

# Free Internet Access to Cadastral Data – First Experience in the Czech Republic

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**Key words:** Cadastre, Free Access to Information on Land, Protection of Privacy of Personal Data

## SUMMARY

The digitization of cadastre data enabled their distribution by Internet technologies. First experience with new improved service to customers of Cadastral Offices. Internet access to cadastral data enables a common free access to selected base information on land parcels and buildings (number and area of a parcel, land use, house number, owner and co-owners, etc.). Beside that the technology enables access to information about ongoing processes preceding the entry of new data into the Cadastre registers (including the survey procedures). Different aspects of the new service. Avoiding possible interference of the Law on free access to public information and the Law on protection of privacy of personal data. Expected development of the new service and conclusions.

## ZUSAMMENFASSUNG

Digitalisierung der Katasterdaten ermöglichte Verbreitung von diesen Daten mit Internet-Technologien. Die erste Erfahrungen mit verbessertem Kundendienst der Katasterämter. Zutritt zu Katasterdaten mittels Internet bietet einen allgemein freien Zutritt zu ausgewählten Grundangaben über Parzellen und Gebäuden (Nummer und Fläche, Nutzung, Gebäudenummer, Inhaber und Mitinhabern u.s.w.).

Die Neue Technologie ermöglicht daneben auch einen Zutritt zu Angaben über die gerade durchlaufende Prozesse vor Eintragung in Katasteroperat (einschließlich des Messverfahrens). Verschiedene Aspekte der neuen Dienstleistung. Vermeidung von eventuellem Zwischenstreit des Gesetzes über freien Zutritt zu Informationen und des Gesetzes über Personendatenschutz.

Erwartungen während der Entwicklung dieses neuen Dienstes und Schlussfolgerungen.

## RESUME

La numérisation des données du Cadastre a ouvert la voie à la diffusion de ces données par les nouvelles technologies de l'information et de la communication (TIC), notamment par l'internet. Les premières expériences avec ce nouveau service amélioré offert aux clients des bureaux cadastraux. L'accès Internet aux données du Cadastre permet à tous de disposer d'un accès libre et gratuit aux informations de base sélectionnées concernant les lotissements de terre et les bâtiments (numéro et superficie de la parcelle, exploitation, numéro du bâtiment, propriétaire et co-propriétaire, etc.).

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Cette nouvelle technologie assure également l'accès aux procédures qui précèdent l'insertion des données mises à jour dans les registres du Cadastre (y compris les travaux topographiques). Différents aspects de ce nouveau service. Mesures à prendre pour prévenir la contradiction entre la loi sur l'accès libre aux données publiques et de la loi sur la protection des données personnelles. Développements envisagés du nouveau service. Conclusions.

# **Free Internet Access to Cadastral Data – First Experience in the Czech Republic**

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## **1. INTRODUCTION**

Cadastral and land registers have in the Czech Lands long historical tradition. The primary function of these instruments was to ensure information on land and other immovable property for its further application, mainly for fiscal purposes and the protection of proprietary and other material rights to real estate, later to the whole spectrum of further requirements of their users.

The rules for providing information were usually liberal. One of the main principles of the Land Cadastre and the Land Registry was their publicity. The principle of formal publicity (publicity of documentation) together with the principle of material publicity (public faith in written records concerning material rights to real estate) were two basic principles for assuring proper function of the Land Registry in this country. During the socialist period of the state-controlled economy (second half of the 20th century) so called “Real Estate Registry” with different function and principles replaced the Land Cadastre and the Land Registry. The publicity of the records in the Real Estate Registry was considerably narrowed. Viewing into the documentation was permitted to eligible persons only (e.g. owners, buyers). The new Cadastre of Real Estates since 1993 is public again. Only law may restrict the publicity. The method, volume and territorial extent of provided information depend on technical possibilities of data processing, on legal regulations and administrative organisation of the state.

