CHAPTER 4

3D PROPERTY TYPE IN MALAYSIA

4.1 Introduction

The aim of this chapter is to provide an introduction to 3D properties in Malaysia. Familiarity with the cadastral system is essential for a better understanding of the following study.

This chapter would firstly provide a brief introduction on land tenure system before and after the National Land Code 1965 (Act 65), Malaysian Cadastre System and the good governance of land administration. This will then be followed by an explanation of the legal framework of 3D property. The discussions will encompass the National Land Code 1965 (Act 56), the Strata Titles Act 1985 (Act 318), the Building and Common Property (Maintenance and Management) Act 2007 (Act 663), the Document of Title, cadastral maps and e-Cadastre Malaysia. This chapter continues with a discussion on boundary before end with its summary.

4.2 Land Tenure System Before and After the National Land Code 1965 (Act 56)

Before British rule was established in Penang and Melaka, the customary land tenure followed the same pattern as in Sarawak, Borneo, Burma and parts of India and Ceylon. When the British took over the administration of Penang, it was virtually an uninhabited island with no settled law, much less a recognised land system. Historical records showed that before the arrival of the English traders in 1786, the year that Ruler of Kedah ceded the Penang Island to the East India Company, Malaya was already governed by Islamic Law and Malay Customary Law. It can be seen from some historical records that laws existed such as Malacca Laws of 1523, the Pahang Laws of 1596, the Kedah Laws of 1605, the Johore Laws of 1789, the Perak Code and the Ninety Nine Laws of Perak 1765 (Buang, 1989; Das, 1963). Besides, the Malay States were never ceded by the British, so, there is no question of English Law or the Deeds System being introduced into the Malay States before the Malay States accepted British protection. The only law at that time applicable to the Malay was Mohammedan Law modified by local custom (Buang, 1989; Das, 1963).

The early English Law that was introduced into Penang was known as the Deeds System, which recorded land transactions in the form of deeds or indentures. According to Das (1963), the Deeds System was introduced in Penang properly as early as 1807 and in Singapore in 1819, and later extended to Malacca in 1826. The land law in Penang remained the same with the Deeds System even after the Torrens System was introduced in the Malay States on 31st December 1965. Malacca was different from Penang in terms of their respective historical laws. Prior to the arrival of the English, Malacca had a long history of self-rule under the Malay Sultanates before being occupied by the Portuguese, Dutch and English. Over time, the Malacca land tenure system evolved into a combination of traditional Malay Customary Law, Islamic Law, and Portuguese and Dutch Laws. The Malay Customary Tenure endured and continued to be influential in Malacca until late 1886 when the English Deeds System became fully implemented. As was the case in Penang, the Deeds System lasted in Malacca until the passing of the National Land

Code (Penang and Malacca Titles) Act 1963 which came into force simultaneously with the National Land Code 1965 (Act 56) on 1st January 1966 (Buang, 1989; Das, 1963).

The Torrens System was introduced in four Malayan States after they were united in 1896 to form the Federated Malay States when they accepted the Residency System. These were the States of Pahang in 1887, and Perak, Negeri Sembilan and Selangor in 1874. The first land tenure enactment, named the General Code of Regulations Regarding Land (Perak), was enacted on 28th February 1879, followed by the Selangor General Land Regulations No. 2 of 1882, Negeri Sembilan Land Regulations of State Council Minutes on 8th April 1887 and Pahang General Land Regulations in 1889. The land tenure and enactment of the 1890s of each of the four Federated Malay States was repealed and re-enacted in 1903. Later, in 1911, the first united land enactments of the Federated Malay States, named the Land Enactment No. 11 of 1911 (Federated Malay States) and the Regulation of Titles Enactment No. 13 of 1911 (Federated Malay States) were passed. These two Federated Malay States enactments of 1911 remained in force until their amendment by the Land Code 1926 (Cap 138), effective on 1st January 1928, which unified the land law held on Registry Title and Mukim Registry until it was in turn repealed by the National Land Code 1965 (Act 56) on 1st January 1966.

The National Land Code 1965 (Act 56) came into force in 1st January 1966 to administer all land matters in Peninsular Malaysia and Federal Territory of Labuan while Sabah and Sarawak continued to use their own land ordinance. For Sabah, there are the Sabah Land Ordinance 1930 (Cap. 69), Land (Subsidiary Title) Enactment 1972, and Land Acquisition Ordinance (Cap. 69) while for Sarawak, there are the Sarawak Land Code 1958 (Cap. 81), Mining Ordinance 1985 (Cap. 83), Land Control of Subdivision Ordinance (Cap. 82), and Strata Titles Ordinance 1957 (National Land Code 1965, 2010).

a) National Land Code 1965 (Act 56)

The National Land Code 1965 (Act 56) was formulated based on existing practices in the 1950s until the pre-1965 era before it came into effect on 1st January

1966. Before this, all land dealings were governed by the Federated Malay States (Cap 138) Land Code 1926 that came into effect on 1st January 1928. Also being enforced at the time were five separate State legislations in each of the five Unfederated Malay States as well as the English Deeds System in the former Straits Settlements of Malacca and Penang. This idea of having an adequate and progressive National Land Code was proposed by the Malaysian former Deputy Prime Minister Tun Musa Hitam.

The National Land Code 1965 (Act 56) contains six divisions and is divided into 42 parts with 513 sections. However, one part has since been repealed. There are seventeen schedules to the Act. However, three schedules have been repealed. Division I provides an introduction while Division II is concerned with the disposal of land. Division III covers alienated lands, incidents and title registration while Division IV describes matters concerned with land alienation. Division V focuses on alienated land and supplemental matters. Finally, Division VI contains general and miscellaneous provisions.

Most of the sections in the National Land Code 1965 (Act 56) were enacted with the law on dimension on surface. However, in Section 75A to Section 75G, Chapter 4, Part Four of Division II, the dimension above surface related to disposal of land otherwise then by alienation and permit to use air space above State land and reserved land is discussed. In this chapter, it discussed about the power to permit use of air space above State land or reserved land; the application of permits; the issue of permit on approval; conditions of permits; the deposit or security in respect of permit; and the power to cancel permit.

Meanwhile, for the dimension below surface, Section 92A to Section 92I, Part Five (A) discussed on the disposal of underground land. Here, it discussed about the specification of rights in respect of underground land upon alienation; alienation of underground State land; the application of independent use or alienation of underground land below alienated land underground land below leased reserved land; the specification of rights in respect of underground land upon the grant of a lease or reserved land and the lease of underground land below reserved land.

b) Strata Titles Act 1985 (Act 318)

According to Khoo (1984), no part of the land must be wasted in most development plans. As suitable land for development in the urban area becomes scarcer, it is necessary that every single piece of land be developed and utilised to its maximum capacity. One way is to increase density in the building forms. As land in the city becomes more expensive to acquire, the natural tendency is to build upwards.

The twentieth century has seen many social economic changes in urbanisation in most countries, including Malaysia. As a result of rapid urbanization and scarcity of land, high-rise buildings have become homes to many (Hussain, 1999). The development of high-rise buildings in high-density areas is a measure to optimise the land use and enhance the living standard. In residential areas, occupants of high rise buildings are normally small families who wish to enjoy a better life-style and have easy access to recreational facilities. Other important considerations are security and easy access to the work place.

Since the Federated Malay States Land Code 1926 did not provide for strata title ownership, various mechanisms were put in place to meet the increasing demand for high-rise buildings (Teo, 1998). The Malaysian strata title registration, which owed its origin to the Australian New South Wales Conveyancing (Strata Titles) Act 1961, was first introduced in Peninsular Malaysia on 1st January 1966 by the National Land Code 1965 (Act 56) under Section 355 to Section 374 that dealt with subsidiary titles to each of the parcels within a building having two or more storeys. With such strata titles, owners are able to enjoy the benefits of an indefeasible title with the unfettered right to charge and to transfer or lease their properties in a similar way that owners of landed properties can.

The rapid housing development growth in 1970s and 1980s introduced technological advancements in the construction industry and architectural innovations, making the provisions in National Land Code 1965 (Act 56) inadequate. Hence, certain amendments were necessary for further improvement to cope with the need at that time. The provisions on strata titles in the National Land Code 1965 (Act 56) were amended several times in 1977 (Act A386), in 1979 (Act A444) and in

1981 (Act A518) before they were repealed in 1985 (Act 318). As in other jurisdictions, prior methods of providing property rights to high rise buildings had been principally through leases and joint ownership through tenancy in common spaces. However, these were found to be subject to various disadvantages as also experienced elsewhere (Hussain, 1999).

Finally, in order to simplify and overcome the inadequacies of these provisions in the National Land Code 1965 (Act 56), the National Land Council Review Committee deliberated and decided to recommend that a separate legislation on strata titles be enacted, and the existing National Land Code 1965 (Act 56) for subsidiary titles provisions be repealed and replaced by the Strata Titles Act 1985 (Act 318). This legislation was enacted on 22nd May 1985, published in the Federal Gazette on 30th May 1985 and came into force on 1st June 1985. Although the provisions on strata titles are now in Act 318, this new act is still to be read and construed together with the provisions and rules of the National Land Code 1965 (Act 56).

Strata Titles Act 1985 (Act 318) is an Act to facilitate the subdivision of building or land into parcels and the disposition of titles. Most of the section in Strata Titles Act 1985 (Act 318) were enacted to make the law three-dimensional. For example, dimension on surface (land parcel and building), above surface (skybridge and balcony) and below surface (underground car parking and walkway). The Strata Titles Act 1985 (Act 318) contains 11 parts and is divided into 101 sections; it contains five schedules to the Act. However, one part has since been deleted. Part I contains preliminary provisions relating to the construction of the Act and its application to Peninsular Malaysia. Part II lays down the procedural requirements of subdivision of a building or land while Part III provides for the registration of strata titles upon approval of subdivision of a building or land. Part IV, which contains provisions regarding provisional blocks, facilitates phased developments of strata schemes. Part V touches on the division and amalgamation of parcels while Part VI lays down the rights and obligations attached to individual parcels and provisional blocks. Part VII deals with the management of a subdivided building upon its destruction while Part VIII touches on the termination of subdivision of subdivided building. Part IX, which formerly contained special provisions for low cost buildings, has been deleted since the third amendment of this Act added in Part IX (A) laid down the provisions regarding the Strata Titles Board. Finally, Part X contains miscellaneous applicability of the National Land Code 1965 (Act 56) in relation to dealings and insurance of title in continuation and other such matters (Strata Titles Act 1985, 2010).

