INTRODUCTION

The e-Tanah System is a computer system and a set of supporting rules and business practices within a legal framework that provides a reliable means of completing conveyancing and other land related transactions electronically. These arrangements are intended to replace the existing paper-based processes in land administration of the State land Registries for the approximate 70% of transactions that are relatively common and routine.

The development of e-Tanah Pilot Project in Penang is being co-ordinated by the Ministry of Natural Resource and Environment (NRE) through a special project team called Pasukan Projek e-Tanah (PPeT) and State Project Co-ordination Teams (SPCT) overseen by the e-Tanah Steering Committee (eSC) which represented by the federal government agencies and land administration representatives. The work is supported under the Ninth Malaysia Plan of Department of Director General of Land and Mines (Federal) (JKPTG) which has undertaken to establish permanent governance arrangements and provide establishment funding to support the system during implementation and take-up.

As a national facility to assist State Land Registries in more efficiently providing service delivery in land administration, e-Tanah will provide an electronic environment to:
• facilitate on-line payment of quit-rent of land title and other related fees (e-Payment);
• facilitate remote private title search electronically (e-Search);
• provide a centric customer counter service through the concept of 'Single Point of Contact' (SPOC) to collect transaction information and have it checked and verified for completeness and compliance;
• convert paper-based titles which manually registered to electronic-based titles with Bar-coded and electronic authentication of the Registrar's digital signature;
• lodge instruments or submission of applications with Land Registries through SPOC services and receive confirmation of their lodgment or submission and registration manually or by technology means.

e-Tanah System is likely to be owned by Federal government but it has to be operated as a mutual collaboration in each land administration of the State government. e-Tanah will be an industry facility available to all State land Registries to use in their delivering more efficient services to consumers.

EXISTING LEGAL FRAMEWORK

The development of e-Tanah application system is a 'legislative-driven'. There is a definite need to provide and incorporate special provisions under the National Land Code (the 'Code') to provide legal binding for electronic land administration and registration upon coming into operation of e-Tanah system in any land Registry.

The core business areas of the e-Tanah application system require an essential and immediate need to revise, amend or modify the existing provisions of the Code to ensure the system is developed and operated in accordance with supporting legal framework. Thus, the NLC has been amended in 2008 by providing enabling provisions thereof. In legal term, the e-Tanah system is named as Electronic Land Administration System (ELAS).

Section 5D of the National Land Code (Amendment) Act 2008 (‘Act A 1333’) provides in part, that the Minister (means Minister of Natural Resources and Environment, Malaysia), with the approval of the National Land Council, may appoint a date for the coming into operation of the ELAS in any land Registry (in which it constituted by the office of the Registrar of Titles, the office of the Land Administrator, and the Disaster Recovery Centre) in any State of the Peninsular Malaysia. However, that appointed date shall be notified in the Gazette of the Federation as a real operation date of the ELAS in the respective State.

With this enabling legal framework, it is pertinent to note that –

(i) the operation of ELAS shall only be legally recognised in any land Registry on a date appointed by the Minister and notified in the Gazette of the Federation with the approval of the National Land Council. Prior to this notification, the consent on appointing such date from the State Authority has to be obtained first for the purpose of subsection 5D(1). This is due to the fact that operation of ELAS is involving land matters and it security of data construed as part as the State Authority's jurisdiction pursuant to State List of the Ninth Schedule of the Federal Constitution.

(ii) this approach is quite similar to the method used on how the Computerized Land Registration System (CLRS) of the Fourteenth Schedule of the Act has been commenced
previously in any land Registry of all States in Peninsular Malaysia. But it is pertinent to address that the integrity and security of data in which it is virtually stored in the ELAS database shall be successfully tested, preserved, ascertained and accepted by the State Authority in respect of conferring the indefeasibility of titles or interests by registration as guaranteed under section 340 of the principal Act (the Code).

(iii) by inserting this subsection, the terms 'land Registry' under the operation of ELAS has a same definition as previously provided upon the commencement of CLRS. However, it is therefore extended to include the Disaster Recovery Centre (DRC) as a mandatory precaution in times of disaster under the implementation of ELAS.

Paragraph (c) of subsection 5D(2) is a new provision inserted into the Code to define the safe keeping of digital data and records under ELAS environment especially in the event of disaster. This is a legal approach to guarantee the sustainability of titles ownership and its security of tenure in the State in consequence of unexpected tragedy that possibly occur under electronic environment. Basically the Disaster and Recovery Centre (DRC) is a backup and recovery centre that shall be set up under the ELAS within the State but subject to any ICT prerequisites and requirements by the State Authority in correlation with section 375 of the Code. For example, the important of this paragraph (c) can be materialised at the following instances:

(i) Under the Sixteenth Schedule, the Database is a backbone to hybrid electronic environment of ELAS. In this regards, all data (i.e. textual data and spatial data) stored in each Database of each State District Land Office (PTD-DB) has to be replicated into Consolidated Database set up at the State Director of Land and Mines Office (PTG-DB) in which its stand for a back-up copies. In the event of any problem may occur at any point of time under operation of ELAS, the users may continue their respective daily duties at each PTD-DB by accessing to information directly from the PTG Consolidated Database. All these data are replicated and stored in the similar manner on a real time basis to the DRC Database of the State.

(ii) In the event of distraction may occur in respect of direct accessing to the data and application system of PTG Consolidated Database (i.e. network distraction, or PTD server is malfunctioned or down, etc), the ELAS of PTD is still in operation as usual under their respective database or by using the DRC Database eventhough there will be no accessibility to the PTG Consolidated Database.

Subsection 5D(3) of the Act enables the ELAS to enter into arrangements with the State for the effective application and administration of the ICT system in force in the land Registry by provisions of the Sixteenth Schedule. In order for this enabling provision to be effectively administered, it is necessary for the ELAS to be conferred with the provisions of the Code that has to be read with modifications, amendments, additions, deletions, substitutions or adaptations as provided in the Sixteenth Schedule as it is appropriate with the application systems and business coverage of the ELAS.

To meet this purpose, it is important to understand how the pilot e-Tanah Software Application Systems works within the framework of the Sixteenth Schedule. Amendments, additions, deletions, substitutions or adaptations of the Code are desirably needed to support the electronic features introduced by the ELAS. The legal supports of the Code are involving the following matters:
(i) **Electronic features relating to documents of titles** – *(paragraph (a) of subsection 5D (3))*:

- Statutory Forms for electronic document of land titles shall be produced in Form 5Be, 5Ce, 5De, 5Ee, 11Ae or 11Be respectively as prescribed in the Sixteenth Schedule. Alphabet ‘e’ stands for electronic features of the ELAS system. The respective statutory forms shall be produced with **Barcode** and **authenticated by using Digital Signature** instead of a normal hand signature and seal of the Registrar or Land Administrator. This involving every type of document of titles affecting land upon alienation or title in-continuation upon amalgamation of land, subdivision of land, surrender and re-alienation of the land or other purposes permitted by the Code. This approach is a replacement of Form 5BK, 5CK, 5DK, 5EK, 11AK or 11BK which currently produced by CLRS under the commencement of Fourteenth Schedule of the Code.

