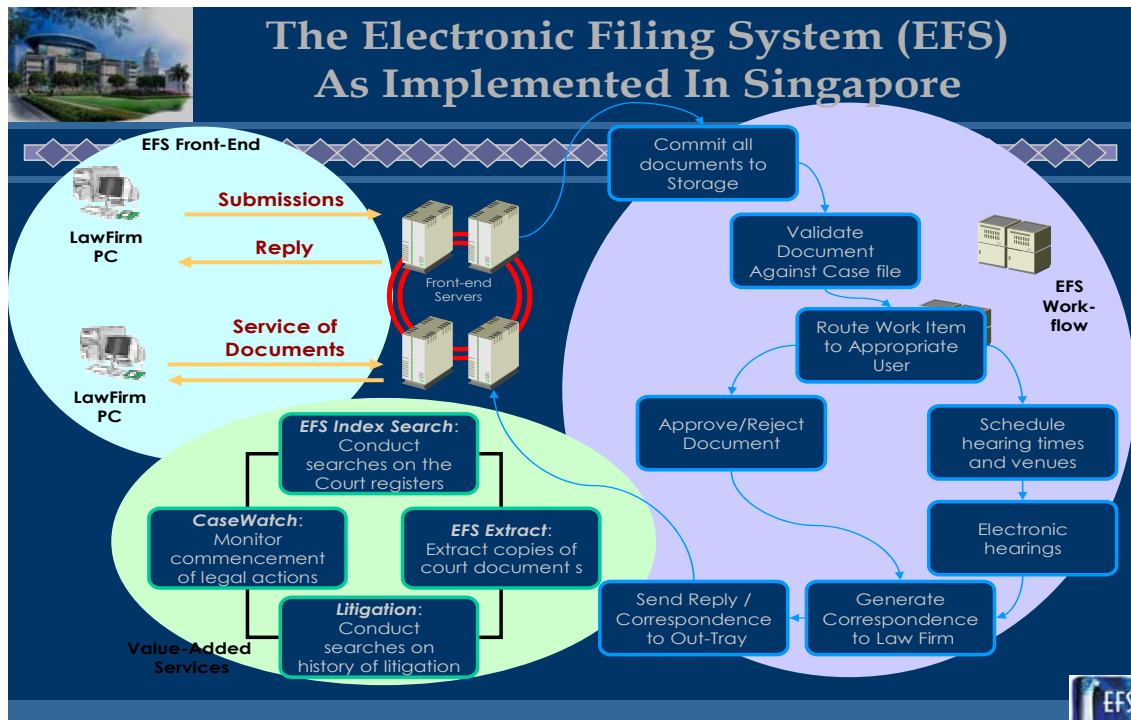
firms concurrently with the click of the mouse. An electronic certificate of service can also be generated by the system. This certificate of service is sufficient proof of service and can be filed in court in place of an affidavit of service. Apart from enjoying the benefits of convenience, speed and reliability, users no longer have to rely on manual service. Users can therefore save the cost of employing manual process servers and filing affidavits of service.

6. The Electronic Information Service allows law firms to perform public search queries on case information directly from their office or at the Service Bureau.
7. The EFS has 4 main components:
 - Front End (FE) software residing on EFS-ready law firm's desktop which can be downloaded over the web by registering at the EFS web portal. The FE application provides templates for the submission of documents to the Courts and allows scanned physical document (in PDF Format) to be submitted along with the template information.
 - Gateway application sitting on the FE and Courts' workflow application to receive submissions from the law firms or replies from the Court, route it to the appropriate party and, compute and deduct the fees payable by the law firms for the transaction.
 - Courts' workflow application residing on Court's computers to cater for the internal routing and workflow processes within the Courts.
 - A standalone key management system which enables the Courts to issue digital certificates on smart cards to law firms so as to verify and authenticate their identity when documents are filed through EFS.
8. The development and implementation of EFS was in accordance with the following principles:
 - It is a Government-private sector partnership, where the private sector partner provided services on the basis of the "ASP business model";
 - It adopted a Phased Roll-out Approach (i.e., without any "big-bang" roll-out);
 - It involved all key stake-holders in the requirements study/design phase;
 - There was commitment to the effort by the highest levels of the Judiciary;
 - EFS training is conducted regularly (even now) and there is constant accessibility to training materials;
 - Appropriate disaster recovery plans have been put in place to deal with catastrophic failures or situations like the Avian flu or SARS;

- Low-volume users were looked after through the establishment of service bureaux; and
- E-Filing, especially when done directly from law firms own computers, is incentivised through differentiated charging.