(i) Amendment of Strata Titles Act 1985 (Act 318)

The Strata Titles Act 1985 (Act 318) has been amended four times since its promulgation. The first amendment was executed through the Strata Titles (Amendment) Act 1990 (Act A753), which came into force on 23rd February 1990. The second amendment was the Strata Titles (Amendment) Act 1996 (Act A951) that came into force on 2nd August 1996. This was followed by the Strata Titles (Amendment) Act 2001 (Act A1107) that came into force on 1st December 2001 and finally by the Strata Titles (Amendment) Act 2007 (Act A1290) that was enforced from 12th April 2007. There will be an amendment for Strata Titles Act 1985 in 2012 which cater many issues that pending since 2007.

The various amendments introduced by the 1990 amendment were aimed at further improving the procedures and processing of applications for the subdivision of buildings, to further safeguard the interests of purchasers of the strata scheme, improve certain aspects of the management of a strata scheme, remove ambiguities in the provisions themselves, and do away with the provisions that are anomalous when viewed in the context of the general legislative framework of the Strata Titles Act 1985 (Act 318) as a whole (Teo, 1998).

Later, to make it easier to apply for strata titles, the 1996 amendment enabled the developers of a building to submit an application for such titles even if the land was still held under a Qualified Title or if the Certificate of Completion and Compliance for occupation had not been issued. However, before approval could be granted in respect of the application, the final titles to the land had to be registered and the Certificate of Completion and Compliance issued, among other requirements. As for the issuing of strata titles for mixed developments, comprising multi-storey buildings, the 1996 amendment resolved the problem by allowing strata titles to be

issued for single storey buildings if they were part of the same strata scheme. The 1996 amendment also streamlined the rules governing the functioning of the management corporation charged with the administration of a strata scheme. Procedures for voting and the tabling of special resolutions were changed to allow for a more flexible decision-making process among council members of the Management Corporation (Teo, 1998).

The 2001 amendment primarily provided for the establishment of a Strata Titles Board to settle disputes, its jurisdiction as well as matters pertaining to the proceedings and representation before the Board. Provisions were also made to empower the Director of Land and Mines in a State and the Land Administrator in the Federal Territory to appoint a managing agent to exercise the functions of the management corporation in the event that the management corporation did not function properly. For the prosecution of offences under the Strata Titles Act 1985 (Act 318), the written consent of the Public Prosecutor is required (Khadijah, 2006).

Finally, the 2007 amendment changed 'and the Federal Territory of Kuala Lumpur' to 'and the Federal Territory of Kuala Lumpur and Federal Territory of Putrajaya', and inserted after the word 'building' the phrase 'or land'. In this case, any alienated land having two or more buildings held as one lot under the final title shall be capable of being subdivided into land parcels with buildings of not more than four storeys held under the same strata scheme. Provisions have also been made in the operation of the Computerisation System of Strata Titles in any land registry with the insertion of the new Fifth Schedule, which allows making an entry on a Document of Title under the Computerisation System of Strata Titles.

To sum up, in this 2007 amendment, there are three types of application to be made in the subdivision of a property, where the application involved (a) building only, (b) buildings and land, or (c) land only. Finally, plans are afoot to enact legislations to overcome the problem of maintaining common areas in high-rise developments before the setting up of the management corporation. This will alleviate the problems of maintenance and provision of services for the residents. Hence, the Building and Common Property (Maintenance and Management) Act 2007 (Act 663) came into being, along with the 2007 amendment on 12th April 2007

to provide for the proper maintenance and management of buildings, lands and common properties in a strata scheme.

c) Building and Common Property (Maintenance and Management) Act 2007 (Act 663)

Along with the Strata Titles (Amendment) Act 2007 (Act A1290), the Building and Common Property (Maintenance and Management) Act 2007 (Act 663) was enacted and has been in force since 12th April 2007. It was enacted to provide for the proper maintenance and management of buildings, lands and common properties, which involved dimension on surface, above surface and below surface in a strata scheme. This Act will be repealed in 2012 and replace by the new Strata Management Act 2012.

The Building and Common Property (Maintenance and Management) Act 2007 (Act 663) contains eight parts, which are divided into forty-six sections. There are two schedules to the Act. Part I contains preliminary provisions relating to the construction of the Act and its application to West Malaysia. Part II relates to the administration of the Act, including the appointment of the Commissioner of Buildings and other officers, while Part III makes provisions for the management of building or land intended for subdivision into parcels, the establishment of a Joint Management Body once the building has been completed and delivered by the developer to purchasers, but before the Management Corporation is formed. Part IV touches on the building maintenance account while Part V lays down the building maintenance fund and sinking fund provisions. Part VI deals with the provisions for managing agents, detailing their powers and duties while Part VII lays down the provisions on the deposit and recovery of charges by the developer and Joint Management Body. Finally, Part VIII contains miscellaneous provisions for representation in civil proceedings, liability of directors, service of notice or order, power of entry, power to compound, regulations and prosecution.

In conclusion, the amending, repealing and replacing of such land laws, ordinances, codes, rules and regulations throughout the period of the land tenure system was designed to suit the needs of the prevailing economic development.

Changes were continually incorporated as the demand for land for commercial use increased in more modern times.

In conclusion, it can be seen that from the history of the land tenure system before and after the National Land Code 1965 (Act 56), Malaysia does recognise 3D property (dimension on surface, above surface and below surface). These 3D properties are explained in the sections below.

4.3 Tenure and Its Legal Framework

Law and legislation are a complex set of rules that have been developed gradually and naturally within each society to ensure its running orderly and the peaceful behaviour of its members.

Besides the National Land Code 1965 (Act 56), the Strata Titles Act 1985 (Act 318) and the Building and Common Property (Maintenance and Management) Act 2007 (Act 663), there are also other direct or indirect legal documents relating to land administration and real estate ownership as well on survey and construction that currently govern the land registration and are very important towards developing a 3D cadastre for 3D property rights in Malaysia. These are Federal Constitution 1957, Real Property Gains Tax Act 1976 (Act 169), Town and Country Planning Act 1976 (Act 172), Street, Drainage and Building Act 1974 (Act 133), Uniform Building By-Laws 1984 (G.N.5178/85) etc.

There are three ways to acquire land for dimension on surface, above surface and below surface. Firstly, the land can be acquired through alienation from the State authority under Section 42, National Land Code 1965 (Act 56). Secondly, land can be acquired through dealings, and finally through inheritance. State agencies and the Federal Government are required to go through State authority to acquire land in

accordance with the Land Acquisition Act 1960 (Act 486) (Land Acquisition Act 1960, 2010).

Furthermore, the State authority shall have power to alienate State land under Section 76 to 78 of the National Land Code 1965 (Act 56), reserve State land and grant leases of reserved land under Sections 62-64 of National Land Code 1965 (Act 56), permit the occupation of State land, reserve land and mining land under temporary occupation licences under Sections 70-75 of the National Land Code 1965 (Act 56) and permit the use of air space on or above State land or reserved land where such air space shall be within the confines of a structure under Section 75A-75G as well as the disposal of underground land below surface under Section 92A to 92I of the National Land Code 1965 (Act 56).

Meanwhile, State authority shall have power to alienate State land for subdivision of a building or land into parcels. Section 6 of the Strata Titles Act 1985 (Act 318) states any land building having two or more storeys on alienated land held as one lot under final title (whether Registry or Land Office title) shall be capable of being subdivided into parcels; and any land on the same lot shall also be capable of being subdivided into parcels each of which is to be held under a strata title or an accessory parcel. In addition, this section also states that any alienated land having two or more buildings held as one lot under final title (whether Registry or Land Office title) shall be capable of being subdivided into land parcels each of which is to be held under a strata title or an accessory parcel.

Section 6 of the National Land Code 1965 (Act 56) states the Director General of Land appointed under the Federal Commissioner Ordinance 1957 shall be known as the Director General of Lands and Mines. The Director General of Lands and Mines is appointed by the *Yang di-Pertua Agong* to consult and correspond through meetings with State Directors to furnish him/her with reports and information relating to land administration within the State. The Director General of Lands and Mines may also inspect the Land Registry or Land Office records in any State with the approval of the State Director.

Article 91 of the Federal Constitution 1957 provides for establishment of the National Land Council, or better known as *Majlis Tanah Negara* (MTN). The Prime Minister chairs the Council which has a representative from each State, usually the Chief Minister or *Menteri Besar*, and a maximum of ten representatives from the federal government. The duty of the National Land Council is to formulate a national policy for the promotion and control of the utilisation of land throughout the Federation. This exercise is carried out from time to time in consultation with the federal and State governments and the National Finance Council. It is mandatory for both the federal and State governments to follow the policies formulated by the National Land Council (Federal Constitution 1957, 2005).

Section 11 of National Land Code 1965 (Act 56) specifies that the State authority may be notified in the Gazette of the administrative areas by dividing it into districts, *mukims*, towns or villages after it has been surveyed and declared by the State Director of Survey and Mapping. The State authority may appoint a State Director of Land and Mines, a Registrar, a Director of Survey and Mapping, District Land Administrators and other officers that the State authority may consider necessary. Sections 40 to 42 of the National Land Code 1965 (Act 56) also points out that all State land, minerals and rock material within the territories of the State shall be vested solely in the State authority.

