Condominium Registration in the Unified Land Registry in Hungary Towards the 3D Registration

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Key words: condominium, Unified Land Registry, unique ID number, 3D registration

SUMMARY

Developing, introducing a 3D Cadastre, Land Registry is a challenge and very strong need in many countries. In big and densed cities there are many real estate development under and above ground creating engineering constructions, like tunnels, bridges, pipe lines, other objects as properties, have been unregistered in the land registry. The investors, owners of these constructions require registration as properties in the Land registry in order to create legal status and mortgage facilities of objects above and under the surface.

Development of 3D registration requires comprehensive legal and technical solution, but before to reach the final aim, gradual approach can be possible.

Condominium, condominium units as properties have been registered in the land registry in Hungary since decades. Condominium units as properties have unique ID number with link to the land parcel number and physical description therefore it's possible to register them in the land registry. Condominium registration is a kind of 3D registration because units as properties are existing above and under the surface.

This paper wants to describe the condominium registration in the Unified Land Registry in Hungary. Following the method of condominium registration it is possible to extend the registration of objects above and under the surface gradually, towards the creation of complete 3D Cadastre, Land Registry.

ÖSSZEFOGLALÓ (Hungarian)

A 3D Kataszter, ingatlan-nyilvántartás létrehozása nagy szakmai kihívás, de egyidejűleg felhasználói igény sok országban. Nagy, sűrűn beépített városokban számos ingatlan beruházás történik a felszín alatt ill. felett, létrehozva mérnöki létesítményeket, alagutakat, hidakat, vezetékeket, egyéb létesítményeket, melyek egyben tulajdonok, de az ingatlan-nyilvántartásban nincsenek regisztrálva. A befektetők, és ezen objektumok tulajdonosai igényelnék a felszín alatti, feletti objektumok, mint ingatlanok, ingatlan-nyilvántartási bejegyzését, hogy jogszerű ingatlan tulajdon létesüljön és jelzálog bejegyzésre alkalmas legyen. A 3D-s ingatlan-nyilvántartás létrehozása átfogó jogszabályi és technikai megoldást igényel, de fokozatos bevezetése is lehetséges.

Társasházak, ill. azokban lévő ingatlanok (lakás, egyéb helyiség), mint tulajdon, évtizedek óta regisztráltak a magyar ingatlan-nyilvántartásban. Az un. egyéb önálló ingatlanoknak egyedi azonosítójuk - mely kapcsolódik a telek helyrajziszámához - és alaprajzuk (térkép)

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van, tehát regisztrálhatók. A társasház regisztrálása egyfajta 3D-s regisztráció, hiszen az ingatlanok nagy része felszín alatt, ill. felett van.

Az előadás ismertetni kívánja a társasház nyilvántartást a Magyar Egységes Ingatlannyilvántartásban, mely módszert követve a 3D-s nyilvántartás kiterjeszthető, és a teljes 3D-s ingatlannyilvántartás megteremtése fokozatosan elérhető.

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1. INTRODUCTION

Many countries in Europe and all over the world, especially in metropolitan area, there is scarcity of vacant land on surface for development.

In big and densed cities there are many real estate development under and above ground, creating engineering constructions as valuable properties, without registration in the land registry, cadastre.

There is a growing interest for registration of these properties in the cadastre and land registry establishing secure ownership and mapping facilities of real estate objects. But on the other hand the traditionally cadastre, land registry haven't been prepared to register in 3D.

In the traditional cadastre and land registry there are mainly legal difficulties to register the objects, as properties, constructed under and above the surface because there are legal constrains and the traditional cadastre and land registry have been created for 2D space.

Development of 3D registration requires comprehensive legal and technical solutions, changes in law, but before to reach the final aim to register all objects, constructed above and under the surface, as properties, gradual approach can be possible.

The first step should be the registration of condominium in the Cadastre, Land registry, as a kind of 3D registration. Condominium units as propertis have unique ID number and physical description therefore it's possible to register them in the land registry, Cadastre.

There are not too many land registry or cadastre containing condominium registration but the Hungarian Unified Land Registry is one of them.

1.2 Problems in Registration

The paper based cadastral map have registered the legal status of parcel boundaries and other objects in 2D space.