- The plan of the land on which the document of title is relates shall be produced by computer generated and printed in Form B1e in respect of final title or in Form B2e in respect of qualified title. Alphabet ‘e’ stands for electronic features of the ELAS system. This approach is a replacement of Form B1 or B2 which currently produced separately by CLRS under the commencement of Fourteenth Schedule of the Code.

- Procedure for preparation and registration of any dealing in respect of land and any entry or endorsement of any note, memorial or memorandum or any correction or cancellation thereof on any document of title, has a similar approach as previously introduced by CLRS under the Fourteenth Schedule of the Code. It is absolutely adopted and applied with appropriate modifications into the ELAS application system with authentication by using digital signature.

(ii) **Electronic features relating to document of temporary occupation licence or permit** – *(paragraph (b) of subsection 5D (3))*:

- Statutory Forms of computer document for every temporary occupation licence pursuant to section 67 of the Code, or known as TOL, and every Combined Temporary Occupation Licence and Permit for Removal of Rock Material pursuant to section 69 of the Code, shall be produced in Form 4Ae or Form 4Be of the Sixteenth Schedule, respectively. Alphabet ‘e’ stands for electronic features of the ELAS system. The respective statutory forms shall, upon production under the ELAS system, be **authenticated by using Digital Signature** instead of a normal hand signature and seal of the Land Administrator. This involving every type of document of TOL affecting land upon fresh approval or renewal as so permitted by the Code. There is no Barcode is introduced to these forms due to the nature of TOL usually issued on yearly basis and the usage of barcode is therefore deemed uneconomical approach. This approach is a new electronic measure brought up by the ELAS and it is not available in any provision of the Code.

- In addition, Statutory Forms of computer document for every Permit for Removal of Rock Material pursuant to section 72 of the Code, and every Permit for The Use of Air Space Above State Land or Reserved Land pursuant to section 75C of the Code, shall be produced in Form 4Ce or Form 4De of the Sixteenth Schedule,
respectively. Alphabet ‘e’ stands for electronic features of the ELAS system. This involving every type of document of PERMIT affecting land upon approval as so permitted by the Code. There is no Barcode is introduced to these forms due to the nature of such permits usually issued on yearly basis and the usage of barcode is therefore deemed uneconomical approach. This approach is a new electronic measure brought up by the ELAS and it is not available in any provision of the Code. The respective statutory forms shall, upon production under the ELAS system, be authenticated by using Digital Signature instead of a normal hand signature and seal of the Land Administrator.

- The plan of the land on which the TOL or PERMIT is relates shall be produced by computer generated, printed and produced separately in Form L1, or L2, or P1 or P2 of the Sixteenth Schedule, respectively. This approach is a new value-added element introduced by the ELAS and it is currently not available in any provision of the Code.

(iii) Electronic features relating to electronic payment procedures – (paragraph (c) of subsection 5D (3):

Electronic payment (e-Payment) or payment online is a subset of ELAS. The existing NLC didn’t provides any legal provision to legally bind for this kind of transaction eventhough the electronic environment has been used widely particularly involving banking system.

The e-Payment Module via ELAS is construed as part of its Public Portal. This module allows online public users to pay quit rent online through the internet. The module has the following functions:

(a) Online payment
(b) To provide interface to public users to pay quit rent online
(c) To upload payment information done by public to e-commerce facilities of the respective states to facilitate and process payment by the respective e-commerce facilities in the states
(d) To accept credit card payment by the public user,
(e) To allow user to check on status of payment of quit rent of a particular title or arrears in quit rent.

This approach requires new set of procedures provided in the Sixteenth Schedule as a policy statement of the Code and subsequently it has to be prescribed by the State Authority in the States Land Rules for enforcement purposes.

(iv) Electronic features relating to electronic safe keeping of registers via ELAS system – (paragraph (c) of subsection 5D (3):

Section 375 of the Code provides the responsibilities to the Registrar for the safe keeping of –

(a) Every register of title maintained under the Code or previous land law;
(b) All instruments registered under the Code or previous land law; and
(c) All other instruments, and all books and other records required by the Code or previous land law to be filed or kept in land Registry.

In addition, nothing of those records is able to be removed from the land Registry Office except by an order of the Court or a Judge or under the direction in writing of the State Authority or State Director. Prior to coming into operation of ELAS, this fact is meant at safe keeping of manual or physical records only.

However, upon the coming into operation of the ELAS system, the methodology of safe keeping would definitely includes all digital data stored in the land database. In view of the ELAS which developed based on hybrid system – every District Land Office shall have its own land database. The data flows into those land databases shall also flow via system to the Consolidated Database located at the PTG Office. For security purposes, the same data shall then flow as a replication manner to the land database of the Disaster Recovery Centre (DRC) of the State. In the event of disaster (man-made disaster or natural disaster or hardware disaster), the database of DRC shall be able to take over the functions of Consolidated Database at PTG Office. In respect of subsection 340(2) which read together with section 375 of the Code, the flowing of data from one land database to another land database is virtually operated, and therefore it require a very high level of security controls for the safe keeping of digital records. In the ELAS, the land database is Register Document of Title (RDT), and thus, it’s defeasibility of titles or interests therein must be preserved effectively in any circumstance.

(v) Electronic features relating to the procedure for the maintenance of Presentation Book and Correction Note-Book –(paragraph (c) of subsection 5D (3):

The procedure relating to maintenance of Presentation Book, pursuant to section 304 of the Code, by use of computer has been provided under paragraph 13 of Fourteenth Schedule of the Code. The similar approach is adapted into the Sixteenth Schedule with the similar features.

However, the procedure relating to maintenance of Correction Note-Book pursuant to section 380 of the Code was not specifically stipulated under the previous provision of Fourteenth Schedule. For the purpose of ELAS system, the procedure for maintenance of Presentation Book is therefore extended to be applied upon Correction Note-Book and construed as part of the Sixteenth Schedule.

(vi) Electronic features relating to electronic searches procedures –(paragraph (c) of subsection 5D (3):

Part Twenty Seven of the Code provide that searches could be performed in two ways: Private Searches by virtue of section 384 and Official Searches by virtue of section 385 respectively. However, the provisions of the Code currently require the public or person or body to perform searches by attending themselves at any land Registry.

For the purpose of ELAS, the electronic features introduced by the system is limited to Private Searches only. By electronic approach, the private searches could be performed not only during normal hours but beyond normal office hours provided
there must be an online services available. Therefore, section 384 of the Code has to be reviewed to meet this purpose as incorporated in the Sixteenth Schedule.

Paragraph (c) of subsection 5D(3) is a policy statement of the ELAS. At the point of a date of ELAS is notified in the Gazette of the Federation under subsection 5D(1), the operation of CLRS under commencement of the Fourteenth Schedule of the Code is immediately cease to be operative in the respective land Registry. From that date, there shall be no turning back to the CLRS in any manner or whatever circumstances. The reason is the paramountcy of the indefeasibility of title or interest shall be protected under operation of the ELAS with entire conclusive evidence, guaranteed, certain and reliable of it registration from any possible competing claims. It is a legal standing that the CLRS is no longer legally valid on or after the date of commencement of ELAS.