4.3.1 Surface Landed Rights

In the Malaysian land registration, the process of recording rights in land is via the registration of the land title. According to the Federal Constitution 1957, land matters are under the jurisdiction of State governments and are handled by the respective State Registry or District Land Office, depending on where the Document of Title is formerly registered and is guaranteed by the Federal Constitution 1957 as stated under Article 13 (rights to property). Once an ownership has been registered,

the owner's title and interest are indefeasible except where it involves fraud or misrepresentation.

Land ownership is governed by the National Land Code 1965 (Act 56) and is based on the Torrens System. It is protected by the National Land Code 1965 (Act 56) in Section 340 (Registration to confer indefeasible title or interest, except in certain circumstances). According to Section 5, National Land Code 1965 (Act 56):

"Land includes:

- (a) The surface (including air space) of the earth and all substances forming that surface;
- (b) The earth below the surface and all substances in the surface;
- (c) All vegetations and other natural products, whether or not requiring the periodical application of labour to their production, and whether on or below the surface:
- (d) All things attached to the earth or permanently fastened to anything attached to the earth, whether on or below the surface; and (e) Land covered by water."

(National Land Code 1965, 2010: 34)

Under Section 50 of the National Land Code 1965 (Act 56), the State authority has the power to vary or extend the time or rescind any provision in any lease, licence or permit or reserve land under any land law. Furthermore, Section 92 of the National Land Code 1965 (Act 56) states that the alienation of State land under the final title shall confer a title to the land that shall be indefeasible and have its rights exercisable by anyone or body. However, under Section 340 of the National Land Code 1965 (Act 56), the registration to confer an indefeasible title or interest shall not be indefeasible in any case of fraud or misrepresentation, where the registration is obtained by forgery and the title or interest was unlawfully acquired.

Meanwhile, Section 51 of the National Land Code 1965 (Act 56) classifies land as land above the shoreline, foreshore and seabed, where land above the shoreline shall be classified as town land, village land and country land. These lands

can be categorised under land use for agriculture, building and industry under Section 121 and Section 122 of the National Land Code 1965 (Act 56). Each piece of land shall be imposed with implied conditions and expressed conditions and restrictions in the interest affecting the land (see Section 115, Section 116, Section 117 and Section 120 of National Land Code 1965 (Act 56)).

A proprietor of a parcel has similar powers as those conferred by the National Land Code 1965 (Act 56) on a proprietor of an alienated land. In regard to common property, the proprietor has the right of use, which he would have if he and the other proprietors were co-proprietors. A parcel proprietor may apply to have his parcel divided. If he has more than one parcel and they are contiguous, he can also apply to have them amalgamated and issued with one strata title.

Section 135 and Section 140 of the National Land Code 1965 (Act 56) define subdivision and partition as the sub-division of any alienated land held under Registry or Land Office title by the proprietor into two or more portions to be held by him under separate titles. In addition, any alienated land held by two or more persons as co-proprietors may be partitioned. On the other hand, Section 146 of this Act defines amalgamation as the merging of two or more contiguous lots of alienated land into one lot, to be held by the owner under a single title where the amalgamation of any lots not situated in the same *mukim*, town or village.

4.3.1.1 Easement or Right of Way

The Malaysian statute under Section 282 and Section 283 of National Land Code 1965 (Act 56) defines easement as any right granted by one proprietor to another, in his capacity as such and for the beneficial enjoyment of his land. The rights capable of being granted as easements are the rights to do something in, over or upon the servient land, and the rights that something should not be so done. However, the said rights do not include the right to take anything from the servient

land, or right to the exclusive possession of any part if nothing shall prevent the existence as an easement of any right involving the placing and maintaining in or upon the servient land of any installations or other works.

In addition, no rights in the nature of an easement shall be capable of being acquired by prescription except where it is acquired by an implied grant. The power of a proprietor to grant easements should be exercisable in any particular case, subjected to any prohibition or limitation imposed by any other written law for the time being in force, and to any restriction in the interest to his land. No easement affecting the enjoyment of land, which is subjected to any lease, tenancy or charge, should be capable of being granted without the consent of the person or body for the time being entitled to the benefit, and such consent should be signified in the instrument by which the easement is granted. Again, no cross-easements of support in respect of party wall may be granted by adjacent proprietors except in respect of a wall that stands on their common boundary.

Under Malaysian statute, Section 388 of National Land Code 1965 (Act 56), Land Administrator may create rights of way on the land, which shall be known as Land Administrator's rights of way. The rights conferred and obligations imposed in respect of any land by the creation of a Land Administrator's rights of way shall run with the land and shall be binding on the land's proprietors and occupiers for the time being. Under Section 389 of National Land Code 1965 (Act 56), a Land Administrator's rights of way may be a right of way created for the benefit of the State authority or the proprietor or occupier of any alienated land (private right of way) or a right of way for the benefit of the public (public right of way).

A private right of way created for the benefit of the State authority should authorise persons acting with the express or implied consent of the State authority to pass and re-pass between reserved land or forest reserve and a public terminal. It also includes the purpose of removing rock material from any land, to pass and re-pass between the land and a public terminal. Furthermore, a private right of way created for the benefit of the proprietor or occupier of alienated land should authorise the proprietor or occupiers, as the case may be, and persons acting with the express or implied consent of the proprietor or occupier to pass and re-pass between the land

and a public terminal. Meanwhile, a public right of way should authorise the public to pass and re-pass between any specified area of land and a public terminal.

Apart from these wide powers of disposition expressly dealt with in the Act, the proprietor has wide powers of use and enjoyment in respect of the parcel/land parcel. This implies that, in principle, a parcel proprietor has the full range of entitlements usually ascribed to owners as indicated above. These include inter alia the right of occupation, the right to prevent someone from entering the parcel/land parcel and the right to make the fullest use of the parcel/land parcel (See Section 44(1)(a) of the National Land Code 1965 (Act 56)).

A crucial question is whether a parcel/land parcel proprietor really acquires the same extensive power of use and enjoyment over his/her parcel/land parcel as a landowner has over his/her house. In this regard, the question can be posed whether a parcel/land parcel proprietor can genuinely occupy, use and enjoy his or her parcel/land parcel at his or her discretion, prohibit other persons from encroaching on his or her rights and freely dispose of and alienated his or her parcel/land parcel. More practically, one can enquire whether the fact that the proprietor has obtained ownership of the parcel/land parcel entitles him to dispose of the parcel/land parcel to anyone he likes, remove inside walls and doors, redecorate the parcel/land parcel and equips it with a new bathroom or kitchen. One may also ask whether he or she is allowed to drive nails into the walls to hang pictures and repaint, retile and fit the parcel/land parcel out with wooden panels at his/her discretion. One has to concede that the owner of a house on a separate plot of land is entitled to do most of these things.

4.3.2 Underground Rights

For property deals with dimension below surface, underground land means land that lies below the surface of the earth while stratum means a cubic layer of

underground land. Section 44(1)(a) of the National Land Code 1965 (Act 56) states that the extent of the exclusive use and enjoyment of so much of the land below that surface is limited only to such a depth reasonably necessary to the lawful use and enjoyment of the land.

According to Section 92B and Section 92E of the National Land Code 1965 (Act 56), the State authority may specify the depth up to which the underground land directly and immediately, below the alienated land may be used, and different depths may specified in respect of different parts of such underground land. Provided that where any regulations made under this part provide for the minimum depths, the depth shall not be less than the minimum depth provided for the class, description of location of land to which the alienated land belongs, or where it follows the regulations made by the Minister under Section 92I of the National Land Code 1965 (Act 56).

A committee of the Department of Director General of Lands and Mines (JKPTG), the Department of Mineral and Geosciences (JMG) and the Department of Public Work (JKR) have prepared a proposal for fixing the minimum depth for the use of underground surface. It depends on the usage and category of land on the land surface and the geology factor of a local area (Federal Lands and Mines Director General Secular, 2008).

The National Land Code (Underground Land) (Minimum Depth) Regulations 2006 in National Land Code 1965 (Act 56) were introduced in 22nd November 2006 to specify the minimum depth of such underground lands. However, as geological factors differ from one place to another, a uniform depth cannot be specified. For agriculture land use, the fixing of minimum depth is based on, firstly, type of crops and the need to protect the rooting zone. This is because the depth of the rooting zone for crops in Malaysia is a maximum of five metres. Secondly, a relevant consideration is the right of enjoyment of the landowner to construct the traditional dug well for obtaining alternative water supply. The depth of the traditional dug well depends on the level of the underground water of the local area; usually it is approximately six metres from the earth surface. After taking these two factors into consideration, a minimum depth of six metres from the earth surface has been

suggested as the depth for underground land alienation by the committee for the category of agriculture land use.

For the category of building and industry land use, the fixing of minimum depth depends on the depth of piles for building on the earth surface. The determination of type and size of the piles used is dependent on the type of soil. Usually, the basic depths of a single and a double-storey building for residential purpose are eight metres and ten metres respectively, while the basic depths of such buildings for industrial purposes are ten metres and fifteen metres respectively for the type of hard soil. Hence, depending on the type of building, the joint committee suggested that the minimum depth of alienation underground land be ten metres from the earth surface, extending to fifteen metres for industrial constructions.

4.3.3 Strata Rights

Under Malaysian strata titles statutes, parcels/land parcels created from strata titles can be divided into three dimensions, *viz.* dimension on surface, dimension above surface and dimension below surface.

According to Karr (1973) and Abdullah (1996), the strata scheme offers a place to stay that comes with a new life style, there are many reasons for buying a strata property. Among them are a change of life style and the benefits of strata scheme living. Unlike the purchase of a terrace house, a semi-detached house or bungalow, the purchase of a strata property involves the transfer of rights of parcel/land parcel. What is purchased are the rights to a parcel/land parcel under the Strata Titles Act 1985 (Act 318). All property rights, pending the issue of strata title, are contained in the sale and purchase contract document alone. The document attests to ownership of rights to the property developer. To own the strata property itself, the purchaser has to await the issuance of the strata title.

