E-Land Conveyancing and Registration – Vision and Risks

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Key words: Land Registration; Land Record; E-Conveyancing; Electronic Signature

SUMMARY

More then 150 years had passed since English solicitors expressed their vision of land registration system in which land transactions are quickly and smoothly registered at the same manner in which securities are transferred in the stock exchange. This vision led to the development of the Torrens system and to its expansion in various sides of the globes. Yet the reality of land conveyancing was far from accomplishing this old vision. The process of registration in many jurisdictions suffered from bureaucratic delays and was, and in many jurisdictions still is, based on analogical paper-based documentation system. Though many systems had gone through computerization process, it dealt with the presentation of manually entered information rather than direct and automatic registration of digital applications. It was only the last decade that brought to reality the idea of real estate e-conveyancing according to which a land transaction should be automatically processed and registered from the stage of the application to the stage of final registration. A few countries made a great deal of effort to develop such a system but yet there is a way ahead until its conclusive implementation. Israel land registry is going to launch an e-registration project as well. In my paper I will summarize the current situation of the e-conveyancing projects and try to evaluate its advantages and risks.

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1. THE E-CONVEYANCING VISION

More then 150 years had passed since English solicitors expressed their vision of land registration system in which land transactions are quickly and smoothly registered at the same manner in which securities are transferred in the stock exchange. This vision led to the development of the Torrens system and to its expansion in various sides of the globes. Yet the reality of land conveyancing was far from accomplishing this old vision. The process of registration in many jurisdictions suffered from bureaucratic delays and was, and in many jurisdictions still is, based on analogical paper-based documentation system. Indeed in the tweintieth century many systems had gone through computerization process. Yet it dealt with the presentation of manually entered information rather than direct and automatic registration of digital applications. There was a significant use of microfilm and microfisch and in there was a move towards digitalization and electronic preservation of registration documents (*Whitman 1999*).

During the last decade the idea of complete electronic registration has been developed. ON Professor Dale Whitman suggested on 1999 to develop a comprehensive electronic system of registration according to which the whole process, from the generation of the documents through the application untill the recirdation or registration - will be automatic. His proposal included very detailed vision. He suggested to store information in text-characters system (ASCII-American Standard Code for Information Interchange). He suggested to enable delivery of applications in electronic format. The advantages of such system are enormous and include the saving of manpower and time, auto indexing, enabling easy full text searches and better supervision of the registration process. In general such system will se more simple and will use standard forms. Thus it will enhance the accessibility of the general public to land registration. It may enable in the future consolidation of registration offices and centralization of the registration office that is available electronically from every place (*Whitman 1999*).

2. THE IDENTIFICATION RISK

One of the main obstacles in the way to complete computerization of the registration process is the problem of identifying parties to transaction and the authentication of documents. Prof. Whitman suggested some tentative though not complete solutions to this problem, like using electronic signatures or techniques of biometric identification. As to the former he suggested to use PKI (Public Key Infrastructure) system of electronic signature. This system is based on the matching between a public key that is distributed in public and a private code that is confidentially distributed and secured by an official Certification Authority (CA). Indeed this system may bring some inherent dangers like the danger of losing or taking the private code, hacking the CA company or misidentifying the initial applicant by the CA. the last danger put very serious duties on the CA and may need a close supervision of the authorities on the CA and the way it fulfils its duties. The biometric identification system may decrease the dangers of misidentification though it too suffers from disadvantages: the lack of reference database and the political resistance from creating such databases. It is claimed that electronic signatures and other electronic identification tools can reduce the danger of fraud and forgery. A clever electronic system may supervise the process and detect typical patterns of fraud and either automatically prevent them or make an alert. Nevertheless an electronic system might be more vulnerable for electronic fraud or disruption. This makes the accessibility to the system crucial to its vitality (*Whitman 1999*). As we shall see, the problem of identification is still the main obstacle to the full accomplishment of the e-conveyancing vision.

3. THE URPERA AND ITS IMPLEMENTATION

The U.S. Congress has enacted on 2000 the Electronic Signature in Global and national Commerce (E-SIGN) Act. On 1999 a Uniform Electronic Transaction Act (UETA) has been drafted. Whitman concluded his vision with a recommendation to amend the UETA and make him more specific to the E-Conveyancing challenge. Indeed on 2004 A Uniform Real Property Electronic Recording Act (URPERA) has been approved (with few later minor revisions) and dozens of counties in varios states of the USA have adopted at list a certain version of electronic recordation. According to the key section of the Act (sec.3) the requirement of recording is satisfied by an electronic document and the requirement of a signature on a document may be satisfied by an electronic signature. A requirement of verification of signature, whether by a notary or by other witness, may be satisfied by the attachment or logical association of all information required with the electronic document or the electronic signature (URPERA). Bramante and Jones categorized 3 different models of electronic recordation systems. The first model is based on the electronic registration of scanned paper-based documents. The rgistartion is based on visual inspection of an officer. The second model is based on a document image that is wrapped in an XML (eXtensible Marked up Language) wrapper containing standart and importat data. The registration here is partially outomated but yet requires visual inspection and approval of the recorder. The 3rd and most advanced model and the closer to Whitman's vision is based on the registration of documents that has originally been generated by the vendor in XHTML (Extensive Hyper-Text Mark-up Language) format. The data is automatically checked and accepted or rejected. The first two models contain electronic signature on the signed documents and notary verifications of hand signatures of the vendors. The 3rd model is the only model in which all signatures are electronic including the signatures of the parties. Thus, secured access is required from all parties. This is probably the reason for the fact that the use of this model has still been confined only to reconveyances of deeds of trust and satisfaction of mortgages by title insurance companies or loan servicers. This restricted use is interesting due to tha fact that all models are applicable in recordation system whereas mistakes or forgeries do not change the title and there is no guarantee to the title. The question of identification is much more crucial in title registration systems, where the state guarantees for an indeficient title. It has been proved that all the systems significantly shortened the time of registration. The average elapsed time of the process differs between one hour (the 1st model) to 5 minutes (2nd