Subsection 5D (4) of the Act is, inter alia, meant at facilitating the possibilities for future expansion of ELAS under the Sixteenth Schedule as it is ‘necessary, desirable or expedient’. These possibilities are, inter alia, includes the following:

(i) To meet the needs for further improvement of land administration system in consequence of its continuous evolution;

Figure 1 above shows five stages in the evolution of land administration systems from a technology perspective. The first stage recognizes that historically cadastral systems were manually operated with all maps and indexes hard copy. At this stage the cadastre focused on security of tenure and simple land trading. The 1980s saw the computerization of these cadastral records with the creation of digital cadastral data bases (DCDBs) and computerized indexes. However this computerization did not change the role of the land registry or cadastre; however it was a catalyst to start institutional change worldwide where the traditionally separate functions of surveying and mapping, cadastre and land registration started coming together.

At the present time there is a significant refinement of web enabled land administration systems where the common driver is interoperability between disparate data sets which is being facilitated by the partnership business model. This is now the start of an era where basic land, property and cadastral information is now being used as an integrating technology between many different businesses in government such as planning, taxation, land development, local government. Examples of this are the Sistem Pangkalan Data
Kadaster (SPDK) and the new e-Cadastre being developed by the Department of Survey and Mapping. These developments have also been a catalyst for the development of “mesh blocks” which are small aggregations of land parcels that are now revolutionizing the way census and demographic data is collected, and managed. This era has also offered the potential for better managing the complex arrangement of rights, restrictions and responsibilities relating to land that are essential to achieving sustainable development objectives. This is also driving the re-engineering of cadastral data models that will facilitate interoperability between the cadastre, land use planning and land taxation for example.

There will be a new era when cadastral data is information and a new concept called iLand will become the paradigm for the next decade. iLand is a vision of integrated, spatially enabled land information available on the Internet. iLand enables the "where" in government policies and information. The vision as shown diagrammatically below is based on the engineering paradigm where hard questions receive “designed, constructed, implemented and managed” solutions. In iLand all major government information systems are spatially enabled, and the “where” or location provided by spatial information are regarded as common goods made available to citizens and businesses to encourage creativity, efficiency and product development. The Land Administration System (LAS) and cadastre is even more significant in iLand. Modern land administration demands such a land administration infrastructure as fundamental if land information is to be capable of supporting those “relative” information attributes so vital for land registries and taxation.

(ii) To legalise any new web-based application system, such as below:

- Electronic presentation (e-Presentation);
- Electronic Submission (e-Submission or e-Mohon which consists of e-lodgement);
- Electronic dealing (e-Dealing);
- Electronic auction or auction online (e-Auction);
- To include official searches as part of electronic services; and
- e-Attestation; e-Transmission; e-Strata;
- Others.

In view of Malaysian Torrens system, the vital part of the ELAS is the ability of technology to ascertain the virtual indefeasibility of title or interest over land in which it was impliedly spelt out in the Sixteenth Schedule. Under ELAS arrangement, the indefeasible title or interest is virtually alive in the electronic environment and constituted by:

The title or interest is obtained by electronic registration process under the Sixteenth Schedule of the National Land Code 1965
The title or interest is incorporated therein by not less than seven core values of Torrens registration system:

- **2A** There must be **identification of the land** (i.e. maps or plans in which land boundaries are identified).
- **2B** There must be **identification of the owner** (which places a high value on privacy to guarantee the name on the title accords with the individual claiming ownership).
- **2C** There must be **verification of the interest**, if any (which ensures the existence of the title claimed to the satisfaction of an official according to generally accepted legal and business norms).
- **2D** There must be **identification of the interest obtained**. (the time and mode of its acquisition – important for resolving competing claims).
- **2E** There must be **increase of the proprietary protection** available to the interest. (Registration creates the interest and turns it into a property right protected against any other claim).
- **2F** There must be **transaction facilitation** by verification of the title of the person conveying land. (In Torrens system, it is a search of a simple title. It virtually eliminates most of the transaction costs associated with sale, development and securitization of the land).
- **2G** There must be **proof of registration**. (i.e. a notation on the instrument, a receipt for registration fees, a print out of the computer record supported by electronic signatures, etc).

The title or interest is free from any of the following consequences:

- **3A** Fraud; or,
- **3B** Forgery; or,
- **3C** Misrepresentation; or,
- **3D** Unlawful acts.
The electronic register is everything. But the successful and smooth working of the electronic technology for title registration system by the ELAS largely depends upon:

(a) an accurate digital survey and delienation of the boundary lines and preservation of boundary stones, for an idefeasible title with a defeasible area and shifting boundary lines is wholly inconsistent with the basic principle underlying the system;

(b) general awareness on the part of the public that so long as a registrable interest in land is not registered or, at any rate, protected by caveat or a title acquired by an appropriate order of the Court under the Code in case of dispute or other causes, which may stand in the way of effecting a memorial, the person claiming such interest acts at his peril;

(c) careful inspection of the electronic register and of the presentation record immediately prior to the execution of an instrument;

(d) presentation of the instrument (which must be carefully drawn up so as to avoid any clerical error in the name and description of the parties or of the land affected by the transaction) accompanied by such other necessary documents as may be required under the provisions of the Land Code, in the absence of which or in the case of error appearing in the instrument, registration may be suspended for a short period as so as to enable the error to be rectified or necessary documents filed, as the case may be, or the instrument rejected altogether as being unfit for registration;

(e) prompt registration;

(f) great care of the part of attesting witnesses to ensure proper identification of the parties to the instrument or their duly constituted attorneys (and in such cases where the power of attorney is of fairly ancient vintage by obtaining satisfactory proof and, if necessary, a statutory declaration from the attorney that the power of attorney is still in force and has not been revoked by the death or mental incapacity of the donor in anticipation of any requisition by the proper registering authority to supply him with proof of continuance of the power of attorney) to prevent unauthorised, fraudulent or other improper dealings; and above all,

(g) an adequate and highly efficient staff in the registry so that presentation of an instrument for registration is immediately noted in the presentation record and a memorial thereof made with the least possible delay. The possibility of any error in effecting a memorial must be eschewed and, in that context, noting in the presentation record of the date and exact time of presentation of instruments for registration becomes highly significant, for priority is thereby preserved and indefeasibility of title assured.

Given the amount of fraud perpetrated within a paper system, the integrity of the Torrens system of State guaranteed title under section 340 of the NLC shall be maintained in an electronic system. The writer’s view of the Sixteenth Schedule is that it is possible to maintain a Torrens based electronic registration system provided safeguards aimed at minimizing the opportunity for electronic based fraud to occur are implemented. Some of these safeguards, such as limiting access to registered users, requiring certifications of authority and capacity from users and the use of PKI
systems for digital signatures, are present in the successful systems operating in other Torrens jurisdictions. Given the experience of other jurisdictions and the lessons learned from them, it should be possible for the State Authorities in Peninsular Malaysia to develop and implement a system that fulfils not only legal requirement but also maintains the confidence of users in a land registry system of title by registration guaranteed by the State.