The idea of the strata title is based on the horizontal and vertical subdivision of a building or of air space, instead of the normal vertical subdivision of land. The lands and buildings erected upon it are divided into parcels, land parcels and common properties. Each parcel and land parcel consists of an individual apartment or house, for which a separate strata title is issued to the registered proprietor. All parts of the building and land that do not form parts of an individual apartment or house become common property, managed by the Management Corporation or body corporate of the strata scheme on behalf of all the proprietors of parcels and land parcels in the strata scheme (Hussain, 1999). From the explanations above, it is understood that the strata title contains rights of property that encompass the dimension on surface, the dimension above surface and also the dimension below ground surface.

A good example in strata rights is the property deals with dimension above surface, Section 75A of the National Land Code 1965 (Act 56) allows the issue of a permit use of air space above State land or reserved land for a period not exceeding twenty-one (21) years for the purpose of erecting, maintaining and occupying a structure on or over State land or reserved land as an adjunct to any structure on the adjoining land. However, these types of rights of the proprietor of any alienated land were limited to the exclusive use and enjoyment of only so much of the land above that surface as is reasonably necessary to the lawful use and enjoyment of the land. In addition, Section 44(1)(a) of the National Land Code 1965 (Act 56) says that the extent of the exclusive use and enjoyment of so much of the column of air space above the surface of the land is limited only to such a height reasonably necessary to the lawful use and enjoyment of the land.

Section 4 of the Strata Titles Act 1985 (Act 318) defines a parcel/land parcel proprietor as a registered parcel proprietor. Thus, in order to qualify as a parcel proprietor under the Act, a purchaser of a parcel/land parcel must have the strata title transferred to and registered under his/her name. Upon registration, an individual strata title parcel/land parcel will be issued to the purchaser. In addition to the vesting of ownership in the individual parcel/land parcel as distinct from the common property, the parcel proprietor must also have his share in the common property endorsed and certified on that transferred strata certificate of title as well as

in the strata roll that must be prepared by the management corporation under the Act under Section 15, Section 16 and Section 17 of Strata Titles Act 1985 (Act 318).

Section 5 of the Strata Titles Act 1985 (Act 318) provides that the Act has to be read and construed as if it were part of the National Land Code 1965 (Act 56). Consequently, the provisions of the National Land Code 1965 (Act 56) and the rules made under it, which are consistent with the provisions of the Strata Titles Act 1985 (Act 318) and the by-laws, and applicable to parcels/land parcels, should apply in all respects to parcels/land parcels held under strata titles. The National Land Code 1965 (Act 56) thus treats the rights of registered proprietors to parcels/land parcels within multi-storey buildings in the same way as it treats the rights of registered proprietors of pieces of land (See Section 92 of National Land Code 1965 (Act 56)). It provides expressly that the proprietors of parcels/land parcels have the same rights in respect to their parcels/land parcels as a land proprietor has over his or her land (See Section 5(2) of Strata Titles Act 1985 (Act 318)). All the incidents of ownership of immovable property conferred on the registered proprietors of alienated or registered land are conferred on the parcel/land parcel proprietor of a subdivided building and, in principle, a parcel/land parcel proprietor can deal with his/her parcel/land parcel as he or she deems fit. In addition, no rights in an accessory parcel should be dealt with or disposed of independently of the parcel to which such accessory parcel has been made appurtenant and no rights in the common property should be disposed of by a proprietor except as rights appurtenant to a parcel (See Section 34(1)(a) of Strata Titles Act 1985 (Act 318)).

In a strata subdivision, the land and improvements erected on it are divided into parcels, land parcels and common properties. Section 6 of the (Strata Titles Act 1985 (Act 318) allows any building having two or more storeys on alienated land and any alienated land having two or more buildings held as one lot under the final title (Registry title or Land Office title) to be subdivided into parcels, each of which is to be held under a strata title or an accessory parcel.

According to Section 7 of the Strata Titles Act 1985 (Act 318), the proprietor of an alienated land on which there is any building may apply for subdivision of the property. Notwithstanding this, the proprietor of any alienated land held under a

qualified title, and which has been duly surveyed and in respect of which a Certified Plan has been approved by the Director of Survey, may apply for the subdivision of any building or land. These can be done before the certificate of completion and compliance has been issued for the building. Meanwhile, Section 25 of Strata Titles Act 1985 (Act 318) states that a parcel proprietor may divide his parcel into two or more new parcels, each to be held under a separate strata title. At the same time, the proprietor may amalgamate two or more contiguous parcels/land parcels that were held by him to form one parcel/land parcel to be held under a single strata title provided they share at least one common boundary, consisting of a floor or ceiling.

It is important for the strata title owner to know the physical extent of his parcel/land parcel to which he has exclusive ownership. The Malaysian statute under the Strata Titles Act 1985 (Act 318) defines parcels in relation to a subdivided building as one of the individual units (except where it is an accessory parcel), which is held under a separate strata title, and in relation to subdivided land. A land parcel means a unit comprising subdivided land on which there is a completed building of not more than four storeys which is held under a strata title.

A parcel is a cubic entity formed by the walls, ceilings and floors of a residential apartment or business premise. The centre lines of the outer boundary walls form the vertical boundaries and the centre lines of the floors and ceilings form the horizontal boundaries of the parcel. In other words, the purchaser of a parcel purchases the internal space enclosed by the four outer walls, ceiling and floor of his parcel together with part of the structure up to the centre of the walls, floors and ceilings. This means that the purchaser also owns all the inner walls dividing the rooms inside the parcel. However, the outer structure of the building is common property owned by the management corporation.

The legal framework governing the management of subdivided buildings or land after the issuance of strata titles is a very important part of strata title. The management has to run the building on a self-governance or self-management basis and ensure harmonious community living. The management of the building will go on until the termination of the subdivision that is the building is destroyed or when all the parcels are owned by the same proprietor and he decides to terminate the

subdivision. Thus, it is vital that the provisions of the strata title laws are fully understood so that the management of the building is properly undertaken, in accordance with the provisions of the law.

Under Section 10(3) of the Strata Titles Act 1985 (Act 318), each parcel/land parcel in lands comprised in a strata title scheme must be defined on the storey plan. The storey plan must contain the outlines of each proposed strata parcel/land parcel and the respective boundaries by reference to their floors, walls and ceilings showing the horizontal dimensions. Under these circumstances, the developer may choose any surface of the wall, floor and ceiling as the boundary lines of the parcels. Otherwise, the common boundary of a parcel/land parcel with another parcel/land parcel or with common property is taken to be the centre of the floor, wall and ceiling unless provided otherwise in the storey plan.

4.3.3.1 Conditions Imposed on Provisional Block

The Malaysian statute under the Strata Titles Act 1985 (Act 318) defines a provisional block as a block in respect of a building proposed to be, or in the course of being, erected on a building or land, for which a separate provisional strata title is applied or is to be registered, or has been registered. This concept of provisional block, which allows for phased development, is to overcome the financial burdens faced by the developers for further construction of the uncompleted buildings. Phased development also allows developers to take into account the changing market conditions. Moreover, phased development also allows purchasers to obtain strata titles in the earlier phases without having to wait for the whole strata scheme to be completed. In turn, this will enable financial institutions to obtain better securities from their borrowers.

To prevent the developers from taking advantage of the provisions relating to the phased development and to protect the interest of the purchasers of parcels in the earlier stages, more specific conditions and additional requirements must be complied with in applications for strata titles under Section 9(2)(a), 9(2)(b), 9(2)(c), 10(A)(2a), 10(A)(2b), 10(A)(2c) and 10(A)(2d) of the Strata Titles Act 1985 (Act 318). Furthermore, under Section 70 of the Strata Titles Act 1985 (Act 318), in any dealing of a provisional block that has been registered, the registration should not pass any title or interest in the said provisional block; the Registrar should, upon discovery of the registration, cancel the registration and no person or body affected by such cancellation would be entitled to any compensation.

Finally, under Section 20 of the Strata Titles Act (Act 318), upon the completion of all the buildings within the provisional block, the original proprietor of the building must make an application, within six months from the date the building is certified by the public or local authority to be fit for occupation or use, for the issue of separate strata titles to the completed parcels. Under this provision, the purchasers of the provisional block are assured the issuance of strata titles without further delay. In fact, failure to apply within the stipulated period will be subjected to a penalty and the extension period would be granted only one time not exceeding three months.

4.3.3.2 Common Rights

Common property is any natural resource used in common, whether it is an open access resource or a limited access and managed resource (Stevenson, 1991). In Malaysia, the Strata Titles Act 1985 (Act 318) defines common property as:

... so much of the lot as is not comprised in any parcel (including any accessory parcel), or any provisional block as shown in an approved strata plan.

The Building and Common Property (Maintenance and Management) Act 2007 (Act 663) defines common property, in relation to a development area as an entity that is not comprised in any parcel, such as the structural elements of the building, stairs, stairways, fire escapes, entrances and exits, corridors, lobbies, fixtures and fitting, lifts, refuse chutes, refuse bins, compounds, drains, water tanks, sewers, pipes, wires, cables and ducts that serve more than one parcel. It also includes the exterior of all common parts of the building, playing fields and recreational areas, driveways, car parks and parking areas, open spaces, landscape areas, walls and fences, and all other facilities and installations and any part of the land used or capable of being used or enjoyed in common by all the occupiers of the building.

The concept of common property facilitates identification of the part of the strata scheme that falls under the management corporation's responsibility. It is the management corporation's duty to carry out the necessary repair or maintenance on the relevant part of the building, which is part of the common property. As for the part of the building that forms part of the parcel, such duty falls on the proprietor when damage is happened inside the parcel. However, the determination of where the boundary lies between a parcel and common property is important because the proprietor has the right or power to deal with the former whilst the management corporation deals with the latter.

In short, all land except land that forms a parcel/land parcel and part of an accessory parcel will be included in a strata scheme as common property. Thus, the soil beneath the building, the land for the yet undeveloped parts of the scheme and the air space around and above the building are part of the common property. However, parts of the land may be withdrawn from the common property and earmarked as accessory parcels.

