Real Estate Market Data and the Value Spreadsheet’s Boom in Lithuania

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Abstract
The correctness and reliability of property valuation results depend on the amount and correctness of real property market data. In Lithuania all real property, its cadastral information, and property transactions – both map data and attribute data – are registered in one integral Real Property Central Database managed by the State Enterprise Centre of Registers. The real property registered in the Real Property Register is described following the valid legal acts and the dates are properly verified and reliable.

The Centre of Registers in Lithuania administrates the registers of Real Property, Legal Entities, and Addresses. Lithuanian experience in multipurpose integrated cadastre and register, equally in a property market data collection and property valuation is very advanced. Following Lithuanian practice we may say: ‘no valuation without property cadastre and register system; no valuation without property market databases, besides GIS’. Centre of Registers collects data about all real property transactions concluded since 1998. At present the computer transactions databank holds about 1 000 000 transactions related to real estate.

Our paper draws up an exploratory case study of Lithuanian property cadastre and register system and real property data accessibility experience. This paper begins the analysis process and aims to provide facts and insights about the real estate market data collection, administration, and dissemination, again the information technologies and interoperability in property administration, also property valuation.

Key words: real estate market data; property valuation, property cadastre and register

Introduction
During the last twenty years the theory of real property good governance, digital and spatial information technologies drove the creation of new visions, models and tools for many property management domains, also the property valuation systems. The development of a new vision for property valuation in the contemporary socio-economic and technological context is presented in our previous e-publication (Aleksiene, Deveikis and Galiniene, 2012). Following Lithuanian practice we may say: no valuation without property cadastre and register system; no valuation without property market databases, besides GIS.

Lithuanian experience in multipurpose cadastre and register, equally in a property market data collection and property valuation is very advanced and presented in many papers (Bagdonavicius and Deveikis, 2011; Bagdonavicius et al., 2008). The correctness and reliability of property valuation results in mass as well as in single valuation depend on the amount and correctness of real property market data.

Our paper summarizes an exploratory case study of Lithuanian property cadastre and register system and property data accessibility experience. This paper begins the analysis process and aims to provide facts and insights about the real estate market data collection and administration, and dissemination, again the information technologies and interoperability in property administration.

1. Real Property Data Administration in Lithuania

All real property and its transactions in Lithuania are registered in the digital Central Real Property Cadastre and Register Database. The real property registered in the Real Property Register is described following the valid legal acts and the dates are properly verified and reliable. Property identification is unified and the system for searching property description becomes simpler. Every interested user having concluded a contract with the data provider has the right to make a search for property on the Internet. The search may be done by the location of property (its address) as well as by the owner of property. The access to database is charged. Moreover, property identification system about all legally registered property may be accessed via the Internet both the local and foreign users using the European Land Information system, EULIS.
1.1. Scientific, Legal and Organisational Background. The Cadastre 2014 is a model of the Real Property Administration. By the late twentieth century, Lithuania provided robust model of the multipurpose cadastre and register. Literature on multipurpose cadastres emerged in the International Federation of Surveyors, FIG. During the 1990s the potential of cadastre and land administration systems was articulated in two FIG Declarations (1996; 1999) and the technical statements of cadastre were also explored and provided by a vision “Cadastre 2014” (Kaufmann and Steudler, 1998). Multipurpose cadastres offer more benefits than juridical and fiscal cadastres. The use of multipurpose cadastres, based on European experiences, was considered ‘best practice’, science and a theory were built upon the framework with the land Management Paradigm (Williamson et al, 2009). The paradigm revealed the link between country’s land policies, real property administration functions, information infrastructures and the achievement of sustainable development.

‘The Cadastre 2014’ (Kaufmann and Steudler, 1998) has been an extremely useful document for generalizing technical developments for the cadastre and register systems in the contemporary context. The document centred on six statements and included following decisions or allegations: the need to manage the property rights, restrictions and responsibilities within the cadastral framework (statement 1), the abolition of the separation between cadastral maps and registers (statement 2), the evolution from cadastral mapping to cadastral modelling (statement 3), the abolition of pencil and paper cadastres (statement 4), a move towards privatising elements of the Cadastre (statement 5), and the requirement for the cadastre to be cost recovering (statement 6).