THE NEED FOR NEW ENABLING PROVISIONS

Introduction of Electronic Dealings (e-Dealing or e-Urusniaga)

The process of creating and lodging an electronic dealing, called an e-Dealing. Under e-Tanah System in future, it is to be proposed that e-Dealing allows electronic submission of application for transfer, lease, charge or easement of the land. By legal definitions of statutory instruments under the Code, the successful electronic environment of land dealing (e-Dealing) requires enabling legal framework to be provided therein for the following prerequisites:

- There must be e-Title which can be generated by the system;
- There must be an e-Form application system;
- There must an e-Attestation application system;
- There must be e-Certification by use of digital signature;
- There must be e-Stamping system;
- There must be e-Presentation application system; and,
- There must be e-Registration system.

How the system works:

(i) Create and prepare an e-Dealing

An e-Dealing is created electronically using electronic templates in e-Tanah system where many details such as current owner’s name, are entered automatically onto the electronic template from the titles register. The workplace of e-Tanah system is a ‘cyberfile’ used to create and manage all aspects of each e-Dealing, including searching, preparing instruments and messaging. In this workspace, the conveyancers can view and manage online titles dealings created by them.

(ii) Pre-validation

Once prepared, an e-dealing can be pre-validated - checked to ensure that the dealing will pass registration if submitted in its present state. When an instrument is pre-validated, it will pass (but for signing) if it is correct. The status screen will show the status ‘draft’ for unsigned instruments and ‘signed’ for signed instruments. When a whole e-dealing is pre-validated, it will fail if any of the instruments remains unsigned. An incorrect dealing can be amended rather than having to wait until it is rejected and returned. Pre-validation can be done at any stage from when the dealing is prepared until submission.
(iii) Attestation, and Signing

To submit an e-dealing, the instruments must be attested and certified by the persons stipulated in the Fifth Schedule of the Code, and subsequently electronically signed using a digital certificate. Only conveyancers who are nominated on the e-Tanah A & I (Authority and Instruction) form can certify and sign e-Dealings. They must have a digital certificate and appropriate privilege allocated within the firm.

(iv) Stamping and release

Once both conveyancers are satisfied the dealing can proceed, they can manage for stamping through *e-Stamping* application system provided by LHDN. This allows for the instruments to be released. When all the instruments have been released the dealing can be electronically submitted to the relevant land Registry Office through e-Tanah System online.

(v) Submit

The e-Dealing is submitted electronically to land Registry using e-Tanah online and a presentation priority date and time is assigned.

(vi) Registration

Upon registration, e-Tanah system runs automated checks. If the dealing passes it is registered by the Registrar immediately and the titles register is automatically updated without manual intervention by the land Registry Office. The submitting conveyancer receives an electronic notice confirming registration.

If the dealing is rejected it is returned to the conveyance through their e-mail so that it can be modified and resubmitted.

*Introduction of Electronic Submission (e-Submission or e-Mohon)*

The process of creating and submitting an electronic non-dealings matters relating to land under the Code, called an *e-Submission*. Under the futuristic e-Tanah System, it is to be proposed that *e-Submission* allows electronic submission of application for transfer, lease, charge or easement of the land. By legal definitions of statutory instruments under the Code, the successful electronic environment for making applications relating to land matters other than dealings (e-Submission) requires enabling legal framework to be provided therein for the following prerequisites:

- There must be *e-Title* which can be generated by the system;
- There must be an *e-Form* application system;
- There must an *e-Lodgement* application system;
- There must be *e-Certification* by use of digital signature;
- There must be *e-Presentation* application system; and,
- There must be *e-Registration* system.
How the system works:

(i) Create and prepare an e-Submission

An e-Submission is created electronically using electronic forms (e-Form) templates in e-Tanah system where many details such as current owner’s name, are entered automatically onto the electronic form template from the titles register. The database of e-Tanah system is a ‘cyberfile’ used to create and manage all aspects of each e-Submission, including searching, preparing application documents, lodgement of caveats and messaging. In this e-Tanah environment, the applicants can view and manage online land matters applications other than titles dealings created by them.

(ii) Pre-validation

Once prepared, an e-submission can be pre-validated - checked to ensure that the submission will pass approval or registration if submitted in its present state. When an application is pre-validated, it will pass (but for signing) if it is correct. The status screen will show the status ‘draft’ for unsigned documents and ‘signed’ for signed documents. When a whole e-submission is pre-validated, it will fail if any of the documents remains unsigned. An incorrect submission can be amended rather than having to wait until it is rejected and returned. Pre-validation can be done at any stage from when the electronic application is prepared until submission.

(iii) Verification and Signing

To submit an e-dealing, the instruments must be verified by the applicants, and electronically signed using a digital certificate. Only applicants who are nominated on the e-Tanah A & I (Authority and Instruction) form can certify and sign e-Submissions. They must have a digital certificate and appropriate privilege allocated within the firm.

(iv) Submit

The e-Submission is presented electronically to land Registry using e-Tanah online and a presentation priority date and time is assigned.

(v) Approve or Reject

The e-Submission is approved electronically by the land Registry using e-Tanah internal integrated application system and an acknowledgement to applicant is conveyed through e-mail assigned.

If the submission is rejected it is returned to the applicant through their e-mail so that it can be modified and resubmitted.

(vi) Registration

Upon registration, e-Tanah system runs automated checks. If the submission passes the approval requirements, it is registered by the Registrar immediately and the titles
register is automatically updated without manual intervention by the land Registry Office. The submitting applicant receives an electronic notice confirming registration.

**Introduction of Single Title System**

As provided by section 158 and 159 of the Code, there are two (2) types of land title namely Registry Title – that is the register of grants and the register of State leases; and Land Office Title – that is the Mukim Registers.

In view of the centralized database for e-Tanah system in future, it is necessary to create a single title system which is in line to the concept of 'single point of contact' (SPOC) for land administration delivery system. In this regard, it suggested that all Land Office titles to be merged or converted into a single title system, called Registry title only. As such there are provisions of the Code has to be amended or repealed to meet this purpose.

This proposal is essentially diverts the existing provisions of the Code toward the following consequences –

(i) All existing Land Administrators and Assistant Land Administrators shall be required to be appointed and notified in the Gazette as Deputy Registrar of Titles in accordance with section 12(1)(b) of the Code –

"12 The State Authority may appoint for the State:-

(a) a State Director of Land Mines, a Registrar of Titles and a Director Survey and Mapping. 

(b) so many deputy Directors Lands and mines, Assistant Directors Land and Mines, Deputy Registrar of Titles, Deputy Directors of Survey.................".

(ii) All existing District Land Offices have to be re-established as Branches to the State Director of Land and Mines Office;

(iii) All Land Office Titles maintained by the District Land Offices have to be converted into Registry Titles;

(iv) All data on titles can be centralized at Director of Land and Mines Office whereby, registration of title and dealing could be presented at any District Land Office of the State.

Initially there are few provisions relating to land office title have to be amended and partly to be repealed. For instance, provisions relating to application for order for sale affecting land office title under section 260 to 265 and other related provisions are no longer significant and it has to be repealed. Alternatively, such applications by chargee would have to be filed in court in accordance with section 256 of the Code.

The proposed single title system would somehow reduce the category of title into two categories only namely grant for title which is held in perpetuity and mukim lease which is held on lease basis. These categories of titles may leads for a better understanding from the public as well as facilitating the administration of land and its delivery system.
This proposal can be implemented in stages. It is advisable to create single title system by legal force and make it in parallel with On-line Registration under the e-Tanah System. Therefore, it is pertinent to amend the Code to provide a method whereby Minister may with the approval of the National Land Council declare any State to enforce a single title system by converting all Land Office Titles to Registry Titles under operation of electronic title by registration (On-line Registration).