B. EFS Deployment

9. Introduced in phases between March 1997 and December 2003, EFS initially only required electronic filing of court documents relating to civil proceedings commenced by writ of summons and all applications, etc., brought under or arising from such proceedings.
10. This system was incrementally extended to civil proceedings commenced by Originating Summonses, Originating Motions and Originating Petitions and then to all other civil proceedings, e.g., Admiralty Suits, Bankruptcy Applications, Companies Winding-up Applications, Probate, and Powers of Attorney.
11. Subsequently, EFS was also rolled-out for family court proceedings. i.e., Divorce and Adoptions, and criminal proceedings in the supreme judiciary. Currently, only criminal proceedings in the subordinate judiciary do not come under the purview of the EFS. Paper documents are still being filed for such proceedings.
12. Presently over 84% of documents are filed in court electronically by more than 400 law firms via the web-based system. The rest are filed through the service bureaux. The key point to note is that *all* documents enter the Court system in electronic form *even if* the service bureau is used. The service bureaux, in effect, merely assist the filing party to file electronically. The Courts do not have to worry about parallel processes in both paper and electronic form (except for old, pre-EFS files). More than 2.5 million court documents have been electronically filed to-date. On average, 2,000 documents are processed electronically daily.
13. Upon receipt at the Courts, an electronically filed document will be routed to the appropriate Court official for processing. EFS further allows the further routing within the judiciary, e.g., for approvals to be obtained from judicial officers, and for hearings to be fixed, where necessary. Once the document is processed, it will be routed back by the Court official to the originating party, with details of the filing and hearing details, if any. Fees payable for the filing of the documents to Court are automatically deducted from the law firms' bank accounts by the EFS vendor.
14. A simple graphic representation of EFS is represented below



C. Benefits of EFS

15. The EFS exploits the electronic super highway to minimise not just the physical movement of people and paper documents, but also to contain the increasing requirement for physical storage space. The following are the main benefits of EFS:

- An integrated information system through which Courts can proactively track each case through its life-span;
- Improvements in efficiency through minimising paper flow throughout the litigation process;
- Shortened case processing times;
- Faster document filing and retrieval;
- Minimising loss of documents through filing mistakes;
- Concurrent access to any case file by different persons;
- Access to case files from any location (e.g. outside the courts).

Each of these benefits is elaborated in greater detail below.

16. Benefits to Law Firms

- Improving efficiency of law firms - Traditionally, court documents were filed manually over the court registry counter in paper form. Copies of court documents were also obtained manually over the counter. This was done by court clerks engaged by law firms making daily trips to the registry. Service of filed documents on the other law firms was also manual, i.e., making physical trips or sending through ordinary post. With EFS, law firms can perform

document submission, request for electronic copies of the documents and serve documents on other law firms without leaving their offices. They will not need to make physical trips to the Courts or other law firms, hence saving precious time.

- Increasing the productivity of law firms – Filing at the court premises was confined to the normal working hours of the court. EFS, however, allows for law firms to file and serve documents or request for extract copies 24 hours a day, 7 days a week. This would mean greater convenience and flexibility to the law firms. Some law firms now run shifts in their law firms to make use of the 24/7 operational availability of EFS.
- Improving the management of client accounts by providing billing information for their integration with their in-house accounting system.
- Notifications or alerts of the status for documents filed, court replies, service of documents and hearing fixtures via Short Messaging System (SMS) on handphones tapping on EFS databases allow law firms to stay responsive and lawyers to keep in touch even when they are not in the office.