Lithuanian experience in multipurpose digital and spatially enabled property cadastre and register system as well as Lithuanian market data administration and property valuation is presented in many publications (Bagdonavicius and Deveikis, 2011). The State enterprise Centre of Registers (Registry centras) participates in the European Land Registry Association (ELRA), in the European Land Information Service (EULIS) and other international bodies (Website of the Centre of Registers, 2013).

In Lithuania all real property cadastral information – both map data and attribute data – are registered in one integral Real Property Central Database managed by the State Enterprise Centre of Registers. The integration and concentration of the cadastres and registers are very strong and common. The Centre of Registers in Lithuania administers the registers such as Real Property Register and Cadastre, the Register of Legal Entities, and the Address Register (Figure 1). Three international projects – European Address Infrastructure (EURADIN) Project, Public Electronic Service for Real Property Transactions (NETSWEP) program and Electronic Service for Registration of Legal Entities (JAREP) – have been implemented by the State Enterprise Centre of Registers in recent years.

Figure 1. The Centre of Registers in Lithuania adminstrates some of the most important state/public registers. Source: Aleksiene et al, 2012
The main objects in the cadastre include basic property units, parcels, boundaries and right-of-use units. The real property transactions are also recorded in the register. Also the information on ceased units is preserved. All geometrical or geodesic measurement data are maintained currently in 2-dimensional medium. There will be pressure to improve the spatial accuracy of databases and the speed at which they are updated.

Legal framework for the Real property administration is following:
- Law on Real Property Cadastre;
- Law on Real Property Register;
- Law on Land;
- Law on Construction;
- Law on Territorial Planning;
- Law on Real Property Tax;
- Law on the Background of the Property and Business Valuation; etc.

Many laws include subordinate legislations by Government rules or regulations, e.g. the Real Property Cadastre Regulations, the Real Property Register Regulations, the Property Valuation Methodology, and other.

1.2. Real Property Market Data Accumulation and Search Systems in Lithuania. The Real Property Transactions Price Database (Register) is integrated into the Cadastre and Register. Real Property Register is responsible for registering all transactions, mortgages and juridical encumbrances.

Centre of Registers has implemented the project Public Electronic Service for Real Property Transactions (NETSVEP). This service is launched practically in all notary bureaus in Lithuania. NETSVEP offers a possibility for the real property transaction parties to conclude a transaction within a shorter time period by performing all actions related to acquisition of real property and registration of rights thereto the notary bureau without direct applying to the Centre of Registers. The notary who is going to verify the transaction in person will receive electronic certificates and data whether property subject to transaction was not sold to other person, was not mortgaged, seized or has no restrictions on the rights to dispose of the property, which are needed to conclude a transaction. Upon request of the person who acquired the property, notary verifying the transaction may register the rights of ownership to real property in the Real Property Register electronically. With the implementation of the project, transactions become more secure and simpler. Notaries verify transaction and ownership registration documents using electronic authentication and e-signature system.

Real property market data accumulation produce to platform for property valuation services in Lithuania. Property sales data and real property lease data is available in our country for large cluster of customers and data users, also for a valuer. The Real Property Transactions Price Database contains actual data on all real property transactions made since 1998. Market research and property valuation unit of the Centre of Registers provides to the clients/users an actual real estate market data, also different statistical data on real property market.

Real estate data in Lithuania is available, accessible via internet or by e-mail, but not free of charge. It is a problem with long term to settlement. Sustained delivery of the real property market data is indispensable in valuation process, equally in mass valuation or individual valuation process. The real property market data search system under development aims at classifying all search parameters and providing an opportunity for a user himself to define what parameters should be used for the search of property transactions data. At present the search is possible by 10 different parameters or their combinations. Seeking to present reliable market data they are subject to multitude package of transaction’s data, for instance annual package or volume of market transaction data. It is making-up to statistical processing and analysing. An accessibility of property market data is one of the basic tools in property administration and valuation.

In addition to the analysis of actual transactions, the analysis of the entire real property market also plays an important role when analysing the real property market. The analysis of property groups by type of its use, material, year of construction (or reconstruction) and other parameters in the subject area as well as on broader scale is performed. In this case the graphical visualisation of property attributes and prices is a useful tool for a valuer. Graphical visualisation is used in valuation proceedings or reports, GIS and other
graphical material are desirable inputs as well as an output in valuations reports, hard copy or digital (electronic) proceedings.