**Introduction of Electronic Strata Titles (e-Strata)**

The process of creating and submitting an electronic application for strata subdivision under the Strata Titles Act 1985 (STA), called an *e-Strata*. Under the futuristic e-Tanah System, it is to be proposed that *e-Strata* allows electronic submission of application for subdivision of building into parcels, subdivision of land into land parcels, subdivision or amalgamation of parcels, and etc. By legal definitions of statutory forms under the STA, the successful electronic environment for making applications relating to strata matters requires enabling legal framework to be provided therein for the following prerequisites:

- There must be enabling provisions to produce strata titles prior to vacant possession;
- There must be *e-Title* which can be generated by the system;
- There must be an *e-Form* application system;
- There must an *e-Submission* application system;
- There must be *e-Certification* by use of digital signature; and
- There must be *e-Registration* system.

**How the system works:**

(i) **Create and prepare an e-Submission**

An e-Strata is created electronically using electronic forms (*e-Form*) templates in e-Tanah system where many details such as current owner’s name, are entered automatically onto the electronic form template from the titles register. The database of e-Tanah system is a ‘cyberfile’ used to create and manage all aspects of each e-Strata, including searching, preparing application documents, lodgement of caveats and messaging. In this e-Tanah environment, the applicants can view and manage online land matters applications other than titles dealings created by them.

(ii) **Pre-validation**

Once prepared, e-strata can be pre-validated - checked to ensure that the submission will pass approval or registration if submitted in its present state. When an application is pre-validated, it will pass (but for signing) if it is correct. The status screen will show the status ‘draft’ for unsigned documents and ‘signed’ for signed documents. When a whole e-strata is pre-validated, it will fail if any of the documents remains unsigned. An incorrect submission can be amended rather than having to wait until it is rejected and returned. Pre-validation can be done at any stage from when the electronic application is prepared until submission.

(iii) **Verification and Signing**

To submit an e-strata, the application forms must be certified by the applicants, and electronically signed using a digital certificate. Only applicants who are nominated on
the e-Tanah A & I (Authority and Instruction) form can certify and sign e-Submissions. They must have a digital certificate and appropriate privilege allocated within the firm.

(iv) Submit

The e-Strata is submitted electronically to land Registry using e-Tanah online and a presentation priority date and time is assigned.

(v) Approve or Reject

The e-Strata is approved electronically by the land Registry using e-Tanah internal integrated application system and an acknowledgement to applicant is conveyed through e-mail assigned.

If the submission of application for strata subdivision is rejected it is returned to the applicant through their e-mail so that it can be modified and resubmitted.

(vi) Registration

Upon registration, e-Tanah system runs automated checks. If the e-Strata application passes the approval requirements, it is registered by the Registrar immediately and the strata titles register is automatically updated without manual intervention by the land Registry Office. The submitting applicant receives an electronic notice confirming registration.

This proposal can be implemented in stages. It is advisable to implement the e-Strata system in parallel with On-line Registration under the e-Tanah System. Therefore, it is pertinent to amend the STA to provide a method whereby the Minister may with the approval of the National Land Council declare any land Registry of the State to enforce an e-Strata system by converting all manual strata titles to e-Strata Titles under operation of Electronic Land Administration System for Strata Titles in accordance with the Sixteenth Schedule of the Code.

**Automatic Extension of Leasehold**

(i) What is the difference between ‘renewal of land leases’ and ‘extension of land leases’?

Application for renewal of land leases is an application by landowner to renew land title in respect of which the existing term has expired; whereas application of extension of land leases is an application to extend the term of existing land title.

(ii) How to apply an extension of land leases term?

The landowner must submit an application in a prescribed form to the Land Registry where the land is located. A photo-copy of the old title, print out of title and a plan showing the land are also to be submitted. The landowner is also required to furnish full details on the improvements found on the land such as buildings and cultivation.
(iii) What are the possible options given to the land owner?

Under the leasehold extension policy arrangement by the State Authority, the landowners are possibly given the choice to take a 60-year or 99-year lease, payment for which may be made in installments over 10 years.

(iv) How the premium of this leasehold extension is calculated?

The premium calculation was based on a simple formula, taking into consideration the land usage, category of land and the market value, excluding the value of the building and improvement to the land.

(v) Does the National Land Code 1965 adopt the approach for automatic renewal or automation extension term of leasehold land in Peninsular Malaysia?

Basically, no specific provision in the National Land Code 1965 that allow an automatic renewal or extension upon expiry of leasehold. It is pertinent to note that the term of ‘lease’ is derived from alienation of land by the State Authority and therefore, in order to obtain an extension or renewal of it’s term, the new leasehold for the said land shall be treated and granted through alienation process only. It cannot just simply be renewed or extended by the Registrar.

In view of the Code, an “extension or renewal of term of leasehold land” may be obtained through the following administrative approaches:

(a) The leasehold land must first be surrendered to the State Authority under Section 197 of the Code;

(b) Accordingly such leasehold land will be reverted to the State Authority and become State land under section 199(1) of the Code (but it is not guaranteed by the Code that the applicant will get back his land. It’s all about depending on the discretion of the State Authority);

(c) The land owner subsequently apply for alienation of that land with new term of lease;

(d) The State Authority approve the alienation of that land with terms and conditions as may be prescribed in the State Land Rules, including new period of leasehold of not exceeding 99 years – section 76 of the Code;

(e) Subject to the payments to be made by the owner, the new land title will finally be registered with new holding of lease period.

In respect of section 79(2) of the Code, the State Authority in Peninsular Malaysia has not been conferred with the powers to automatically renew or extends the leasehold terms without going through the alienation process. In other words, the current procedure of the Code impliedly require that in order to obtain a new term of leasehold, the existing leasehold land has to be surrendered first and subsequently, the land become State Land and the State Authority then may re-alienate the land with new terms of lease to the person who is the registered proprietor thereof.
(vi) How to complement this automatic extension of land leases under the NLC?

The NLC has to be amended to meet this purpose. By incorporating the new words of law into the Code, the existing landowner can apply for an extension of lease term at any time. He does not need to wait for the expiry of the lease. So if his bank requires a longer lease as security, he can apply to extend the lease to meet the requirement of the bank. The proposed amendment also brings along the assurance that the existing landowner gets the extension, not anybody else. This possible amendment has come about due to the sensitivity of a caring government after the matters were raised by the members of the public. The amendment of the Code is most significant for all existing leasehold land owners in the States of Peninsular Malaysia.

**Do Away With Qualified Title (QT)**

The significant part of e-Tanah system is external system integration with e-Cadastre. Under this arrangement, the Certified Plan for purposes of Final Title (FT) registration can be produced by e-Cadastre in one day timeframe. This circumstance indicates that the Qualified Titles now are no longer vital to electronic environment of land administration.