17. Benefits to Judiciary

- *Resolving problems of handling paper for the Judiciary* – It is inevitable that in a paper-based regime, documents may be filed into the wrong paper file, or inadvertently missed out. There is also the problem of storing a large number of paper files, and the need to move bulky paper files from court official to judicial officer or judge. Files may get mis-routed, or misplaced in the paper transport process. With the EFS, most of these problems are significantly curtailed, if not eliminated. All documents are stored electronically in the system and most up-to-date information can be viewed by more than one person at the same time. In storage, the electronic collections take up a fraction of the space required by paper files.
- *Ease of handling for the judicial officers* – With a “pack-and-go” feature available on EFS, court files can be neatly extracted onto CD-ROMs or even USB memory devices, for off-line usage. Remote access was also made available to Judges for full access to EFS via broadband/VPN. This has reduced the need to transport bulky paper files.
- *Reducing the need for the Judiciary to handle cash* - With EFS, collection of fees is electronic and collection of fees over the counter is virtually eliminated.
- *Improving case management* – Traditionally cases are tracked by separate computer systems requiring staff to manually enter data so that the tracking mechanisms can be put into place. With EFS,

inbuilt case tracking and monitoring features remove the need for costly and error-prone re-entry of data.

- *Improving case file security and confidentiality* - with EFS, it is easier to implement restricted access to case files or documents that are “sealed” by Court order.

18. EFS provided the impetus for law firms to install broadband Internet access, thereby providing impetus for law firms to make fuller and more advanced use of modern technologies in their practice of law.

D. EFS Review

19. In 2003, the Chief Justice called for an in-depth review of the operations of EFS in the context of the experience gained and the advancements in technology at that time.

20. Results of the review showed that EFS provided the Judiciary with a fully electronic registry and was instrumental in encouraging the legal profession in Singapore to take a giant leap in the adoption of information technology (IT). However, EFS added a significant layer of costs for litigants. At the same time, there were technical issues which needed to be addressed. Following the review, EFS was enhanced to address some of the identified issues.

21. The review also culminated in the adoption of a holistic approach to the implementation of IT systems in the litigation process in Singapore. This is reflected in the Electronic Litigation Roadmap¹ which aims to provide general guidelines and directions to future implementation committees in line with such an approach. The end goal is to facilitate the disposal of cases and thereby enhance access to justice. IT should only be implemented insofar as it is efficacious.

22. The Electronic Litigation Roadmap envisages that there should be a number of IT systems working together, rather than one single IT system, to achieve the wide-ranging and ambitious goals established by the stakeholders. These range from providing case-file management capabilities to law firms, case management for the judiciary, and e-hearing possibilities where the latest technologies are used by lawyers in Court to present arguments on behalf of their clients. In order to achieve all this, innovation must come not just from the Government, but also from the private sector. There will also be a need for creative thinking in devising business models to support such features. Finally, there

¹ Please see *Electronic Litigation in Singapore: A Roadmap for the Implementation of Technology in the Litigation* available at http://www.lawnet.com.sg/legal/ln2/comm/PDF/Electronic_Litigation_Roadmap_Paper_2005.pdf

must be full willingness to accept open technical standards as a means to achieving integration and interoperability.