At the end of 1993 the Czech Government approved an ambitious Project of Digitalisation of the Cadastre. The project consists of several steps of technical modernisation of Cadastral Offices and their computerisation. The basic IT equipment for Cadastral Offices including installation of LANs was delivered between 1992 and 1994. At the same time local databases were created and then continuously updated. Conversion of descriptive data into digital form was completed in the years 1994 to 1998. Conversion of cadastral maps in digital form started in 1995. In 2000 LANs of Cadastral Offices were interconnected with the Central Database by WAN. Following year the Enhanced Information System of the Cadastre of Real Estates with advanced architecture and technology and new application software was implemented. This system enables a real time on-line access to updated cadastral information and can provide information from the whole territory of the Czech Republic.

## **2. PAID REMOTE ACCESS TO THE CADASTRE**

After implementing the new cadastral software in 2002 a remote access to cadastral data was launched. This paid service enables access to all descriptive cadastral data and to the digitised cadastral maps. As the Cadastre covers title registration, Internet access to cadastral data is

of great importance, in spite of the fact that the digitisation of cadastral maps is not yet completed.

Remote access to cadastral data (both descriptive and graphic) is a part of the solution of the new application software. It enables to “eligible users” right of access to Central Database, which replicates data of local databases within minutes. The security of the Central Database is ensured by a firewall. The data are provided for reading only. Clients must be registered and deposit an initial advance payment before they can obtain access to this service. Main clients are Courts, public administration offices, municipalities, banks, lawyers, notaries, land surveyors, valuers, local and central governments and real-estate agents. Standardised services like searching for owners or parcels and standardised extracts from the database are available. At the end of 2003 more than three thousand paying clients were registered. The value of data communicated via Internet increased from 18.9 mil CZK in 2002 to 25,5 mil CZK in 2003. These numbers do not include value of aggregate searching services over the territory of the whole country that can be estimated to another 93.9 mil CZK.

### **3. NEW CUSTOMER SERVICE – FREE ACCESS TO SELECTED CADASTRAL DATA**

From the beginning of 2004 a new customer service was launched – free Internet access to selected cadastral data. Application called “Viewing the Cadastre” enables to obtain some selected data concerning the ownership of land parcels and buildings registered in the Cadastre and detailed information about state of procedures concerning requests for entry or record into the Cadastre.

The access to the application is available at <http://nahlizenedokn.cuzk.cz/>. It is also possible to arrive to this address via web pages of the Czech Office for Surveying, Mapping and Cadastre <http://www.cuzk.cz> or via “Public Administration Portal” of the Ministry of Informatics <http://www.portal.gov.cz>.

Following information may be obtained by this free access:

- Follow-up of entry procedures
- Additional information about cadastral procedures
- Information from Cadastre

#### **3.1 Follow-up of Entry Procedures**

In this section it is possible to get the detailed information about the progress of entry procedures into the Cadastre. According to the number of procedure and the name of proper Cadastral Office you can see the date of delivery, current state of progress (e.g. commenced, stopped, rejected, new record prepared and approved, decided, dispatched, closed). There are also names of participants in the procedure, list of procedural acts carried out with date and information about the type procedure (e.g. ownership rights, mortgage).

By inserting the number of a procedure it is possible to obtain also the information on nearest 40 procedures (20 before a 20 after) with date of delivery and state of their progress. In this way you can follow the sequence of handling of your particular case. You can also get information about all the petitions delivered the same day, by inserting the date of delivery.

This contributes to put the work of Cadastral Offices under permanent public watch and contribute thus to their transparency.

### **3.2 Additional Information about Cadastral Procedures**

The rights, which arise, change or extinguish by decision of Court or other administrative bodies (according to the Law) are registered by a simple record in the Cadastre (without any decision of the Cadastral Office). Details about procedures of this type are accessible in this section in a very similar structure as in case of record by entry.

Besides there are some activities of Cadastral Offices concerning sub-division plans prepared by private land surveyors. The surveyors submit the plans to Cadastral Office to confirm and certify parcel numbers used in plans. Access to detailed information of this type is also available in this section. This enables land surveyors to follow up the certification process of their survey plans. This is very useful especially when dealing with extensive sub-division plans, which cannot be checked and certified immediately.

### **3.3 Information from the Cadastre**

In this section of the free remote access to Cadastre you can obtain all the information about parcels and buildings registered in the Cadastre.