The legal provisions for QT were originated by the Code to enable land to be alienated and the title issued thereto is a temporary basis due to the usual long waiting for a final survey to be done before it converted into FT. If the e-Cadastre now is able to produce Certified Plan within one day, why must we have a QT rather than a FT? With this facility provided by the technology, should we prefer for QT without a proper final survey of the land? If the QT confers a similar degree of ownership rights as a FT have, why don’t we go for FT?

The intention to do away with QT has been initiated by the previous amendments of the Code. For instance, the amending Act A 1104 have been amended the provisions of sections 79, 135, 140, 146, including section 204B of Chapter 3 Part Eleven of the Code. In addition, new provisions of sections 183A, 184A and 185A were incorporated into the Code. Consequently, the issuance of title for alienation would no longer be required to issue qualified title. Any application for sub-division, partition and amalgamation of land could not be processed for the land under qualified title. The amending Act encourages the Land Administrator or Registrar to issue final title without necessary to issue qualified title in continuation as he think just and expedient to do so. This intension has been recently enhanced by the amending Act A 1333.

In order to implement this proposal under the environment of e-Tanah System, the whole Part Eleven of the Code have to be repealed and any references to qualified title in the Code have to be deleted. As a consequence of these amendments there would be an increase in demand for the issuance of final title. A pro-active action as well as strategies to overcome the problem of existing qualified title must begin from now. The options available to convert the existing QTs to FTs are by setting up a special task force or through outsourcing.

**Streamlining The Statutory Forms Into Electronic Environment**

The statutory forms available in the First Schedule of the Code are required to be customised to make it simple, systematic, easy to use and user-friendly. Under the proposed development of e-Form in the Tanah system, the concept of single contact point of forms has to be designed and it should be useable to accommodate as many types of applications as possible. This approach can be materialised by avoiding various types of forms for every single type of application as presently
prescribed in the Code. Thus all the checklists used by the Land Registry staff should be an effective tool to trace any prerequisites for submitting of applications.

For instance –

(a) the format for attestation clause in Form 13B in which it's construed as part of the land dealing forms such as transfer (Form 14A) or charge (Form 16A/16B) and some other related forms, is deemed to be complicated and difficult to understand for a lay-person who intend to fill up the form. The forms are suggested to be drafted and printed in a standard template and size for easy binding. The 1st and 10th Schedule (section 436) and the 16th Schedule of the Code has to be amended and modified to meet this purpose.

(b) All types of statutory forms for surrender of alienated land in the Code can be merged into a single format in which it’s accommodate all types of applications. This approach can be materialized as illustrated below:

**Why New Enabling Provision Is Necessary**

The future land administration in Peninsular Malaysia envisages that the Land Registry of the State will embark on a project to introduce an optional system of electronic registration of applications. It has to admit the fact that this work began several years ago upon commencement of Computerized Land Registration System (CLRS) under the Fourteenth Schedule of the Code and has, from the outset, fully involved representatives of key stakeholders. Research, dialogue and consultation have demonstrated that there is a desire for an electronic alternative to paper registration and that clear benefits can be seen.
In these transactions the existing conventional instruments of land dealings will continue to be used but, instead of being on paper, will be in electronic form. These electronic forms will be generated within a secure system maintained by Land Registry and will contribute to a process which will be faster and cheaper than paper registration.

The introduction of electronic registration should assist the Land Registry to enhance electronic service delivery to customers in accordance with both the e-Government initiative and the Malaysian Government Transformation Programme.

Electronic land registration is therefore an essential enabler to achieving the goal of making land transactions easier for all, and will see the development of a service which enables the legal profession and mortgage lenders to lodge documents online.

Similar electronic registration systems are being developed in other Torrens jurisdiction's countries like Australia, New Zealand and Singapore. The development of this service should lead to a number of potential benefits including:

- Reductions in the cost of processing applications, which may lead to reduced fees for customers who opt for electronic registration;
- Improved quality of submitted documentation, leading to fewer rejections and less duplication of effort for Land Registry staff and the staff in solicitors practices;
- The potential for faster registration;
- Reduced storage costs for customers who opt to obtain electronic documents.

At present the provisions of the Code underpinning registration on the Title Register (Register Document of Title) restricts property transactions to paper processes. The Title Register can be converted into electronic form under operation of the Sixteenth Schedule of the Code but the barriers to full electronic registration lie in the means of communicating input to and output from the Title Register. These barriers can be addressed by amending statutory provision requiring certain prescribed transactions to be in writing.

SECURITY FEATURES OF ELECTRONIC LAND REGISTRY – DOES INTEGRITY OF INDEFEASIBLE TITLE IS MAINTAINED BY THE e-TANAH SYSTEM?

One of the hallmarks of the Torrens System is the principle of indefeasibility of title, that is, once title is registered, absolute security of that title is guaranteed to the registered proprietor. This is the “keystone” of the Torrens system. The move towards a system of electronic submission of instruments in the Land Registry Office will see changes to lodging and registration practices. The fear is that allowing Internet access to the land registry system may open greater possibilities for computer related fraudulent practices and potentially threaten the security and integrity of the title. It is acknowledged that fraudulent practices have developed in the paper based Torrens system but the use of technology could potentially open up opportunities not only to commit the same types of fraud evident in the paper system but also to invent new methods for defrauding individuals particularly through identity fraud.

Identity fraud refers to the “unlawful taking of another person’s details without their permission”. It “generally involves a person falsely representing himself or herself as either another person or a fictitious person” and using that assumed identity to commit a crime. In the paper world, an important element required for the perpetration of identity fraud is the physical
proximity between the victim and the thief, with the thief relying on personal information obtained from stolen wallets, stolen mail etc to create or assume a false identity. With the Internet and electronic data storage systems, the ease in which an individual can 'steal' such personal information is increased. The reason for this is that in electronic systems, physical proximity is no longer an issue:

Individuals who use electronic services either actively, by inputting their details on the internet, or passively, by using electronic services that contain their details such as bank cards, supermarket loyalty cards or library membership cards, are exposing themselves to the threat of a criminal anywhere in the world stealing their identity by means of a computer network.(R. Massey, 2003).

The problems of identity fraud and the security and integrity of electronic databases are particularly pertinent to an electronic registration system where all dealings are done online and the titles are held in a computerised format in an electronic database. These two problems have the potential to undermine the underlying premise of which the Torrens system is based – a guaranteed indefeasibility of title.

In the past, sophisticated paper-based systems were present to reduce the opportunities for fraud involving conveyancing transactions. As we move into on-line registration of titles and electronic transactions, new opportunities arise for people within organisations as well as for external customers to misrepresent themselves and to manipulate electronic transactions for financial gain (Graycar & Smith, 2002).

Given the potential for increased identity fraud in an electronic environment, the security features of electronic land systems are critical to the maintenance of integrity within the system and its reliability.

(a) Access to the system

Generally, access to the system requires the establishment of a user account with the system. For instance, access to Landonline in New Zealand is via a digital certificate. An individual can only obtain and use a digital certificate when associated with a firm that has bought a license to use Landonline. At the time of application for the license, the firm will be prompted to provide the names of the people who will be using the Landonline functions available under that licence. These staff members listed on the application form must each have individual Digital Certificates.

In British Columbia, EFS filings are done through BC Online. Thus users must have an account with BC Online in order to use the EFS system. Further, each individual using EFS within that account is required to have his/her own user ID. The BC Online user IDs are created at the time of setting up the BC Online account.