Apart from land, the common property comprises all parts of the building or buildings that are not included in a parcel/land parcel or an accessory parcel. Included in the common property are, if the developer has not specified otherwise, the substance of the outer shell of the strata title building from the centre line of walls, floors and ceilings of the parcel, and the roofs and foundations of the building.

Under Section 3 of the Third Schedule, by-laws for the regulation of subdivided buildings of Strata Titles Act 1985 (Act 318), part of the common property can be granted by agreement by the management corporation to any parcel/land parcel proprietor for his exclusive use and enjoyment of part of the common property or special privileges. However, there is no requirement that the grant should be made pursuant to any form of resolution to ensure that it is not prejudicial or detrimental to the interests of other parcel/land parcel proprietors. Neither is there any provision under the Act for such a grant to be noted on the strata register or for a description of the specific areas of the common property concerned to be recorded. Such provision as noted above should be incorporated in the Strata Titles Act 1985 (Act 318) as it would place intending purchasers in a position in which they would be better informed of the overall state of affairs of the strata scheme in relation to the common property.

Section 35 of the Strata Titles Act 1985 (Act 318) mentions in favour of and against each parcel proprietor that there should be implied rights of support, service and shelter. Each parcel proprietor is entitled to have his parcel sheltered by all such parts of the subdivided buildings as are capable of affording shelter and may, for the purpose of replacing, renewing or restoring any such shelter, enter upon the common property or any other parcel. The rights and obligations mentioned above should come into effect without memorial or notification in the strata register, and they should be implied in respect of them such ancillary rights and obligations as are reasonably necessary to make them effective. In this section, right of support means the right to subjacent and lateral support by the common property and by every other parcel capable of affording support. Meanwhile, right of service means rights to the passage or provision of water, sewage, drainage, gas, electricity, garbage, artificially cooled or heated air and other services, including telephone, radio and television services through or by means of pipes, wires, cables or ducts.

4.3.3.3 Rights to Make Rules

In a subdivided building or land, by-laws or better known as house rules regulate the control, management, administration, use and enjoyment of the building. The Strata Titles Act 1985 (Act 318), Section 44 provides that the Third Schedule's by-laws shall be in force for all purposes in the subdivided building or land, from the opening of the book of the Strata Register and shall not be amended by the management corporation.

According to Section 14 of the Building and Common Property (Maintenance and Management) Act 2007 (Act 663), the Joint Management Body shall keep a record of the house rules in force from time to time. The Joint Management Body must supply a copy of house rules at a reasonable cost to the purchaser on receipt of an application in writing and make such house rules available for inspection. The Joint Management Body shall lodge the house rules with the Commissioner of Building within fourteen days of the passing of the resolution by the Joint Management Body approving the house rules. The State authority may, in respect of a local authority area or any other area, appoint a Commissioner of Building for the purpose of administering on issues on management of stratified building.

In brief, these by-laws are primarily to clarify the duties expected of a proprietor within a subdivided building or land and the prohibitions imposed on him, as well as to ensure the reasonable use and enjoyment of the common property in relation to other proprietors. The by-laws in force in the subdivided buildings or lands are binding on the management corporation and all the proprietors. The by-laws empower the Management Corporation to make agreements with a particular proprietor for the provision of amenities or services by the Management Corporation to and in respect of his parcel. The by-laws also require the Management Corporation to maintain in a state of good and serviceable repair as well as produce all insurance policies effected by the Management Corporation.

4.3.3.4 Rights to Manage Strata Scheme and Form Management Corporation / Joint Management Body

When we talk about the management of a subdivided building or land, we are essentially referring to the concept of a Management Corporation, which is incorporated under the law to play the pivotal role of managing the building. As strata schemes are becoming more common, it is of utmost importance to ensure that such schemes are properly managed.

In a strata scheme, there may be one or more completed buildings or lands, which are subdivided in parcels or land parcels, including accessory parcels and provisional blocks. Meanwhile, all other parts, for example, corridors, lifts external wall and open spaces are deemed common property. The maintenance and repair of an individual unit, including any accessory parcel, is the responsibility of the proprietor himself, while the maintenance of common property is a shared responsibility. Therefore, the law provides for the formation of Management Corporation to facilitate the proper control and management of common property for the benefit of all the proprietors.

Strata title ownership also implies a new lifestyle or close community living whereby all the owners need to co-exist peaceably with one another and cooperate to achieve common goals for mutual benefit. Fees need to be imposed for maintenance services to the parcel/land parcel owners. The proper management of common facilities and amenities is also vital for the enjoyment of all proprietors. In brief, the interests of the proprietors in a strata scheme are indivisibly linked to a system of community of property. This community cannot function effectively without a properly structured organisation to handle the problems and everyday details involved in keeping the scheme functioning smoothly and efficiently. It is clear then that there is a need for all the parcel proprietors to articulate their ideas or feelings as a collective whole through a representative body.

In a strata scheme, the ownership of the parcel/land parcel is issued by separate documents of the strata title while the original land title is registered under

the name of the Management Corporation. The Management Corporation, which comes into existence immediately upon the opening of a book of the strata register, comprising all the owners of the units, is responsible to control, manage and administer the maintenance in a state of good and serviceable repair, the fixtures and fittings, including lifts as well as renew sewers, pipes, wires, cables and ducts existing on the lot and used or capable of being used in connection with the enjoyment of more than one parcel or the common property. Where practicable, the Management Corporation can establish and maintain suitable lawns and gardens on the common property, enforcing by-laws or house rules, and collecting contributions for the management fund from proprietors to maintain the building.

Under Section 42(1) and 42(2) of the Strata Titles Act 1985 (Act 318), the Management Corporation is a separate legal entity and, like a company, has perpetual succession, a common seal and may hold property, sue and be sued in its own right and is stated not to be subjected to the Companies Act in Malaysia. The Management Corporation, registered as the proprietor of the common property on behalf of all the owners of the parcels/land parcels, has custody of the land title with the same powers over it as are conferred on a proprietor of land by the National Land Code 1965 (Act 56). It is empowered with duties to look after the maintenance of the building and common property, either managed by managing agents appointed by the Management Corporation or the elected council members on behalf of the Management Corporation.

A parcel/land parcel proprietor automatically becomes a member of this corporation when a parcel/land parcel is registered in his name. In the interest of effective management, parcel proprietors must sacrifice some independence and power of individual decision-making and submit to collective decision-making by the Management Corporation. The Management Corporation is expected to act in accordance with the Act and the by-laws in making decisions on the management and administration of a wide range of aspects of communal living.

Under Section 39(4) and 39(5) of the Strata Titles Act 1985 (Act 318), the management corporation has to perform its functions through its principal organ and the standards and policies for the management and administration of the scheme by

giving effects to its resolutions through exercising and performing its statutory functions. Under Section 50 of Strata Titles Act 1985 (Act 318), if the Management Corporation fails to fulfil its functions properly, an application may be made to the court, under Section 51 of Strata Titles Act 1985 (Act 318), for the appointment of an administrator to replace the Management Corporation and the manager of the scheme.

The Management Corporation is the medium through which the parcel proprietors control and manage the strata scheme. Section 40 of the Strata Titles Act 1985 (Act 318) restricts the Management Corporation during the initial period to amend its by-laws in such a manner that a right is conferred or an obligation is imposed on one or more but not all, borrow monies or give securities, or enter into any maintenance or service contracts for any periods extending beyond the expiration of the initial period. Meanwhile, Section 43 of the Strata Titles Act 1985 (Act 318) imposes and confers upon the Management Corporation a number of functions and powers to enable it to efficiently and effectively discharge its obligations and functions for the benefit of all the proprietors in the strata scheme. In addition, the Management Corporation should establish a sufficient management fund to meet administrative expenses as may be incurred for the purposes of controlling, managing and administering the common property, paying rent, rates and premiums of insurance and discharging any other obligations of the Management Corporation.

Section 4 of the Building and Common Property (Maintenance and Management) Act 2007 (Act 663) mentions that if a building or land intended for subdivision into parcels has been completed before the commencement of this Act and vacant possession of the parcels has been delivered by the developer to purchasers but the Management Corporation has not come into existence, therefore, a Joint Management Body (JMB) shall be established consisting of the developer and not less than five but not more than twelve purchasers upon the convening of the first meeting not later than twelve months from the commencement of this Act or from the date of delivery of vacant possession of the parcels to the purchasers on or after the commencement of this Act. From among the members of the Committee elected, there would be an elected chairman, a secretary and a treasurer. This committee has the power to perform duties and conduct business on behalf of the corporation (see

Section 11 of Building and Common Property (Maintenance and Management) Act 2007 (Act 663)).

Under Section 22 of the Building and Common Property (Maintenance and Management) Act 2007 (Act 663), any surplus monies from the developer's Building Maintenance Account after payments of all the expenditures should be transferred to JMB Building Maintenance Fund not later than one month from the date of establishment of JMB, which shall be maintained by the JMB. The fund should be solely for ensuring that the common property of the building is in the state of good repair and maintaining the common property. It also includes paying for expenses incurred in providing cleaning services for the common property, security services and amenities for the occupiers of the building. Besides, the fund would also be used for paying premiums for the insurance of the building against damage by fire and other risks, paying rent and rates and any other expenses, costs or expenditures related to the procurement of goods or services.

Section 8 of the Building and Common Property (Maintenance and Management) Act 2007 (Act 663) provides the duties of JMB, which would include the maintaining of the common property and keep it in a state of good and serviceable repair, insure and keep the insured building to the replacement value of the building against fire and other risks. Here, the powers of JMB would include collecting the maintenance and management charges from the purchasers according to the allocated share units, authorise expenditure for the carrying out of the maintenance and management of the common property, to make house rules for the proper maintenance and management of the building and so on. According to Section 15 of the Building and Common Property (Maintenance and Management) Act 2007 (Act 663), the JMB would hand over to the Management Corporation not later than one month and would be deemed dissolved after three months, both from the date of the first meeting of the Management Corporation for the building.