The Address Register is an important and useful tool for Lithuanian valuers. Addresses in the Republic of Lithuania are allocated by municipal councils and registered in the Address Register. Lithuania is undergoing a lengthy process to allocate addresses to all administrative units, residential areas, local administrative districts (neighborhoods), streets, buildings and premises. The primary purpose of setting addresses to objects and registering them is to ensure the uniqueness of address. The central database of the Address Register is being constantly updated on the basis of data and documents, which are obtained from other main state registers (Website of the Centre of Registers, 2013).

Data in the Address Register are stored both in textual and graphical form. The Register answers not only whether a certain object exists, but also where such object is located. One of the main tasks in developing the Register information system is to link textual register data with geographic co-ordinates. This will offer more opportunities for using address data, which is important for planning services and goods logistics, rendering operational and emergency services, delivering various tax notices and goods, providing postal and courier services (Website of the Centre of Registers, 2013).

The search and address location service is publicly available and free of charge (Figure 2). Data sets or full copy of the database of this Register can be acquired on the commercial basis.

![Figure 2. The Address Register search system in the website of the Centre of Registers, Lithuania, 2013](image)

The Real Estate Price index is one of the most important factors and a tool that must be assessed during the mass and single (individual) valuation. Data of different periods since 1998 are used in the computation of this index (Figure 3). Calculations are done on the changes in sale prices of new and older construction apartments and individual residential houses, comparing them with the prices in quarter 4 of 1998;
information is also given on change when comparing housing prices with previous quarter prices. There are significant changes in real property prices visible in Lithuania, therefore it is very important to aggregate and enter all market data used in the process of valuation. It is necessary to mention that not only valuers show great interest into the price and indexes of real property changes but other real property market participants, also banks, real estate agencies, investors, etc.

A new generation of internet products is stimulating a greater interest and use of digital maps and other geospatial data in Lithuania. In our country like in Europe the adoption of National Spatial Data Infrastructure (NSDI) strategies and policies has been broadened by EU INSPIRE Directive. This Directive implements and improves the access and the interoperability of digital location information. This data, also real property data is an essential raw material and can be integrated into a wide range of new information products and services, which build on new possibilities to analyse and visualize data from different sources. Opportunities for re-use data have multiplied in recent years as technological developments have spurred advances in data production as well as data analysis, processing and exploitation (Spatially Enabled Society, 2012; Myllymaki and Pykalä, 2011).

2. Standardized Data Processing System and Property Valuation

Since 1997, an integrated real property cadastre and register system is in operation in Lithuania. The State Enterprise Centre of Registers stores and updates the real property cadastre and registers data, administers database of the real property cadastre and register, maintains GIS system in Lithuania, and assesses real property for public needs, including taxation. Data about the entire registered real property amounting to...
over 6.2 million objects is stored in the integrated database. Data on the market transactions and involved property stored in a uniform format creates a possibility to standardise an appraisal or valuation process, to identify main appraisal criteria and factors influencing property value (Bagdonavicius and Deveikis, 2011).

The main activities of State Enterprise Centre of Registers on property market research and property valuation is based on three blocs – mass valuation, provisions of real property market data to external users, and presentation of the mass valuation results to public and external users – as shown in Figure 4.

2.1. Mass and individual valuation systems in Lithuania. Under the order of the Government, the Centre of Registers performs yearly mass valuation of all real properties in Lithuania. An average market value of land and buildings estimated in the course of mass valuation is used for various State and public economic needs, including calculation of the property tax, and is publicly available (Bagdonavicius and Deveikis, 2011; Website of the Centre of Registers, 2013). Services of individual property valuation and cadastral surveys are also available for individual and corporate clients at the State Enterprise of Centre of Registers.

The development of mass valuation system has been unambiguously associated with the intended introduction of a real property tax based on the market value. Favourable political decisions, a modern real property cadastre and register system with its adequate institutional structure enabled to develop a mass valuation system of land and constructions. Flexible mass valuation system allows yearly update of value maps at low costs, makes valuation results accessible to the public and useful for different needs in the public and private sectors (Bagdonavicius and Deveikis, 2011).