In Singapore the law firm wanting to use STARS will need to have a lodgement account before instruments can be lodged. Users within that firm who wish to have access to STARS must each have a user account. These accounts come with a user ID and a password which uniquely identify the individual who have made access to or is accessing the system. The appointed administrator within the law firm manages the user ID and password. If the user is a lawyer, the ID will be linked to the Netrust Digital Certificate. All users who need to use STARS must log in to the system with their user ID and password. However, users who need to sign instruments (lawyers) must log in using the user's Netrust card via the “Netrust
user” login. Other users who do not need to sign instruments login via the “Regular user” login.

The question of access in Malaysian e-Tanah System for public users at this point of time will be looked like similar to what has been practiced in Singapore. However the actual method for accessing the system by the public users is not yet finalised due to the proposed online application systems for e-Dealing and e-Submission are now depending on requirement of legislative review. It is pertinent to note that restricting access to authorised users would make it easier for the system administrator to monitor and track usage of the system as well as to maintain an audit trail of the users in the system. This would be more difficult to achieve in a system that is open for all to use.

(b) The electronic signature infrastructure used by the system

Public key encryption administered under a public key infrastructure (PKI) system is commonly used as the method for signing documents electronically. Public key encryption is an encryption technique using two sets of mathematically related keys – the public key and the private key. Both keys are mathematically related to each other.

However, it is impossible to deduce the private key from the public key because both keys consist of very large prime numbers. The public key can be made available to the world at large whilst the private key must be kept private. To encrypt a message the sender uses his/her private key to encrypt the message (first encryption). The intended recipient would then use the sender’s public key to decrypt the message. However, since the public key is made available to everyone, to ensure confidentiality and that only the intended recipient can decrypt the message, the sender would add a second layer of encryption using the recipient’s public key (second encryption). Thus to decrypt the message, the recipient must first use his/her private key to decrypt the second encryption, then use the sender’s public key to decrypt the first encryption. In this way public key cryptography can be used to provide proof of the integrity and authenticity of the message (ie. it has not been tampered with).

The difficulty with public key cryptography is that it does not prove the sender’s identity. When a person receives a digitally signed message from a sender, how would that person know that the public key of the sender contained in the digitally signed message is really the sender’s public key? An impostor (X) could have generated a public/private key pair, signed the message, stating that it is from A. The recipient of the digitally signed message, if he/she believes X, would then assume that the message came from A. The recipient would use X’s public key in the message to decrypt the digital signature, thinking that it is A’s public key.

In this regard, public key infrastructure can be used to solve this problem. Systems developed to manage private/public keys are referred to as public key infrastructure (PKI). PKI seeks to ensure that the system for distribution of the keys is made reliable. The PKI systems around the world generally utilise the services of a trusted third party to perform this function. The trusted third party is generally called a certification authority (CA). Its main function is to verify the relationship between the identity of the sender and the public key of the sender through the issuance of certificates. The certificate issued by the trusted third party certifies that the public key is indeed the valid public key for that sender. The recipient on receiving an encrypted message will receive the sender’s public key and also a certificate from the CA certifying that that public key is correct and valid.
For example, the New Zealand e-Dealing model uses a form of PKI infrastructure with Land Information New Zealand (LINZ) as the registration authority and a third party vendor called beTRUSTed as the certification authority. The Certification authority provides the PKI infrastructure service responsible for generating digital certificates. To certify and sign an instrument the solicitor must use his/her digital certificate.

To obtain a digital certificate, Landonline users must apply to the LINZ Registration Authority using an online form on the Landonline web site. Proof of identification must be successfully completed before a digital certificate is issued. The Proof can be supplied in three forms which must be current. The options are:

- a passport
- a driver’s licence
- a firearms licence.

The proof of ID form must be completed on paper. A solicitor, court registrar, Justice of the Peace or a Notary Public or any person authorised to take declarations pursuant to the Oaths and Declarations Act 1957 (NZ) will need to cite this form for verification. The verified Proof of ID form must be faxed or mailed to LINZ acting as the registration authority.

Once the application has been approved, the applicant is notified via email. The email contains the activation codes necessary to generate the digital certificate. During this registration process, the private and public keys are also immediately created from the local Internet browser in the applicant’s workstation.

The private key that is generated during registration is the un-revealed key pair and hence must be kept private. The public key is the revealed part of the key pair. When the public key is generated, the public key is automatically delivered to the Certification Authority (beTRUSTed). It is then signed and returned to the subscriber as a Digital certificate. A copy of the public key is also kept by the Certification Authority and is posted to the Certification Authority Master Directory. The public key is used to verify a digital signature and hence it is made freely available to LINZ who receives digitally signed transactions from the subscriber.

The Singapore STARS system uses digital signatures in a PKI environment with Netrust as the CA. To electronically sign documents, lawyers will require a digital certificate, issued by Netrust Pte Ltd. To register for a Netrust Digital Certificate the following is required:

- Identification document of applicant (Identity card, passport or work permit for foreigners)
- Photocopy of front and back of identification document
- Netrust digital personal certificate application form or for a Corporate Netrust digital certificate, a corporate certificate application form

For a corporate Netrust digital certificate, the following is also required:

- Letter of authorization, authorizing the applicant to apply for the card
- Photocopy of the letter from Law Society of Singapore confirming either:
the law firm’s registration (with the law society) or
- the law firm’s registration code

- Alternatively, if the company is registered with Registry of Companies and Businesses, a photocopy of this certificate.

Malaysian e-Tanah system had decided on the appropriate technological framework for the use of electronic signatures as similar as experienced in Singapore. Under e-Tanah environment, it appears that Land Registry envisage that the electronic signatures will be based on some form of PKI. The e-Tanah system uses digital signatures in a PKI environment with DigiCert as the CA. To electronically sign documents, users of e-Tanah system will require a digital certificate, issued by DigiCert. To register for a Digital Certificate the following is required:

- Identification document of applicant (Identity card, passport or work permit for foreigners)
- Photocopy of front and back of identification document
- DigiCert digital personal certificate application form or for a Corporate DigiCert digital certificate, a corporate certificate application form

From the above it can be seen all three jurisdictions use digital signatures through PKI as their electronic signature infrastructure. This is not surprising as it is generally considered that cryptography is the solution for maintaining a degree of security over information, public key encryption being the most secure form of cryptography. Improvements in technology might see the introduction of new forms of encryption techniques, or the increase usage in biometric systems such as fingerprint verification, retinal and iris scanning, DNA verification and voice/facial verification. However at this point in time, public key cryptography appears to be the most viable solution to protecting the security of information in electronic transactions.

This is not to say that public key encryption is immune to attacks against the system. Public key systems require that cryptographic key pairs be issued to individuals who are able to establish their identity to an appropriate degree of assurance. However it is quite possible for fraudsters to produce false documentation to circumvent the system. Other issues to consider in a PKI environment include the manner in which cryptographic keys are generated and given to the users, and the security of the private key. If the individual is allowed to generate the key pairs, it is possible for that individual to retain a copy of the private key for later illegal use. Where private keys are stored on the individual’s computer, their security may be compromised if there are inadequate access mechanisms such as poor use of personal identification numbers (PIN) or passwords. Fraud can still be perpetrated if another person obtains the private key and PIN or password.