By entering name of the cadastral unit and parcel number you will receive detailed information about the parcel kept in the Cadastre. The output consists of following data:

- Parcel number
- Area in square meters
- Name of cadastral unit
- Type of parcel
- Land use
- Number of owner's folio
- Information about building on the parcel (with building number, if any)
- Name/names of owner/co-owners with postal addresses and respective shares
- Information about soil quality (land value), in case of agriculture land
- Information about ongoing legal changes (reference to the number of procedure – if any).

The information on building and ongoing procedure are also active, and by clicking on them you can obtain immediately respective detailed information.

Entering the name of cadastral unit and building number you will obtain detailed information about building, as follows:

- Building number and name of municipality
- Number of owner folio
- Type of building
- Use of building
- Name of cadastral unit
- Number of land parcel
- Name/names of owner/co-owners with postal addresses and respective shares
- Information about ongoing legal changes (reference to the number of procedure – if any).

The information on parcel and ongoing proceeding are active ones and by clicking on them you can obtain immediately respective detailed information.

Free access to the basic information about parcels and buildings registered in the Cadastre is very useful for everybody and for many applications. Nevertheless, only the regular extract from owner folio issued as an official document by Cadastral Office (or obtained by paid remote access to the Cadastre) contents all the important legal information registered in the Cadastre (e.g. mortgages, titles and other registered rights in rem).

#### **4. OPENING CADASTRAL OFFICES TO THE PUBLIC**

*The possibility for everyone to see via Internet what is the progress of ones request from the moment it arrives to the Cadastral Office is one of the most important milestones in the history of the Czech Cadastre.* Another barrier between citizen and administration power is being removed. Former more or less confidential activities of Cadastral Offices of non-sufficient transparency are now open to the public. This can contribute to a greater confidence in cadastral data and increase the quality of the Cadastre data and services.

#### **5. FIRST EXPERIENCE WITH FREE CUSTOMER SERVICE**

The service was prepared at the end of 2003 and tested during December that year. Since the load tests with help of many employees of Cadastral Offices were successful the service was launched on January 2<sup>nd</sup> 2004.

This service has met with great interest of General public. Those who know basic input data (the name of cadastral unit, parcel number, building number) can access more detailed cadastral information. Users appreciate a relatively easy, permanent and free Internet access to up-to-date basic information. Any owner is now able to check the present state of ownership rights to his real estate property and every interested person can get basic cadastral information.

The possibility of monitoring cadastral proceedings by means of Internet is also highly valued. Interested parties can follow progress of their cases and compare it with other cases

without visiting a competent Cadastral Office. Cadastral Offices are pressured to shorten the time limits that are often too long. The service should gradually contribute to improvement of the customer service. The number of those, who are interested in the new free service, is constantly growing.

## 6. PERSONAL DATA PROTECTION

*Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data* was accepted by the Czech Republic and incorporated into - jurisdiction by – accepting the **law No 101/2000 on protection of personal data**. The law covers all the principles of the Directive except point 7 of article 8 - “*Member States shall determine the conditions under which a national identification number or any other identifier of general application may be processed.* A law will recover this absence, which is under preparation.

Since the Cadastre containing personal data is considered according to the law as a public register and its data as published data, there are no legal problems in publishing the cadastral data. Some difficulties sustained only concerning national identification number, which in our case includes coded birth date of natural persons. Due to the absence of the appropriate law regulating processing of the identification number, the remote access to the Cadastre as well as other ways of Internet access to cadastral data are reduced and access to national identification numbers is blocked. The whole service may be moderately affected by the new Law but generally, it does not represent a serious obstacle to continue running the service.

## 7. COVERING THE COSTS OF CADASTRAL INFORMATION

Cadastral authorities provide cadastral information to the public in several forms:

- verbal form,
- public deeds (copies of deeds, owner’s folios, cadastral maps, identification of parcels),
- outputs from cadastral documentation with informational character only:
- printed form,
- electronic form (textual and graphic computer files),
- Internet access :
- paid remote access (see chapter 2),
- free access to selected data (see chapter 3)

The information is provided to the public, state administration, companies, municipalities and private land surveyors, etc. Partly against payment in cash or by bank transfer (outputs with of information character only), partly against payment in the form of duty stamps (public deeds), and partly free of charge (e.g. public deeds to state administration and courts, data for legal surveys, free Internet access).