In short, the Management Corporation is an integral part of condominium living. It is common for the Management Corporation to be formed on completion of the condominium or, which is far too late, when grievances start to arise. Condominium management is not simple. It is defined as the overall control and

supervision of the condominium, within pre-set income and expenditure levels, in order to enhance the values of the condominium units in that complex. The aim, in short, is to achieve value-added management. Such value-added management can only materialize if the condominium is being run effectively and smoothly to the overall satisfaction of the owners and residents. A natural consequence of this will be an increase in the values of the units in that condominium.

4.3.3.5 Rights to Settle Disputes through a 3D Property

The title plan may not accurately represent the exact positions of the boundary. The Strata Titles Act 1985 (Act 318) allows under certain conditions to determine and record the exact line of boundaries on a register title, to avoid any future boundary dispute. Parcel/land parcel proprietors in strata schemes frequently interact with each other as they enter the building's lobby, elevator, parking lot or common recreational facilities. The closer the proximity and the more frequent the interaction, the greater the opportunity for personality clashes to arise.

A property in a subdivided building or land is known as a parcel/land parcel for which a strata title is registered. Under Section 13(3) of the Strata Titles Act 1985 (Act 318), the common boundary of a parcel with another parcel or with the common property is taken to be the centre of the floor, wall, ceiling unless provided otherwise in the relevant storey plans. However, the problem with this definition of boundary is that there may be disputes when damage is sustained to a wall, window or door as to who is responsible for fixing it and to what extent. Here, party wall means a wall forming part of a building and used or constructed to be used for separation of adjoining buildings belonging to different owners or occupied by different persons either constructed or abutting a common boundary.

Under Section 9(1)(h)(i) and 9(1)(h)(ii) of Strata Titles Act 1985 (Act 318), a parcel/land parcel will include those built-up floor areas that are delineated and

marked as parcel/land parcel by the developer on its approved building plan and in its proposed strata plan. Each parcel/land parcel constructed or to be constructed by the developer must have adequate means of access and internal communication within the high-rise building, which does not pass through another adjoining parcel/land parcel and common property. Therefore, the peculiar feature of a parcel/land parcel is that it is surrounded by walls, floors and ceilings.

However, Section 13(3) of Strata Titles Act 1985 (Act 318) being presumptive in nature, does not prevent any strata developer from delineating boundary lines that do not coincide with the centre of the floor, wall or ceiling. In fact, there is no statutory provision in the Act that prohibits the strata developer from choosing the inner face or the outer face of a surrounding wall of a strata parcel to be one of the boundary lines of a strata parcel. This may be so, notwithstanding that the particular demarcated boundary line may coincide with a part of the facade of the high-rise building or perhaps even a townhouse.

Generally speaking, the Management Corporation often lacks the required toughness or mediation skills to resolve disputes. Furthermore, their impartiality is often suspect because of conflict of interest or inconsistency in their application of house rules. The doors of the civil courts are naturally open to hear these disputes. However, because of excessive delays, the costliness and technicalities of the adversarial litigation system and the ill will and hatred generated between the combating litigants or courts are often perceived to be an inappropriate forum for the settlement of disputes in strata title schemes.

It is indeed true that the modern world has neither the time nor inclination for the excessive delays and costliness that litigation entails. Everyone likes disputes to be resolved through a process, which is speedy, to avoid unnecessary absence from daily work. The cost of settling disputes must also not be unpredictably high or disproportionate to the importance of the claim. Furthermore, the person sitting in judgement must not be ignorant of the realities of the disputed situation.

Accordingly, the question is how to put in place a simple and inexpensive system for the settlement of disputes in strata schemes as an alternative to the

commencement of legal proceedings in the courts. Such an alternative system would cover cases where the circumstances do not justify the expense of court proceedings. By allowing the courts to devote their attention to more important cases, time and unnecessary expenses would be saved.

In the Malaysian strata scheme, the management corporation previously had to take the initiative in addressing conflicts. However, the corporations were not able to handle complex conflicts. Occasionally, corporations called upon the State Director of Land and Mines for advice, but since this official does not play an active role in supervising management corporations and is preoccupied with his other functions, his advisory service was very limited in practice. As a last resort, matters had to be brought before the court. To avoid a costly and time-consuming court procedure, the Malaysian legislation amended the Strata Titles Act 1985 (Act 318) in 2001 to provide for the establishment of the Strata Titles Board through Strata Titles (Amendment) Act 2001 (Act A1107).

The Strata Titles Board was set up as a mechanism to settle disputes amongst the parcel/land parcel proprietors and the Management Corporation as well as to enforce strata title legislation more effectively. Each board is under the jurisdiction of the State government. The Strata Titles Board is an independent statutory tribunal which is quasi judicial in nature. The adjudicative powers of the board are conferred by an Act namely Part IXA, Section 67A to Section 67X of the Strata Titles Act 1985 (Act 318). The board can only perform within the limits of its statutory jurisdiction and from time to time makes decisions to determine the legal rights of particular parcel/land parcel proprietors. The Board should consist of a president and such number of deputy presidents and not more than twenty other members. However, this IXA will be repealed and Strata Titles Board will be replaced by the Strata Management Tribunal under the new Strata Management Bill 2012 with additional features.

4.3.3.6 Termination of the Strata Titles

Section 56 of Strata Titles Act 1985 (Act 318) provides that when a subdivided building is damaged but is not totally destroyed, a court of competent jurisdiction, on the application of the Management Corporation, a parcel proprietor, or a registered chargee of any parcel, may order the settling of a scheme for the reinstatement or the continued use of the building in whole or in part. Any such scheme may include provision for the transfer of the interests of the proprietors of parcels, which have been wholly or partially destroyed to the other parcel proprietors in proportion to their share units. After the termination of subdivision, the Management Corporation shall become the proprietor of the lot as the trustee of the former proprietors.

4.4 Malaysian Cadastre System

Some of the information about Malaysian cadastre system is based on the Country Report on Cadastral Template (2003) from the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) (Nordin, 2003).

Malaysian land administration is traditionally based on Malaysian land law, while the Malaysian cadastre system has essentially two basic components, namely land registration and the cadastral survey and mapping that have different structures and authorisations. In brief, land administration in Malaysia is generally responsible for the collection of revenue, title registration, managing application for land dealings, changing of condition of land use, subdivision, partition or amalgamation of land or building and so on.

The traditional cadastre system that is practised in Peninsular Malaysia is a parcel bound system and provides essential land and property information of the lots

and land parcels. The existing Malaysian cadastral survey and mapping registration system and land registration system deal with properties located not only on the surface level, but also above and below the surface level. Therefore, the rights of the proprietor of the surface parcel shall also apply to the air space above and the space underground as well.

Land use right is one of the rights that are often based on occupation of land over a long period and can be defined in written law or by traditions. Hence, a systematic record of land in all matters is very important in the management, administration, planning and development of land. Due to the ever increasing demand for ground space, the traditional paradigm in law should be changed to keep up with the times (Nordin, 2001).

Peninsular Malaysia is a federation of States, each of which is responsible for its own land matters. All States operate a Torrens System of registration, administered by the State District Land Office and coordinated by the Land and Mines Office. Land registration is under the State government while cadastral survey and mapping is under federal jurisdiction. Land administration safeguards a variety of rights depending on the traditions of the country, but the legalistic cadastral survey system and land law still use plane geometric expressions for land and property tenure.

The objectives of the Malaysian land registration system are to provide security and simplicity to all dealings with land. It establishes and certifies, under the authority of the government, the ownership of an indefeasible title to land and simplifies, hastens and reduces the costs of all land dealings. The title is a conclusive proof that the person mentioned therein is the owner of the land described therein. Valid titles require an accurate description of boundaries and as such, the cadastral survey plays an important role in the system.

The Malaysian land registration system provides for textual and spatial information that is consistent with the two aforementioned components of the system. Although not strictly part of the cadastral survey system, valuation, local government and planning authorities are heavily reliant on the land registration

system. They utilise the information provided by the system in conducting their business, and work in close coordination with the institutions supporting the system.

The most important element in the land registration component is the type of title called system of land tenure and the nature of government guarantee. The system provides for registration to confer indefeasible title or interest, except in certain circumstances, such as through fraud or misrepresentation or registration obtained by forgery or by means of an insufficient or void instrument. Essentially, for alienation under the final title, it only becomes effective from the time of the registration of the Register Documents of Title (RDT) at the Land Office, whereby the Issue Document of Title (IDT) would be simultaneously issued to the registered proprietor of the land. The Land Office Title is considered as appropriate in the case of rural land lying above the shoreline, and not exceeding ten acres in area. On the other hand, the Registry Title is considered appropriate in the case of town land and village land, or land included in any part of the foreshore and seabed that exceeds ten acres in area. Both the Register Documents of Title and the Issue Document of Title have been affixed to them and is appropriately sealed, a Plan of the Land, certified as correct by or on behalf of the State Director of Survey and Mapping.

The Document of Title can be considered the pillar of the documenting machinery in the registration system (Nordin, 2001). The registration records are in the form of bound books, known as the register of grants and the register of State leases. Every Document of Title is compiled in a books series and serially numbered for every piece of property. Nordin (2001) noted that the Document of Title serves as evidence of ownership and with it, the proprietor can make any dealing such as charge, transfer, lease, sale or grant right of easement over the property. Thus, all transactions would be recorded and the new owner's or current owners' name(s) would be endorsed on both the Register Document of Title and Issue Document of Title. The latter is surrendered to Land Office for this process.