The property mass valuation system in Lithuania received an international appreciation and awarding. In June 2007 the Institute of Revenue Rating and Valuation (IRRV) and the International Property Tax Institute
(IPTI) in cooperation with the Centre of Registers organised an international conference *Role of Property Tax – Effective Revenue Mobilisation* with over 140 participants from 20 countries. In October 2007, the IRRV presented the Centre of Registers with an award for Excellence in Valuation (Website of the Centre of Registers, 2013).

The state of the mass valuation system in Lithuania and its statement of the challenges, and perspectives are presented in many papers (Bagdonavicius and Deveikis, 2011) and shown in Figure 5.

![Figure 5. A mass valuation development challenges in Lithuania. Source: Bagdonavicius and Deveikis, 2011](image)

In 1994 individual property valuation system started to develop in Lithuania, which secured application of market principles in assessing property for mortgage, privatisation needs, expropriation of property for public needs as well as for developing business and property market. Lithuanian Association of Property Valuers was also established in 1994.

In case of individual valuation one or some of real property objects are assessed; consequently, such valuation is distinguished for a detailed analysis and description of the subject property, detailed interpretation of legal and economic factors of value. The postulates of the sustainable development are reflected in the territorial planning documents, which become more and more important for describing location and object development circumstances.

Though individual and mass valuation has many distinctive features, viewing this process as the standardised procedures one may also find many common features – the same valuation approaches applied, similar need for data on the analysed market and similarity of the processes. Therefore, while analysing both individual and mass valuation practices as well as their perspectives it is important to look for links and ways how one valuation system could supplement and optimise activities of other system. The first and most important point of integration is the development and use of automated system for collection and processing of the property data (and property market data) necessary for valuation.
The legal framework of property valuation in Lithuania is presented by following laws and regulations:
- Law on Background of the Property and Business Valuation (version 2011, enforceable since 1 May, 2012);
- Methodology of the Property and Business Valuation (adopted since 1 May, 2012);
- International Valuation Standards, 2011 (IVS 2011);
- European Valuation Standards, 2012 (EVS 2012);
- Real Property Valuation Rules (adopted 2005, version 2013) and Land Mass Valuation Rules (adopted at the end 2012);
- Code of Ethics of the Valuers (2012);

The Ministry of Finance and a State Budgetary Institution Property Valuation Oversight Agency are liable to the supervision of property valuation activity in Lithuania. The Law on Background of the Property and Business Valuation legitimates International Valuation Standards and European Valuation Standards as well as juridical and methodological sources and references in our country. Besides, the European Parliament and Council of Ministers in 2013 agreed on the final text of the Mortgage Credit Directive stating that "in order for national valuation standards to be considered reliable, they should take into account internationally recognised valuation standards, in particular those developed by the International Valuation Standards Committee, the European Group of Valuers' Associations or the Royal Institution of Chartered Surveyors". The conferral of this status on TEGoVA in European legislation is a truly historic occasion, a turning point in the development of TEGoVA as Europe's real estate valuation setting body (TEGoVA website, 2013).

New regulations, adopted in Lithuania in the middle of 2012, have stronger attitude on using real property market data for the preparation of valuation report. However, the provision of real property market data from Centre of Registers to external users became complicated. Further provisions or an open access to property market data is not clear at the moment in Lithuanian individual valuation practice. Centre of Registers discontinues many possibilities to get property market data in greater packages, e. g. annual package of market transactions. Data provisions via internet became very expensive and time-costly.

2.2. Geospatial data for property valuation. Valuer is a part of the Spatially Enabled Society. This is to remind that the saying “location, location, location” became a traditional mantra in valuation process. More extensive use of GIS is vital for the improvement of individual or mass valuation systems. The use of digital maps in its turn becomes an important element for valuation practice. To sum up this is to state that individual valuation as well as the mass valuation is developing in similar direction. In both systems the use and integration of GIS and geospatial data in valuation systems are playing an increasing role.

It is expected that the integration of these systems in the future will be even closer as well as the use and introduction of information systems. The analysis of the entire real property market also plays an important role. The analysis of property groups by type of its use, material, year of construction and other parameters in the subject area as well as on broader scale is performed. The graphical visualisation is used in mass and individual valuation practice. The framework of mass valuation maps is envisaged to general public and valuers as an additional material (Aleksiene et al., 2012).