E. Tackling the human elements

23. The implementation of EFS marked a paradigm shift in the civil litigation process which had hitherto relied on paper. Given its profession-wide impact, it was clear to us that the success of EFS depended on the strong support and commitment of the legal profession, the Judiciary and the technology solution providers.
24. To encourage “buy-in”, prior to the deployment of EFS in March 2000 as a compulsory service, a voluntary pilot programme was put in place for lawyers to experience the advantages of filing documents electronically, and to identify the problems that might arise from filing documents in this manner. This was to enable us to identify and address problems before they surface when the use of EFS is made compulsory.
25. Even though we took these steps, it was not quite enough. There were a number of teething problems. Lawyers unfamiliar with EFS filed non-compliant documents resulting in rejections. There was also resistance by Judicial Officers who were not technically comfortable with using EFS as a tool for hearing. Many of them were used to having paper files and paper documents for hearings. The number of documents that they could open for a hearing and the speed at which such documents could be called up from the server posed problems and they felt that using EFS slowed down their conduct of hearings tremendously. Despite electronic filing, lawyers were sometimes asked to provide paper documents for hearings, causing much frustration.
26. To better understand the problems, the 2003 EFS Review Committee and the EFS Review Implementation Committee were created, with representatives from all the relevant stakeholders (viz. the lawyers, the Judiciary and the service providers). This ensured that a large number of differing views were collated. Clerks from law firms and Judiciary staff were also invited to various focus group meetings to share their experiences on the use of EFS and their views as to how EFS could be improved.
27. An Electronic Litigation Colloquium was also organised. The one-day colloquium, held on 17 April 2004, was attended by members of both the Bench and the Bar. Representatives from the InfoCommunications Development Authority of Singapore and various technology vendors were also invited to participate. The discussions during the colloquium formed the basis of the Electronic Litigation Roadmap.

28. Arising from the valuable feedback and assistance, the performance of EFS was enhanced by implementing both technology and process changes, as “immediate fixes”. Technical enhancements included the restructuring of case information into a “case-centric” database, where key case information, like hearing dates, was sent to lawyers. This also helped to reduce the repetitive work faced by lawyers in preparing documents, such as those with repeated party information. EFS fees were also cut by about 20%.
29. For the Judicial Officers, two flat screen monitors were deployed in hearing chambers, to enable better viewing of electronic documents. The number of documents that could be opened simultaneously was increased, and the response time of the system was greatly enhanced through creative technical solutions. A “Pack and Go” functionality was also created, so that entire case files can be extracted and stored on memory sticks for access without a “live” connection to EFS.
30. For the Judiciary staff, business processes were reviewed and streamlined to enable faster processing of EFS documents and improve productivity. Many of the Judiciary staff have remarked that they cannot imagine going back to a paper Court system again.
31. A central theme running through the Electronic Litigation Roadmap is the the inextricable link between the successful implementation of technology and work processes of the stakeholders. It cannot be emphasised enough that in order for technology to be successfully integrated with the litigation process, all the stakeholders (viz. the lawyers, the Judiciary and the service providers) have to be keenly involved in the development of a system that would harness the full potential of information technology for the benefit of all.

F. The Future – iELS

32. EFS is currently more than 10 years old and with the Electronic Litigation Roadmap in mind, a new *Integrated* Electronic Litigation System (or *iELS*) has been conceptualised to replace EFS. This is an appropriate juncture to do so as the technology behind EFS is becoming dated; the hardware and software are reaching their “end of life”.
33. *iELS* will establish a standards-based system with new capabilities and enhanced functions such a template-based filing, integrated due-diligence, case and data validation with agencies, case management and tracking, and resource management.
34. This new system will provide the infrastructure for law firms, litigants and the Judiciary to interact with each other. It will allow for case

tracking and management, and integration with practice management and billing systems. *iELS* will also integrate with courtroom presentation technologies to allow lawyers to easily use modern courtroom presentation technologies to present evidence and arguments.

35. Briefly, there will be 3 main pillars in *iELS*:
 - a document or file management system which will serve as the electronic case-file repository;
 - a work flow engine which will capture the intricacies of decision making or processing; and
 - an electronic-form software system which will allow structured data entry at source without double-entry to overcome the over-reliance on scanned documents currently seen in EFS.

36. *iELS* will endeavour to provide the various services identified by law firms as being essential, namely, the ability to electronically file e-forms prepared off-line in batches, enhanced communication with the Judiciary, access to Court calendars for “DIY-calendaring” for certain categories of hearings, access to case information / materials and billing information.

37. We have called for an open tender for the development of *iELS* and we are in the midst of reviewing the submissions received. We expect to award the project next month and hope to implement *iELS* by 2010.

38. One of the lessons learnt from both EFS is that legislation may have to be changed to allow for the operation of the system. The need to dovetail electronic systems with legal requirements must not be overlooked, and where legislation needs to be amended, our experience is that early effort pays off. In this regard, we are already in the process of looking into such changes for the implementation of *iELS*.