In the land registry there are also difficulties to register the ownership and other rights of real estate objects under or above the surface. Public domains, like roads, streets, squares have not been the part of many land registry and many objects have been constructed under the surface of public domains (public utilities, underground public garages, metro stations, etc.) Currently there are few exceptions for registration of objects, properties constructed under or above the surface using condominium or strata title legislation.

In big cities, metropolitan areas there is growing interest and needs in using space under and above the surface for constructing real estate objects but the legal changes in the land registries didn't follow the growing request mentioned above and there are still difficulties, constrains to register the ownership of real properties created under and above the surface.

There is no more technical difficulties for mapping of real objects, existing under and above the surface thanks for the IT and GIS.

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The main problem is the lack of changes in law. The legal profession is always very conservative, they are very much attached the old, traditional land registry law and legal changes generally takes quite a long times.

The registration of properties in 3D requires comprehensive tools and solution in the legal and mapping sides, practically in the cadastre and land registry. Only the simultaneous solution can guarantee the data consistency, of course even in Europe there are several kind of cadastre and land registry concerning data content, legal and institutional framework, therefore there is no single recipe and solution. We have to find the elements which are common in different systems creating guidelines for all countries facing the problems of 3D registration in cadastres and land registries.

The approach is also different in countries running single authority unified land registry or separate cadastre and land registry under multi authority. In case of multi authority the comprehensive decision making is more difficult but the implementation of 3D registration in separate organisations maybe is easier because the full data consistency between the organisations not always compulsory by law.

In case of single authority unified land registry, there is one decision maker and the comprehensive solution is easier to achieve, The data consistency between the legal and mapping part is compulsory by law therefore the implementation of 3D registration is more complicated.

2. THE HUNGARIAN SITUATION

Hungary faces the same problems as many countries in Europe and all over the world. In Budapest capital and other bigger cities there are growing number of objects, properties constructed under and above the surface, like underground public garages, shops, metro stations, etc. The legal and mapping registration of these objects as property in the unified land registry system is possible only in case of condominiums and other special case.

The current Land Registry law issued in 1997, it's quite new, but still based on the traditional law (Grundbuch), didn't take many new requirements into consideration and the mapping and geometric description of objects under and above the surface is partly solved, but condominiums as 3D objects have been registered in the land registry in Hungary since decades.

The Unified Land Registry system in Hungary, the integration of cadastre and legal registry (Grundbuch) on legal basis and institutional level. The comprehensive solution of 3D registrations from one side is easier due to the single authority legal and institutional framework but from the other side is more complicated because the data consistency between the legal and mapping part is compulsory by law.

2.1 Current Conditions, Possible Solutions

The Hungarian Unified Land Registry System is a multipurpose nature. The registration of condominium units as properties is also the part of the land registry. For example in Budapest more then 930 000 properties have been registered. 230 000 land parcels, 700 000 condominium unit properties.

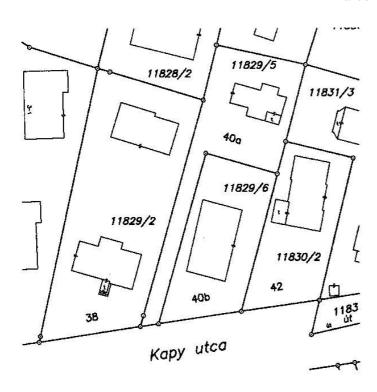
In case of condominiums there is no problem to register any objects, units as a property above or under the surface if the property within a construction or building. The building, construction must be located on land parcel.

It's essential that every registered property have unique identity number. The ID number of properties in condominium are based on the parcel number of the land. The other requirement to register a property in condominium the geometric description. In case of land parcels the cadastral map represents the geometric description of parcels, the legal documents represent land titles.

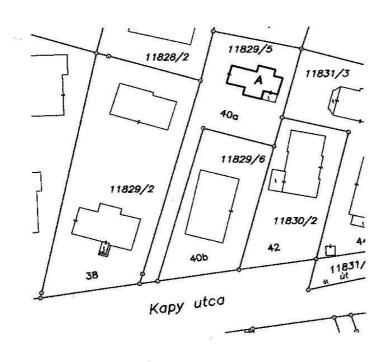
When we form condominium for registration of condominium units, map and deed is required. The "map" is a scaled lay out plan, about of each level (storey) of the building, with numbering (identifying) of each property (unit). These numbers with link to the parcel number will be the unique ID numbers. The lay out plan is the so called "map of condominium."