Yearly income (both financial and administrative charges in the form of fee stamps) for providing all cadastral information was 400 mil. CZK (16 USD in the year 2003). Nearly the

same volume of information was given out free of charge. The income is a part of public revenue. A lower financial income than planned influence negatively the budget of cadastral authorities. The low charge for paid cadastral information and large volume of unpaid information restricts development plans of the cadastral branch. In spite of a strong pressure from the part of users (e.g. municipalities, GIS experts, land surveyors) for free of charge cadastral information.

According to amendments to the Cadastral Law and to the executive regulation on supplying cadastral data by the remote access, the cadastral data will be free of charge for all public administration inclusive municipalities and regional administrative bodies from April 2004. As there are more than 6 thousands municipalities and many other offices of public administration, the number of remote access users will increase up to 12 thousands. Free of charge access thus means, that volume of data required will increase more than proportionally. Massive strengthening of technical equipment is necessary. Governmental funding is now under discussions.

More over the Ministry of Informatics promised that every Post Office will manage this service for those who have no access to Internet.

According to the law only the extracts of the Cadastre issued and certified by Cadastral Office are considered to be legal documents. The outputs of remote access are not, for the time being, legal documents and give only information on actual data kept in the Cadastre. A possibility for municipalities or other administrative bodies to certify remote access outputs by electronic signature is under discussion.

## **8. CONCLUSIONS**

Both the “**Remote Internet Access**” service and the free service “**Viewing the Cadastre**” are important steps in improving access to Cadastre data and support not only access to cadastral data, but also to increase the confidence of citizens in the Cadastre and in the activities of Cadastral Offices.

These services represent also important steps towards completion of the National Geographic Information Infrastructure (NGII) and e-government projects in the Czech Republic.

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## **BIOGRAPHICAL NOTES**

### **Dipl.-Ing. Ivan Pesl (†)**

born in 1944. After graduating from the Technical University in Prague, Civil Engineering Faculty (surveying and mapping) in 1966 he worked on many posts in Cadastral Offices. Post-graduate studies of geodesy at the Technical University Prague during years 1973 – 1975. In 1980 he was given the authorization in surveying for Cadastre and civil engineering. Many papers and articles in professional journals document his activities within the Czech Union of Surveyors and Cartographers in the field of the Cadastre. He was the head of newly established Cadastral Department of the Czech Office for Surveying, Mapping and Cadastre in 1993 at the beginning of the cadastral reform and later the Director of the Surveying and Cadastral Inspectorate in Opava and a national delegate to the FIG Commission 7. He deceased on 19<sup>th</sup> February this year.

### **Dipl.-Ing. Jiri Rydval**

born in Prague in 1941, where he graduated from the Czech Technical University, the Faculty of Civil Engineering, branch of study surveying, as surveying engineer (M.Sc.) in 1963. After graduating he was employed in Institutes in Plzen and in Prague, where he carried out cadastral and thematic mapping and geodetic engineering. Presently director of the Cadastral Office Blansko. He is active as expert witness on Cadastre. He is member of the Council of the Czech Union of Surveyors and Cartographers and a member of the National Committee for the FIG, where he is an assistant to the national delegate in Commission 7. Author of several contributions at the FIG Congresses and Working Weeks on Czech Cadastre.

### **Václav Slaboch, MSc. PhD.**

Director of Research Institute of Geodesy, Topography and Cartography (VUGTK) in Prague, Vice-Chairman of the Czech Union of Surveyors and Cartographers, member of the FIG Commission Revision Group and delegate to Commission 5. Studied geodetic surveying at the Czech Technical University in Prague, 1968 –1969 employed with Fairey Surveys Ltd., U.K and later at the department of informatics of the VUGTK in Prague and at the Czech Office for Surveying, Mapping and Cadastre. 1979 – 1981 recruited as consultant for UNDP, and 1990 - 1995 by the Government of Malta. Member of the EuroGeographics Expert Group on Quality, teacher of Engineering Surveying at the Czech Technical University in Prague.

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