The interaction between cadastral databases, territorial planning documents, geological and geochemical survey and information, also property values zoning will increase. The idea of interaction between different sectors of GIS and valuation practice is in action at the moment. The implementation of territorial planning process in property valuation systems is crucial, and should be mentioned as one of the most important tools for the sustainable and innovative property development. Data integration concept is necessary to be considered as a key element of a Spatially Enabled Society. Data integration involves combining data

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1 The final Directive has achieved this, eliminating all reference to ‘international standards’ in the Article and, in the Recitals, eliminating reference to the Financial Stability Board and instating TEGoVA and its European Valuation Standards in their rightful place among the internationally recognised valuation standards that member states must take into account when fulfilling their obligation under the Directive to develop reliable national property valuation standards (Note by M. MacBrien, TEGoVA website, 2013).
register statements since 2007. These led to disputes in valuers as well as to the bank sector, property developers and other uses of this data. The Lithuanian valuers will be using many applications in this database, e.g., Sales Data On-line search System; Cadastral Maps; Extract of Register Statement for Property Unit; Mass Appraisal Results for Property Unit; Housing Price Indexes Information; Value Spreadsheets and Determining Market Value with Time Adjustment Function, and others. Information on the number of real property market transactions is also provided. The banks, real estate companies, property developers and other users use these data.

3. Internet Value Spreadsheets – to be or not to be in valuation practice

Digitally and spatially enabled valuation process and a digital reporting include some of the benefits: the innovative services, a greater transparency, an evidence-based policy making and administrative efficiency, also resulting in better public services. The availability and interoperability of robust public data will lead to better property administration and property valuation. Such information is useful and interesting to the housing market stakeholders, valuers and consultants as well as to the bank sector, property developers. Transactions prices which are officially declared in the purchase-sale, purchase on instalments and financial leasing, and lease or rent contracts concluded by natural/physical persons and legal entities and which are recorded in the Real Property Cadastre and Register and Market transaction database handled by the Centre of Registers are used in Valuation practice in Lithuania. The Lithuanian valuers will use digital raw material. In a Finnish study it was concluded that business growth is 15% higher in countries where public-sector geographical data is freely available or is sold at considerably reduced prices (thesis of Organisers of the BVC 2013). The opening up of the governmental data, free to use, has been justified on economic grounds; since access to this data will have major benefits for citizens, businesses, and society and for the governments themselves (Spatially Enabled Society, 2012).

Improved access to public sector geospatial information is launched in our country, but new business can be built on the back of these data. The enterprises, such as REMAX, Lithuanian branch of the Newsec / Re&Solution UAB have prepared web applications to demonstrate property transactions’ value maps. Data and digital maps are an essential raw material and can be integrated into a wide range of new information products and services, which build on new possibilities to analyse and visualise data from different sources. Opportunities to use data have multiplied in recent years as technological developments have spurred advances in data production as well as data analysis, processing and exploitation. Facilitating the use of this raw data will create jobs and thus stimulate economic growth.

These great digital powers are now building Digital Civilisation, rather than a series of mere products, individual platforms or new applications in social activities, also in valuation process. The future of geospatial data applications and use is discussed in FIG edition Spatially Enabled Society, 2012 (SES, 2012). Open data is a powerful instrument to increase transparency in public administration, improving the visibility of previously inaccessible information, informing citizens and business about policies, public spending and outcomes. The availability of robust public data leads to better evidence-based policy making at all levels of government, resulting in better public services (SES, 2012).

Housing Prices Indexes (HPI) of the Centre of Registers and OHBI, the Lithuanian apartment price index by Real Estate Advisors Company Ober-Haus since 2009 are supported by the data of the Centre of Registers. The spread-sheets via internet for determining property market value with time adjustment function (Figure 6) are developed in Centre of Registers since 2007 (Deveikis et al., 2009). Other firms and companies are developing their product or service by themselves within base of the Real Estate Data Basis of the Centre of Registers. These caused discontent and led to disputes in valuers’ society, also led the legal disputes of the Centre of Registers versus companies.
Digitally enabled valuation companies as well as real estate advisor companies are increasingly using geospatial data, property market data and associated services to entice users to become and stay members. Combining different geospatial resources and data basis, Lithuanian real estate advisors companies have opened web-sites suggesting spread-sheets of the property market prices or values for free (Table 1). All these companies use the property market data, collected by State Enterprise Centre of Registers, and geospatial datasets collected through Open data initiatives. The providers of the ESRI Community Maps, Google maps and Microsoft web mapping resources and geospatial data are interested in making their data content broadly available.