2.2 The Way of Creating ID Number of Condominium Units

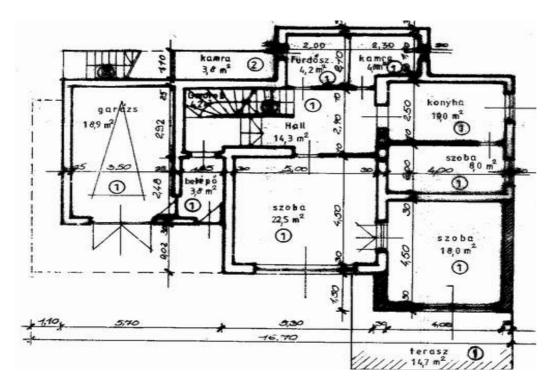
Parcel number of the land 11829/5



ID number of condominium 11829/5/A



ID number of condominium units 11829/5/A/1



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2.3 Registration of Condominium, Creation of Legal Document (Property Sheet)

Basic property sheet of the parcel contains the description of the land parcel

This basic property sheet contains the land parcel information only

```
Szektor: 61
BUDAPEST ILKER.
                                                                                         Térképszelvény: 2628
Belterület 11829/5
   1020 BUDAPEST II.KER. Kapy utca 40-1. 1020 BUDAPEST II.KER. Kapy utca 40-1.
                                                     L rész
                                                                   1131 (m2) törlő határozat:9002/2004
                 Földrészlet területe változás előtt:
1. Az ingatlan adatai:
   alrészlet adatok
                                                                  terület kat.t.jöv. alosztály adatok
                                                                              k.fill. ter. kat. t.jöv.
ha m2 k.fill.
 művelési ág/kivett megnevezés/
                                                     min.c
                                                                   ha m2
- Kivett lakóház udvar
                                                                      1131
                                                                                  0.00
2. bejegyző határozat: 275712/1999/1999.10.26
   A földrészlethez tartozó közös tulajdon ban álló épületrészeket és helyiségeket az alapító
   okirat tartalmazza.
                                                     II. rész
3. hányad: 1/4
   bejegyző határozat: 23510/1984/1984.06.05
275712/1999/1999.10.26
                                                                  törlő határozat:
   jogcím: ajándékozás
jogállás: tulajdonos
   név : Visnyei Zsuzsanna
szül. év: 1946
   cim : 1025 BUDAPEST II.KER. Kapy utca 40/A
   hányad: 1/4
   bejegyző határozat: 23510/1984/1984.06.05
275712/1999/1999.10.26
                                                                  törlő határozat:
   jogcím: ajándékozás
   jogállás: tulajdonos
név : Visnyei Edit
   szul. év: 1955
cím : 1025 BUDAPEST II.KER. Kapy utca 40/A
5. hányad: 1/4
   bejegyző határozat: 87259/2/1989/1989.08.28
                                                                  törlő határozat:
   275712/1999/1999.10.26
   jogcím: vétel
   jogállás: tulajdonos
   név : Visnyei Zsuzsanna
szül. év: 1946
   cim : 1025 BUDAPEST II.KER. Kapy utca 40/A

    hányad: 1/4
    bejegyző határozat: 87259/2/1989/1989.08.28
275712/1999/1999.10.26

                                                                  törlő határozat:
    jogcím: vétel
    jogállás: tulajdonos
   név : Visnyei Edit
szül. év: 1955
    cim : 1025 BUDAPEST II.KER. Kapy utca 40/A
   hányad: 1/1
    bejegyző határozat: 275712/1999/1999.10.26
    jogcím: eredeti felvétel
    jogállás: társasháztulajdon
     a tulajdonosokat a 11829/5/A/1 + 11829/5/A/2 helyrajzi számú különlapok tartalmazzák.
                                                     III. rész
5. bejegyző határozat: 23510/1984/1984.06.05
                                                                törlő határozat: 128077/1993/1993.04.20
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2.4 Property Sheets of Condominium Units

Each unit in condominium has unique ID number and separate property sheet (legal document)

There are three parts of the property sheet

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BUDAPEST II.KER.
Belterület 11829/5/A/1
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1020 BUDAPEST II.KER. Kapy utca 40. ép:A. -. ajtó:1.

L rész 1. Az egyéb önálló ingatlan adatai: terület szobák száma eszmei hányad megnevezés m2 egész/fél 1/2 89 Bejegyző határozat: 275712/1999/1999.10.26 2. bejegyző határozat: 275712/1999/1999.10.26 Az önálló ingatlanhoz tartoznak az ala pító okiratban meghatározott helyiségek. hozzátartozó 18.9 nm. garázs, 26.7 nm. pince, 14.7 nm. terasz. bejegyző határozat: 275712/1999/1999.10.26 II. rész 1. hányad: 1/1 bejegyző határozat: 23510/1984/1984.06.05 etel 275712/1999/1999.10.26 23510/1984/1984.06.05 jogcím: eredeti felvétel jogcím: ajándékozás 23 jogállás: tulajdonos név : Visnyei Zsuzsanna szúl. év: 1946 cim : 1025 BUDAPEST II.KER. Kapy utca 40/A