model) and 30 seconds $(3^{rd} \text{ model})(Bramante & Jones 2006)$. However it seems that the identification problem is still the main obstacle to achieve full implementation of the 3^{rd} model in a nationwide scale.

4. THE ENGLISH VISION AND ITS IMPLEMENTATION

The UK Land Registration Act 2002 set a long term vision of e-conveyancing and authorized the registrar to arrange for an electronic communications network (Part 8). The Act made it obligatory that certain dispositions will take effect only if it is made by means of a document in electronic form and it was electronically communicated to the registrar (sec. 93); Signature of an electronic document has to be certified electronic signature [sec 91(3)(b)-(c)]. The registrar has been authorized to arrange for the provision of "an electronic comminications network" for the registration of transactions that are capable of being effected electronically (sec. 92). Schedule 5 asserted that a person who is not a member of the land registry may only have access to a land registry network under authority conferred by means of an "agreement with the registrar". The act authorized the registrar to provide for the communication of documents in an electronic form to the registrar as well as to the electronic storage of documents (sec. 95) and for an electronic settlement (sec.94)(*L.R.Act 2002*).

The 2002 Act is very general and actually serves as a legislaive framework. It left the actual and specific implemntation of the legislator intent for further rules that will be issued by the registrar in the future. Indeed a lot of work has been done after the enactment though a comprehensive system of electronic registration has not yet been established. Emphasis has been initially put on the construction of the the Electronic Network and the Network Access Agreement (NAA). A set of draft rules and orders had been published on 2007: Land Registration Network Access Rules, Land Registration (Electronic Communications) Order and Land registration (E-Conveyancing) Rules. A Consultation paper that is seeking public views on the first two drafts has been published on 2007 (*UK-Land Registry 2007A*).

The NAA agreement is supposed to be the keystone of the English solution to the problem of securing the authenticity of documents and signatures since the responsibility for this demands should be conferred by the agreement upon the contractors and they are supposed to be 'gatekeepers' to the e-conveyancing system. According to the draft rules there will be three types of agreemnets. The first, a full network access agreement, will allow full access to econveyancing. It will enable the contractor to view items, to exchange and complete property transactions on to the system, to submit applications to Land Registry and to amend all documents and save them on to the system. This type of contract is designed for professional conveyancers and lending institutions. The criteria for entering to such a contract as prescribed in the draft rules (schedule 1): The contractor must be a solicitor' or barrister or notary or licensed conveyancer. He must meet requiremnets in the fields of finanacial position, insurance policies, security demands and past experience. The second type of agreement is a read-only network access agreement that will give limited access to the network for viewing information about their transactions. It will not allow access to amend any document or screen. This type pf contract is designed for estate agents and members of the public who are buyers or sellers. The third type of agreement is a signature network access agreement that will allow conveyancers' clients to view information on the Land Registry network and apply an electronic signature to a document. It is proposed that the system will be generally available only to members of the public wishing to carry out their **own** conveyancing. Accept for some certified professional users an e-signature will be valid only for lifetime of a specific transaction (*UK-Land Registry 2007A*).

It seems that the UK system had made a great progress with the conceptualization of a system of full electronic registration and the establisment of an inventory of legal and beurocratic infrastructure for its implementation. Yet the system is not actually and fully implemented because there are various technical issues that has not been settled. This issues are experienced by way of technical pilots. Thus for example, between 2005-2007 a Chain Matrix prototype had been developed and trialled by volunteer users in Bristol, Portsmouth and Fareham. This component of the system is designed to allow those who are involved in a transaction and have the right authentication to view the progress and key stages of every transaction. The result of the pilot were that the system is not yet fully completed and further developments are required (UK-Land Registry 2008A). Various types of e-signatures have been trialled by volunteer customers but a final solution has not been accepted. Future tasks are to develop tools for including plans and maps in the system and executing payments (UK-Land Registry 2007A). The registrar announced his intention to launch by the summer of 2008 better and enhanced services of Chain Matrix and electronic lodging of documents (UK-Land Registry 2007B) and to focus on introducing electronic discharges, charges (mortgages) and transfers as the priorities towards full e-conveyancing (UK-Land Registry 2008B). It is possible to conclude that also in UK the identification problem is the main detrimnet for the large scale implementation of E-conveyancing. The proposed system is based on a network of restricted authorized dealers that has signed a contract with the government and supplied financial guarantees to their registration activities. This is as well the reason for the priority that is made for implementation of electronic registration of charges, in which relatively few and countable financial institutions are involved.