There are six types of Document of Title depending on town land, village land or country land, the size, whether more or less than ten acres, the term of years holding the land, and whether the final survey has been performed on the land. The types of Title are: Form 5BK (State Grant), 5CK (State Lease) or 11AK (State

Qualified Title) for Registry Title, or 5DK (*Mukim* Grant), 5EK (*Mukim* Lease) or 11BK (*Mukim* Qualified Title) for Land Office Title. State Grant and *Mukim* Grant are freehold which means it is held in perpetuity while leasehold property is State Lease and *Mukim* Lease are held for a prescribed period, usually 60 or 99 years. A qualified title is the title issued prior to the final survey. Sample copies of land titles are shown in Appendix B1, B2, B3, B4, B5 and B6. Recently, the implementation of e-Cadastre Malaysia has simplified the format of the Plan of the Land (Form B1) in the Document of Title. Nevertheless, the format still maintains all the necessary attributes information such as bearing, distance and coordinate. A sample copy of Plan of the Land (Form B1) is shown in Appendix B7.

In addition, there are three types of Document of Titles depending on the types of lands and areas under Strata Titles Act 1985 (Act 318). The Registrar of Titles is required to prepare and maintain a register of strata titles known as the Strata Register. The Registrar takes charge of strata titles, which are dependent on Registry Titles. On the other hand, strata titles, which are dependent on Land Office Title, are the responsibility of the Land Administrator. The Strata Register consists of a series of books, each related to one lot. Every book contains an index, a statement of matters capable of affecting the parcels, a copy of Certified Plan (strata building/land parcel) and the registered documents of title of each parcel and each provisional block. The registered Document of Title to each parcel and each provisional block is in the form of Form 4(K) (State Grant or *Mukim* Grant) and Form 4A(K) (Provisional Strata Title which are prohibited for dealings) respectively. Sample copies of strata title are shown in Appendix B8, B9 and B10.

All cadastral surveys are performed at the request of the Land Office. The work of the Land Office is concerned with registration of title and with land alienation, either for individuals, government agencies, companies or groups. Meanwhile, the Department of Director General of Land and Mines (JKPTG) has a purely advisory role in State land matters. After the final survey has been performed on the land, and the Certified Plan and final title plan have been drawn by the Department of Survey and Mapping Malaysia or a private Licensed Land Surveyor, the documents will be sent to Land Office or Land and Mines Office for the issuance of Document of Title.

The Malaysian cadastral survey and mapping system is based on the Cassini Solder Coordinate System. Each State has its own origin and reference meridian. Cadastral maps are used primarily for the identification of land parcels for the purpose of land management. All the lots that are surveyed by both government and licensed land surveyors are plotted on the maps. All States currently have cadastral maps in digital form based on a graphical representation of geometric components, through the implementation of the Cadastral Data Management System project, which was completed in 2002.

The objectives of a cadastral survey are primarily concerned with the determination of property boundaries, locations and areas, through their marking and description on the ground and plans or maps for the purposes of alienation, subdivision, partition, amalgamation and conveyance. The system, as practised, determines fixed and defined boundaries whereby parcel definition is by the officially emplaced and mathematically coordinated boundary marks (Nordin, 2001).

Section 396 (1) of the National Land Code 1965 (Act 56) specifies that land shall not be taken to have been surveyed until (a) its boundaries have been determined by right lines; (b) its boundaries as so determined have been demarcated on the surface of the land by boundary marks or, if by reason of the configuration thereof or for any other cause, the placing of boundary marks on the actual line of the boundary is to any extent impossible or impracticable, boundary marks are alternatively placed as to enable that line to be ascertained; (c) the area enclosed by its boundaries as so determined has been calculated; (d) a lot number has been assigned thereto by the Director of Survey; and (e) a certified plan, showing the situation of the land, the position of its boundaries as so determined, and of the boundary marks placed thereon and the area and lot number thereof, has been approved by the Director of Survey (National Land Code 1965, 2010).

There are two types of boundary in Malaysian statute. First, boundary for land. Land boundaries are identified by boundary marks. Boundary mark includes any survey stone, iron pipe or spike, wooden peg or post, concrete post or pillar or other mark used for the purpose of marking boundaries. The proprietor of the land is responsible for the safety of the boundary marks. Therefore, the cost of emplacing

boundary marks on land shall be defrayed by the proprietor of the land. Any person who, without the authority of Department of Survey and Mapping, wilfully destroys, damages, defaces, moves or otherwise interferes with a boundary mark shall be guilty of an offence and penalty to fine for the replacement of the boundary marks.

Second, boundary for parcel. Parcel boundaries are identified by party wall. Party wall is a dividing partition between two adjoining parcels that is shared by the proprietors of each strata title unit. Party wall is the centre of the wall, floor and ceiling that divided longitudinally and horizontally two or more parcels and it can be structural or non-structural.

Before the final survey of a particular property, no land title can be registered and issued until the cadastral survey has been completed and the final title plan prepared by the Department of Survey and Mapping or Licensed Land Surveyor. However, temporary land titles, better known as Qualified Titles, may be issued on the basis of a rough survey. The purpose of issuing the Qualified Titles is to speed up land development so that once planning approval has been obtained for any area, development can commence prior to the execution of precise surveys. This prevents the delay of development since the Qualified Titles allows financing by banks and investors.

The cadastral survey and mapping are controlled by the Department of Survey and Mapping Malaysia, a federal department. This department is responsible for cadastral survey work within Peninsular Malaysia but is supported by a growing number of licensed land surveyors, who are primarily responsible for engineering and subdivision surveys. Notwithstanding the above, the cadastre in the States of Sabah and Sarawak are administered by the Department of Land and Surveys. They have the ideal set up of having land administration and cadastral surveys under the control of a single organisation, which is a State entity.

In considering the huge volume of survey works by government surveyors, the Licensed Land Surveyors Act 1958 (Act 458) and Regulations that are related to the licensing and control of private land surveyors allow private surveyors (Licensed Land Surveyors) accredited to the Land Survey Board to carry out title surveys

(Licensed Land Surveyors Act 1958, 2005). This is to encourage a gradual transfer of responsibility for executing title surveys to private professional bodies that help the Department of Survey and Mapping Malaysia to carry out title surveys. Nevertheless, the Department of Survey and Mapping Malaysia retains control of such activities (Chong, 2006).

Under the Torrens System, the boundaries of each surveyed land parcel are defined by coordinates, bearings and distances. Lots can be defined either by physical demarcation or described mathematically based on a coordinate system. Lots and other information are shown in a cadastral map which provides information for identification of land or building parcels for survey and land administration. The description of parcel boundaries and cadastral survey data are shown as graphical information. It commences with preparation of the survey plan which is then submitted for authentication by the Department of Survey and Mapping Malaysia.

The authenticated cadastral map for Malaysia is called the Certified Plan (CP). There are three types of certified plans. Firstly, the Certified Plan (land parcel) is prepared in a standard format that permits the presentation of useful technical data such as bearings, distances, areas, lot numbers, boundary marks, abuttal's of adjoining parcels and the coordinates of two extreme boundary marks as well as other relevant information when dealing with strata and stratum alienations (Survey and Mapping Director General Secular, 2003). Sample copies of the Certified Plan (land parcel) are shown in Appendix B11 and Appendix B12.

The Certified Plan (strata building/land parcel) contains the parcel information like floor areas, parcel numbers, boundary dimensions where the buildings reside in a strata scheme and additional information on the height of the building, number of floors/levels and the strata parcels (Survey and Mapping Director General Secular, 2006b). There is no change to the Certified Plan (strata building/land parcel) after the implementation of e-Cadastre Malaysia. However, the Department of Survey and Mapping Malaysia is in preparation to receive the strata survey details in Extensible Markup Language (XML) format (see Appendix B13). At the point of writing, no licensed land surveyor has officially submitted any strata survey in XML format yet. Likewise, the Certified Plan (Stratum) provides

additional information on the depth and mean sea level of the underground volumetric parcels. However, no Certified Plan (Stratum) has been submitted until recently due to lack of knowledge on cadastral survey and registration of stratum objects.

The Certified Plan then becomes the root document relating to the creation of the parcel boundaries and specific provisions have been made with regard to its role and status in the National Land Code 1965 (Act 56). The said Act gives much significance to the Certified Plan in the sense that land would not be considered to have been surveyed if the plan is not authorised or approved by the Director of Survey and Mapping (National Land Code 1965, 2010) with evidence of the boundaries, boundary marks and areas shown on it (Nordin, 2001). Sample copies of Certified Plan (strata building/land parcel) and conceptual Certified Plan (Stratum) are shown in Appendix B14, B15 and B16 (Survey and Mapping Director General Secular, 2007; Survey and Mapping Director General Secular, 2006a).

4.4.1 E-Cadastre (e-Kadaster) Malaysia

The primary objective of e-Cadastre is to expedite the delivery system for land title surveys. This entails the creation of a survey accurate database at the national level suitable for Geographical Information Systems (GIS) users. Various issues related to the generation of a survey accurate database need to be addressed. The vision of Malaysia becoming a developed country by 2020 calls for the realisation of an efficient public delivery system at various levels. Among the issues of national interest are land related matters, which include cadastral surveys. The government approved an e-Cadastre project under the 9th Malaysian Development Plan (2006-2010) to be implemented by the Department of Survey and Mapping Malaysia (DSMM), in line with the government's aspiration to have a fully digital Malaysia by 2015.

Since 1995, DSMM has embarked on a modernisation program that saw the dramatic computerisation of both its office and field processes of its cadastral survey division. The Digital Cadastral Database was created by capturing the surveyed accurate information of all land parcels. Under the e-Cadastre project, a comprehensive nationwide readjustment of the meshwork of parcels will be carried out based on a new geocentric datum concept. The Real Time Kinematic Global Positioning System (RTKGPS) has seen the setting up of permanent stations established to provide precise geocentric positioning to assist the Coordinated Cadastral System implementation. This network is to be implemented to support the e-Cadastre project.

The current system of cadastral survey is yet unable to capitalise on the advent of satellite based technologies. A complete revamp of the system is required before any improvement to the delivery system could be achieved. The new environment will allow various cadastral survey processes, such as planning, layout design submission, field data capture, completed job submission, quality control and approval, to be carried out remotely via the mobile telecommunication network. Global Positioning System (GPS) will provide real time positioning at centimetre resolution homogenously for the entire country and coordinates will replace relative measurements as the ultimate proof of boundary mark position. Additional features such as building footprint and space images will be incorporated into the new database in a move towards a multipurpose cadastre.