III. rész

- 1. bejegyző határozat: 35971/1986/1906.07.16 Jelzálogjog 135 000 FT,azaz százharmincötezer FT és jár.erejéig az 53/1982./X.7./M T sz.rend.11.par.maghat.rangsorban. II. kerületi fiókja. jogosult: név: ORSZÁGOS TAKARÉKPÉNZTÁR ÉS KERESKEDELMI BANK RT törzsszám: 10537914 cím : 1050 BUDAPEST V.KER. Nádor utca 16.
- 2. bejegyző határozat: 35971/1986/1986.07.16 Jelzálogjog 20 000 FT,azaz húszezer FT bankkölcsön és járulékai erejéig . II. kerületí fiókja. jogosult: név: ORSZÁGOS TAKARÉKPÉNZTÁR ÉS KERESKEDELMI BANK RT törzsszám: 10537914 cim : 1050 BUDAPEST V.KER. Nádor utca 16.
- 3. bejegyző határozat: 35971/1986/1986.07.16 Elidegenítési és terhelési tilalom a jelzálogjog biztosítására . utalás: III/1-2. jogosult: név: ORSZÁGOS TAKARÉKPÉNZTÁR ÉS KERESKEDELMI BANK RT törzsszám: 10537914 cim : 1050 BUDAPEST V.KER. Nádor utca 16.
- 4. bejegyző határozat: 81036/1986/1986.10.02 Jelzálogjog 60 000 FT, azaz hatvanezer FT és járulékai erejéig . jogosult: név: MAGYAR FILMGYÁRTÓ VÁLLALAT cim : 1441 BUDAPEST Lumumba utca 174
- 5. bejegyző határozat: 87259/2/1989/1989.08.28 Holtigtartó haszonélvezeti jog jogosult: név : Visnyei Béláné l.név: Szépe Rozália szül. év: 1927 cím : 1025 BUDAPEST II.KER. Kapy utca 40--1

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It's obvious that any object in condominium, under and above the surface as well, could be registered as any lands or other real estate properties.

The other possibility for creating and registering of properties under the surface of land parcel with unique ID number is an underground construction (wine cellar, garage, etc.) in case with direct access to public domain (street, road, square). It's important that the objects must be located under the land parcel.

3. 3D REGISTRATION, POSSIBLE SOLUTION

The Hungarian Unified Land Registry Systems already registers certain properties locating under or above the surface, like condominiums, other objects but there is no comprehensive solution.

There are three large groups of objects in vertical dimension, currently with registration problems.

- Underground constructions (public garages, metro stations, shops, etc)
- Public utilities, cables, telecommunication lines
- Underground roads, railways, tunnels, flyovers

I think it's obvious that, among others, two essential problems must be solved to introduce the 3D registration.

- The geometric description, mapping of real objects above or under the surface
- Creation of unique identity number of real objects as properties

3.1 Geometric Description

Today thanks for the advanced information technologies there are no more technical difficulties to introduce the digital cadastral mapping allowing us to create digital maps with different layers.

In case of digital maps we can use any number of layers for the third dimension but it's important to locate the horizontal and vertical position of the object.

Analogue cadastral maps are still existing describing the real estate objects in 2D space.

Description of objects in 3D, side-maps must be used, like condominium maps and the accurate location of the objects is also essential. Of course where the digital cadastral mapping is not yet introduced, the solution of 3D mapping is more difficult but possible.

Key symbols on cadastral maps must be used to indicate the location and ID number of real objects under and above the surface.

3.2 Creation of Unique ID Number

Any real estate, land property, registered, has unique ID number in the land registry and the cadastre, therefore it's essential and the most important task in the 3D issue to find out an ID numbering method of objects under and above the surface.

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In the cadastre and land registry the parcel number is the common unique ID number. On the cadastral map and in the legal document the same parcel (property) has the same parcel or ID number. This is the link between the cadastre and land registry and in case of unified land registry between the legal documents and mapping information.

At the registration of condominium units as individual properties the ID number of the unit is related to the land parcel as I described earlier. Using the similar structure the ID numbering of objects under and above the surface could be related to the neighbouring parcel on the surface.