No system, be it electronic or paper, can be full-proof against fraud. The key to minimising the occurrence of fraud is continued vigilance by all parties involved in a land transaction:

- The certification authority in enforcing proper identification checks so that key pairs are issued to authentic users of the system;
- Law firms should establish internal rules and protocols with regards to digital certificates use and misuse; and
Solicitors should ensure that the security of their digital certificate and password are not compromised.

(c) Restrictions on signing documents electronically

The second security feature of the systems is the restriction on parties who can sign electronically.

In New Zealand only solicitors with current practising certificates and licensed landbrokers can certify and sign e-Dealings. This is similar to the situation in Singapore where only lawyers can electronically sign caveats, withdrawal of caveats and extension of caveats and British Columbia, where only Juricert authenticated lawyers or notaries can electronically sign instruments.

In Malaysia, the National Land Code (Act 56 of 1965) provides special provision under Sixteenth Schedule for the Registrar to authenticate the registration of title by using digital signature, but no special provision been enacted for practitioners to sign electronic documents on behalf of their clients. However, when the e-Dealing and e-Submission of the e-Tanah system in operation, it is anticipate that more than 80% of conveyancers are reluctant and express fears over the signing of electronic documents on behalf of their clients. The main concerns were fraud, risk of misunderstanding between conveyancer and client, and dealing with unusual ways of executing documents.

Will limiting the ability to sign documents to practising solicitors improve the security of the system? One advantage may be that it would be easier to maintain security in such a ‘closed’ system. In terms of checking the identity of the solicitors and the issuing of key pairs, the certification authority could work closely with the law society who would provide the certification authority with a list of current practising solicitors. It would also be easier to maintain an audit trail and tracing fraudulently signed documents back to the solicitor who has been issued the key pair. Finally, limiting the ability to sign to solicitors allows law firms and the law society to impose rules and obligations on the solicitors to maintain the security of the key pairs and to prevent abuse and misuse.

In this point in time, given the infrastructure and cost involved in issuing key pairs and digital certificates and in maintaining a PKI system, the practical solution is that only a certain class be allowed to digitally sign documents, the most obvious choice being solicitors. Furthermore, in jurisdictions such as British Columbia, Ontario and New Zealand, the conveyancing practice prior to the introduction of electronic lodgment was for lawyers to sign land title documents on behalf of their clients. In such jurisdictions it was simply a matter of implementing this practice in the electronic system.

(d) Protocols for updating the land register

In Singapore, British Columbia and Ontario, the electronic system is limited to the electronic submission of documents and does not encompass electronic registration nor the making of any entry in the register by a user external to the land title system. Manual intervention in the form of the Land Titles Office staff examining and processing the electronic document is still required. In Ontario, staff at the Land Titles Office must certify the document before it is officially "registered". If the document is a Transfer or other change of ownership document, the ownership field of the register must be updated by the Land Titles Office staff.
In Malaysia where the proposed e-Dealing of e-Tanah system leads to automatic registration without manual intervention, conveyancers have the statutory responsibility of providing specified attestations to electronic instruments before the instruments can be lodged for registration.

It has been the practice for conveyancers in Malaysia to provide attestations verifying that the documentation being submitted is appropriate to permit the Registrar or Land Administrator to register the dealing instrument based on the documentation submitted. This attestation has included correctness of the documentation, identity of the parties, execution of the documents and all matters leading to a change in the status of ownership or interest in the land in question. The difference between the paper based transaction and transactions under e-Dealing is that in the paper one, staff at Land Registry manually check all documents lodged before the Register Document of Title (RDT) is updated. With e-Dealing, the attestation and signing of an instrument leads to an automatic and instantaneous entry onto RDT when the document is submitted, thus placing a high level of responsibility on the proprietors and conveyancers to ensure that the attestations are correct for the purposes of registration. It should be noted that failure to provide correct attestation does not affect the validity of the registration. Once the attestations incorporated in the instrument are provided and the instrument lodged and registered, indefeasibility of title rests on the registered proprietor, regardless of the correctness of the attestations. Thus if conveyancers are not vigilant in providing correct attestations or ensuring that the information contained in the electronic instrument is correct before it is lodged and then automatically registered, mistakes in the register would occur.

There are however certain in-built features within the e-Tanah online system designed to minimise errors from occurring:

- The pre-validation feature: Once prepared, an e-dealing can be pre-validated, that is, checked to ensure that the dealing will pass registration if submitted in its present state.

- The templates used to create an e-Dealing have certain pre-defined fields such as the owner’s name and address. These details are inserted onto the e-Dealing automatically by the system, using the information available from the electronic database maintained by the Land Registry.

- On lodgement of dealing, the e-Tanah online system itself runs automated checks and if the e-Dealing contains any errors, the e-Dealing is sent back to the workspace of e-Tanah system so that it can be modified and re-submitted.

PROPOSED CHANGES TO THE NATIONAL LAND CODE

It is proposed to change the National Land Code particularly the Sixteenth Schedule by providing:

(i) That the Minister may appoint a date, with the approval of National Land Council, for the coming into operation of single title system in any land Registry;

(ii) That any application relating to non-dealings matters of alienated land may be electronically submitted to any land Registry of the State upon coming into force of e-Tanah System;
(iii) That a registration application may be made by electronic communication where it is in respect of a type of dealing which is authorized by Registrar’s direction and falls within a geographical area so authorized.

(iv) Electronic Applications: Permit authorized users to make registration applications using the electronic system and to make provision for the electronic system to capture data and titles.

(v) For any consequential amendments necessary to other related laws and the State Land Rules to facilitate electronic Registration

PROPOSED CHANGES TO THE STRATA TITLES ACT 1985

It is proposed to change the Strata Titles Act 1985 by providing:

(i) For the proposal to issue strata titles prior to vacant possession;

(ii) That the Minister may appoint a date, with the approval of National Land Council, for the coming into operation of Electronic Land Administration System for Strata Titles in any land Registry;

(iii) That any application for strata titles may be submitted electronically to any land Registry of the State upon coming into force of e-Tanah System;

(iv) Electronic Applications: Permit authorized users to make registration applications using the electronic system and to make provision for the electronic system to capture data and titles.

(v) For any consequential amendments necessary to other related laws and the State Strata Titles Rules to facilitate electronic Registration

CONCLUSION

Computerisation of land registration systems is an inevitable consequence of the global penetration of information technology into everyday transactions. This change has already occurred in countries such as New Zealand, Canada and Singapore, with proposals being put forward in e-Tanah system in Malaysia. It has been globally commented that the maintenance of the integrity and security of title is crucial to the success of an electronic land titling system. To achieve this, safeguards aimed at minimising the opportunity for electronic based fraud to occur must be implemented within the electronic land system. From the above analysis, it can be seen that some of these safeguards, such as limiting access to registered users and the use of PKI systems for digital signatures, are present in the successful systems operating in other Torrens jurisdictions. Using these systems as an example, it would be possible for Malaysia to successfully develop an electronic land titling system incorporating these safeguards so as to uphold the confidence of users in a land registry system of title by registration guaranteed by the e-Tanah system.