There are three main components in e-Cadastre, namely Coordinated Cadastral System, Virtual Survey System and Cadastral Data Integrity System. The implementation of a Coordinated Cadastral System is a major part of the e-Cadastre project that includes field and office reengineering to reduce processes and increase the use of digital technology. The Virtual Survey System will equip the field surveyor with ICT, total station, GIS and GPS. The surveyor will be able to interact with the system to extract information that is essential in field operations. Most of the work is automated to reduce tedious computation.

Meanwhile, Cadastral Data Integrity System comprises all the office application related to cadastre, which include pre-survey verification, field survey

data computation and verification, digital title plans generation and approval. In order to implement multipurpose 3D cadastre in Malaysia, new requirements are needed to capture the data in three-dimensional (on surface, above surface and below surface) to cater for strata, stratum surface. This process will be performed in the Electronic Strata Module consisting of the Strata Lodgement Module, Electronic Strata Survey Module and Strata Verification Module. The Strata Lodgement Module is developed especially to fulfil the requirement of a spatial database for strata, while the Electronic Strata Survey Module is developed to perform strata job verification on the ground and at same time perform data collection, and the Strata Verification Module is developed mainly to fulfil the needs of spatial usage for data checking from field checks.

4.4.2 Towards Multipurpose 3D Cadastre

In recent years, a 3D cadastre registration system is being developed. Researchers have contemplated adding 3D cadastre objects in the current cadastre data model and information, accessible by the Department of Survey and Mapping Malaysia, State Land and Mines Office, and District Land Office. Unfortunately, the two stated databases, viz. the Cadastral Data Management System (CDMS) and the Computerised Land Registration System (CLRS) database work separately under different authorities, still do not support three-dimensional capability. As mentioned previously, the Malaysian Land Administration is based on the Torrens System where the cadastral map and the Document of Title with spatial and textual information are regarded as legal evidence, and are required under the rules and regulations in order to have full institutional coordination. Therefore, a good institution is very important in order to achieve an excellent and reliable cadastre registration system. However, due to historical constraints, it seems quite difficult to realise this unless there is full cooperation from various legal bodies, technical organisations and other land-related government agencies private sector participants.

A multipurpose 3D cadastre can be defined as an integrated land information system containing legal (e.g. tenure and ownership), planning (e.g. land use zoning), revenue (e.g. land value, assessment and premium) and physical (e.g. cadastre) information. Therefore, the Malaysian multipurpose 3D cadastre should contain all information about administrative records, tenure, value and sale & purchases records, base maps, cadastral and survey boundaries, categories of land use, streets addresses, census utilities etc. It has the potential to support spatial enabled government, private sectors and society by expanding the process of visualisation, organisation and management of useful land information. In brief, there are many advantages for implementing a multipurpose 3D cadastre. It is especially useful for property inventory, project implementation and monitoring, utility management, population estimates, school management, census mapping and urban and rural development.

A 3D cadastre registration model has been proposed recently, focusing on the combination of these two cadastre registration databases and encompassing matters pertaining to legal rights, land attributes and spatial objects geo-data. The three authorities mentioned above are the main government agencies that are responsible for the cadastre registration system; they integrate and coordinate each other in order to have an integrated and comprehensive cadastral system in Malaysia by using a 2D/3D hybrid cadastre approach.

Various 3D cadastre objects, such as stratified buildings, and construction above and below the ground surface, are the responsibility of the Department of Survey and Mapping Malaysia and the State Land and Mines Office/District Land Office where it concerns object registration and ownership registration respectively. In short, 3D cadastre registration is a combination of land registration utilising the plan land parcel and the three-dimensional land parcel for cadastral registration. Three-dimensional cadastre registration encompasses considerations of the legal rights of land attributes, plane cadastral objects and three-dimensional information.

4.5 Good Governance of Land Administration

Good governance is one of the important issues in the development of a land administration system. It should provide accessibility to vital information concerning land matters. According to Steudler (2004), the concept of governance is not only about government; rather it recognises the power that exists inside and outside the formal authority and government institutions (amongst the government, private sector and civil society). It recognises that decisions are made based on complex relationships between different actors with different priorities. This can be seen from the Global Campaign on Urban Governance (United Nation-Habitat, 2002) that characterizes good governance as one that exhibits sustainability, equity, efficiency, transparency and accountability. These norms are interdependent and mutually reinforcing.

Since the twentieth century, land oriented infrastructures have enjoyed the benefits of information and communication technologies to facilitate the processes of government and public administration. With the turn of the century, there have been more advancements in geographical information technology and global information networks such as mobile computing and the internet, making e-government a welcome transformation (Ting, 2002). Constantly evolving land-oriented businesses are always looking for optimal solutions. The broad use of such technologies can improve the delivery of government services and can result in better governance, greater empowerment of citizens, increased transparency, reduced corruption, less labour incentive transactions, increased revenue and reduced operating costs (United Nations Economic Commission for Europe, 2005). In this regard, e-government has become a new emerging concept that impacts all segments of the land administration systems. The meaning of e-government is quite often misunderstood. It requires the transformation of existing public procedures to simpler forms, while still maintaining transparency for the public.

With the implementation of e-government, business transactions between citizens and government departments can be made available online around the clock. This enables government agencies to align efforts to improve service delivery and

reduce operating costs significantly. As pointed out by Warnest (2005), effectively deployed e-government initiatives make conducting businesses with the government easier while maintaining privacy and security. It is important to note that e-governance is related to the utilisation of e-government combined with processes for wider consultation within and between government, private sector and the public.

In short, good governance is the heart of good land administration. Successful land administration requires an accountable, stable, transparent and zero-corruption government. On the other hand, weak governance in land administration can lead to massive overregulation, conflicting production as well as gap-ridden laws, standards and legal documents (Williamson *et al.*, 2008). Therefore, a national capacity is vital to formulate and implement laws necessary in ensuring good governance.

The current Malaysian cadastral survey and mapping system has insufficient three-dimensional objects registration rights for certain overlapping properties. The two-dimensional type of cadastral system, which has been practised in Malaysia for a period of one hundred years, provides essential information about ownerships of lots and land parcels for the country. The Cadastral Database Management System (CDMS) and Computerised Land Registration System (CLRS), which work separately in each organisation with different legal aspects, are still in a two-dimensional plane surface. Furthermore, there is also insufficient information in three-dimensional objects for taxation and land use to be linked together.

There could be extensive benefits if the CLRS of the State Land and Mines Office (PTG) and District Land Office (PTD), the CDMS of the Department of Survey and Mapping Malaysia (DSMM), the taxation data from the Valuation and Property Management Department and land use from the Town Planning and Development Department are linked together. With the integration of attribute data from CLRS and spatial data from CDMS and through identified applications, the efficiency of land administration can be greatly improved. Nordin (2001) stated that the envisaged applications include on-line registration for surveys and preparation of titles, extending the Digital Cadastral Database enquiry module to the land administrators and also linking the Qualified Title information to the Digital

Cadastral Database. Although conceptually tenable, the eventual implementation would need substantial negotiation and compromise among PTG, PTD and DSMM.

In conclusion, there is currently an increasing demand for rapid access to land-related information as a strategic resource for development and business. The computerised multipurpose cadastre is one of the tools for efficient handling of land, property-related information beneficial to both government and private sectors, and land-related information users across all sections of the community by adding value through the combination of data sets and making these widely accessible. In addition, the United Nations Economic Commission for Europe (2005) noted that e-government can be successful only if it is properly designed and accepted by citizens, companies and administrations.

With vast changes in Information and Communication Technologies (ICT), such as Geographical Information System, internet and web-based applications, together with the initiative of the Malaysian Geospatial Data Infrastructure (MyGDI) National Spatial Data Infrastructure (NSDI), e-Land of Ministry of Natural Resources and Environment (NRE) and e-Cadastre of DSMM, the CLRS and CDMS databases could be integrated electronically. In order to achieve the goal of a comprehensive Land Information System from the district level up to State level and eventually at the national level, the integration of the spatial CDMS database with the textual CLRS database serves as a preliminary requirement. Mariappan (2005) has introduced a mechanism to integrate these two standalone databases. He suggests that coordination among these authorities could be provided by installation of a centralised server or distributed server at each of their offices that act as the transporters and bridges in exchanging data between the CLRS and CDMS.

4.6 Summary

To cope with the fast-paced development in the country, the implementation of e-Cadastre would significantly shorten the time required for cadastral surveys. This would allow qualified titles, which are issued before a survey is carried out, to be phased out. The current National Land Code 1965 (Act 56) already permits the issuance of the final title without having to issue a qualified title prior to that. The image of the DSMM would be greatly enhanced with the expedient issuance of titles and for being the sole custodian of the complete cadastral database of the country.

It is envisaged that e-Cadastre will be fully integrated with e-Land to form a complete Land Information System for Malaysia, capable of completing all surveys and title delivery within a week. The Malaysian Land Information System will serve fully as a digital system. This system will greatly benefit citizens who will receive their final land title within a short period and generate greater confidence in the land market.

In conclusion, strata title owners in Malaysia have benefitted considerably from the various amendments to property laws such as the National Land Code 1965 (Act 56), the Strata Titles Act 1985 (Act 318) and the Common Property (Maintenance and Management) Act 2007 (Act 663). The current legislation in force for ownership of properties in Malaysia has provided an adequate legal structure for all the matters discussed above. From my assessment of the various aspects of National Land Code 1965 (Act 56), the Strata Titles Act 1985 (Act 318) and the Common Property (Maintenance and Management) Act 2007 (Act 663), I think the registration system in Malaysia should be modernised in line with amendments to the legislation in order to keep up with the current challenges of property ownership in strata title schemes.