5. THE CANADIAN ONTARIO SYSTEM

The province of Ontario Land Registration and Information System (P0LARIS) is the first and most comprehensive system of remote Electronic Land Registration System (ELRS). It has primarily been initiated on 1994 by amendments to various acts (land Registration Reform Act, Part 3; Land Titles Act; Registry Act) (OntarioA 2008). The system has been developed and currently administered by the Teranet Canadian firm. The POLARIS system consists of three databases: Title Index Database (which replaces the paper abstract indexes and parcel registers), Property Index Database (which provides a visual index map of properties) and Image Database (which contains images of active instruments in the Title Index Database as well as plans)(*TeranetA 2008*). The system is complete in most, yet not all of the land registries offices in Ontario (*TeranetB 2008*). The ELRS system generates standart documents with details that are outomatically palnted in the documents out of the registration system. The document contains statements of every party, including solicitors or lawyers that confirm authentication and validity of power of attorneys. Each party signs electronically on the document, which can be signed only when duely completed. Every user that want to submit an electronic application for registration should have an authorized unique access key for a registration account which has been set up by Teranet (*OntarioA 2008*). On 2008 access requirement had been tightened and all users should meet three crieria: ensuring the identity, having financial resources that are sufficient to compensate victims of fraud and ensuring good character, accountability, qualifications and integrity of the users (*OntarioB 2008*). The accounts and the criteria are divided for four categories: Listed regulated professionals and financial institutions ("A"); Firms or companies formed by category A regulated professionals in order to carry on business in their profession, such as a law firm ("B");

Any regulated professionals not specified in category A ("C") and all other account holders, including regular business corporations and individuals carrying on business as real estate conveyancers ("D") (*OntarioC 2008*). It seems that the Polaris system came closer to the fulfilment of a complete e-conveyancing vision.

6. THE EUROPEAN MULTI-NATIONAL REGISTER VISION

One of the by-products of the expansion of e-conveyancing systems may be the enhancement of the accessibility of foriegn investors to local markets. The standartization of the systems may lead to the creation of a multi-national register. These results may improve the global land market. A step towards this vision has been made by the European Land Information Service (EULIS). Its ten participants (Sweden, Norway, Finland, The Netherlands, Lithuania, Latvia, Poland, Czhch Republic, Slovak Republic and Germany) set on 2006 a plan for the creation of a prototype of a European land information register (*EULIS 2006*). Countries that currently involved are: England and Wales; Republic of Ireland; Scotland; Austria; Finland; Lithuania; the Netherlands; Norway; and Sweden. The system is not an e-conveyancing system and it provides electronic access mainly to land registration information services (*Eulis 2009*).

7. THE ISRAELI EXPERIENCE

Israel land registry has been computerized some decades ago, but the registration process is basically manuel. Deeds and applications are manually delivered to the registrar. Signature are by hand writing and so are the authentication by a lawyer or notary. The documents are manually checked and transfered to the register by the registrar. The abstract of the register may be electronically viewed by the web site. The registrar has launched a project of electronic scanning and visual storing of documents and an e-registration project is anticipated as well. Yet there is a long way ahead untill the achievenet of e-conveyancing system. The Electronic Signature Act 2001 is not currently applicable on any signature that is concerned with land transaction or registration (*Israel ESA 2001*). The government has announced her intention to launch a project of a new identity card that will combine biometric (fingerprints and face picture) and digital identification tools. Draft legislation in this issue is pending for approval of the Knesset, the Israeli Parliament (*Israel Biometric Bill 2009*). If this project will be affirmed by the legislator it may help to the future solution of the identification problem in a future e-conveyancing system.

8. CONCLUSION

There are many advantages to E-Conveyancing. It has been proved that such systems shorten the time of registration from days to minutes. It saves human work. It is geographically more accessible. It is claimed that electronic signatures and other electronic identification tools (like pin-tokens or biometric equipment) can reduce the danger of fraud and forgery. A clever electronic system may supervise the process and detect typical patterns of fraud and either automatically prevent them or make an alert. Nevertheless an electronic system might be more vulnerable for electronic fraud or disruption. This makes the accessibility to the system crucial to its vitality. Indeed most of the currently developed e-conveyancing systems (especially those of the UK and Ontario) are based on a network of restricted authorized dealers that has signed a contract with the government and supplied financial guarantees to their registration activities. This is as well the reason for the priority that is made for implementation of electronic registration of charges, in which very few and countable financial institutions are involved.

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BIOGRAPHICAL NOTES

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