Table 1. Some companies’ websites suggesting real property spread-sheets / property market prices visualization

<table>
<thead>
<tr>
<th>Web-sites</th>
<th>Started since</th>
<th>Operate by manager</th>
<th>Parent company</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.untu.lt">www.untu.lt</a></td>
<td>2011</td>
<td>RE/MAX (Lithuania)</td>
<td>RE/MAX</td>
<td>Visualization in map</td>
</tr>
<tr>
<td><a href="http://www.bustokaina.lt">www.bustokaina.lt</a></td>
<td>2012</td>
<td>RE/MAX Bravo</td>
<td>RE/MAX</td>
<td>Visualization in map</td>
</tr>
<tr>
<td><a href="http://www.ntvertinimas.lt">www.ntvertinimas.lt</a></td>
<td>n/d</td>
<td>n/d</td>
<td>n/d</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.ntparejas.lt">www.ntparejas.lt</a></td>
<td>2012</td>
<td>n/d</td>
<td>DNB</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.ntsandoriai.lt">www.ntsandoriai.lt</a></td>
<td>March 2013</td>
<td>UAB Atvira erdve</td>
<td>Alna Software</td>
<td>Mobil application; GPS; GooglePlay, iTunes</td>
</tr>
<tr>
<td><a href="http://www.ntguru.lt">www.ntguru.lt</a></td>
<td>May 2013</td>
<td></td>
<td>Newsec/Re&amp;Solution</td>
<td></td>
</tr>
</tbody>
</table>

All companies’ websites, presented in Table 1, use the data of a Real Property Transactions Price Database of the Centre of Registers. All websites’ property value spread-sheets are as well suggested as an array of property market prices or a mapping and visualization of a real property prices. As the provider of the data, the Centre of Registers is discontented and disaffected; the delivery of an annual package of property transactions to property valuation companies and some contracts of property market data provisions to customers and users has been interrupted since 2013. It is disastrous for property valuation reliability, for property market transparency and spatially enabled business development. The attitude of the Centre of Registers is not reasonable. Lithuanian proverb says “a dog on the hay”, the valuers know a silos, the data silos without re-use.

Some countries’ governments have so far tended to make free for re-use their medium to small scale geospatial datasets through Open Data initiatives. The more valuable and costly to create and maintain Accurate, Authoritative and Assured (AAA) geospatial datasets (Williamson et al., 2009), such as cadastral boundaries, administrative boundaries, addresses and large scale topographic datasets, are still sold under license; restricting the wider use across the Spatially Enabled Society. (SES, 2012)
Conclusions and Final Remarks

The primary function of the Centre of Registers is the administration of three main state registers, such as Real Property Register and Cadastre, the Register of Legal Entities, and the Address Register. In fact, the Centre of Registers acts as a centre of excellence of the Lithuania’s public sector in creating and developing register-data-based systems.

The Real Property Register and Cadastre contains data of all real property objects registered in Lithuania. Information of the Register and Cadastre includes cadastral data and maps, ownership and its history, property restrictions, etc. Data in the Register and Cadastre is public including cadastral maps and most of the archive documents containing cadastral files and copies of transaction documents.

Market research and property valuation unit provides the clients with statistical and actual authentic data on real property market. The database of the unit contains actual data on all real property transactions made since 1998. Under the order of the Government, Market research and property valuation unit also performs yearly mass valuation of all real properties in Lithuania. An average market value of land and buildings estimated in the course of mass valuation is used for various State economic needs, including calculation of the property tax, and is publicly available.

Contradictions between the Centre of Registers and Property Data, also the users of a property market transactions data rise constantly. State Enterprise Centre of Registers is self-economic, self-financing entity, and supplied data is not free of charge. Property Data re-use in public or private business is prohibited. The discussions on the public mission, interrelationship between society and Centre of Registers, and national inputs to property administration system are needed and desirable in Lithuanian property valuers’ society.

REFERENCES


Website of the State Enterprise Centre of Registers: http://www.registrucentras.lt/index_en.php

Website of the Lithuanian Association of Property Valuers: http://www.ltva.lt

Website of the TEGoVA: http://www.tegova.org