I specified three large groups of objects under and above the surface with registration problems but I touch the first group only because the solution should be similar to condominiums.

The first group, like underground public garages, metro stations, shops. If the object is the part of condominium, there is no problem with the registration. If the object is locating under the land parcel or public domain, the ID numbering could be the similar to condominium. Generally the area of these constructions are not bigger then the area of the parcel on the surface. It's easy to survey and determine 3D co-ordinates of the objects and the geometric description and mapping can be solved.

3.3 Proposal for the ID Numbering

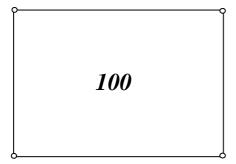
If the ID numbering is accepted the registration of objects as properties is possible both on maps and on legal documents and the data consistency between them is realized.

In the Hungarian Unified Land Registry, the comprehensive solution, the geometric description, mapping and the registration of the objects as properties in three dimensions must be simultaneous because the full data consistency is compulsory by law.

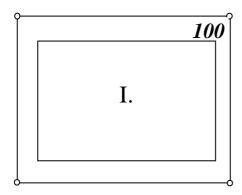
Currently the legal environment and the land registry law is not 100% prepared for the 3D registration, but due to the multipurpose nature of the Hungarian Unified Land Registry and the digital cadastral mapping the major part of 3D objects could be registered in the land registry with few changes in the law. There is no doubt that the final aim is the comprehensive solution of the 3D registration but it's possible to solve the 3D registration gradually.

In my opinion and according to the needs by clients the registration of underground constructions like metro stations, shops, public garages in metropolitan area, as I specified earlier in the 1.group of objects, is the most important. Thanks for the nature of the Hungarian Unified Land Registry, the creation of 3D registration of these objects is possible in the nearer future. The condominiums as registered properties are part of the land registry and we have to adapt the ID numbering and geometric description method to the underground objects specified above. I am convinced, there are no fundamental legal difficulties to amend the land registry law to fit it to the 3D registration. The amendment of the law and the introduction of 3D registration depends on the legal side and decision makers.

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Parcel No of the land



ID number of the underground

Construction

100/ I

cafe 3	2	shop 1
		shop 4

ID number of units

100/I/1 shop 100/I/2 corridor

100/I/3 cafe

100/I/4 shop

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3.4 Economic Aspects of the 3D Registration

Practically we cant avoid the comprehensive solution of 3D registration in the near future because there is a growing interest to register all of the real objects, under and above the surface as properties, in the land registry.

There are many economic benefits, for investors and the state as well.

3.5 Investors, Potential Owners

- In case of registration of objects, the land registry guarantee the security of tenure, owners can deal with them as real estate properties.
- Owners can use these properties for collateral of mortgages
- Investors are encouraged for developing space under and above the surface

3.6 State

- Extension of the land market
- Increasing number of transactions generates more tax, stamp duty
- Extended data content in the land registry increasing the income of the data service approaching to the cost recovery requirements.

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BIOGRAPHICAL NOTES

Academic experience: Dipl. Ing. Land Surveyor MSc. Budapest Technical University. Dipl. Certified Engineer, Budapest Technical University

Current position: Deputy Director Budapest Land Office

Practical experience: Cadastral surveying and mapping, international expert in. Cadastre and land administration matters

Activities in home and International relations: Member Hungarian Society of Surveying, Mapping and Remote Sensing (MFTTT) 1971-

Member Chamber of Judicial Experts 1996-

Hungarian Delegate FIG Commission 7 1995-

Chairman FIG Commission 7 Working Group 3 on Land markets 1998-2002

Chairman FIG Comm. 7 working group 1. 2002-

Chair elect FIG Comm. 7. 2006-2010

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