Country Report 2003

(Based on the PCGIAP-Cadastral Template 2003)

Czech Republic

Country/state for which the indications are valid:	Czech Republic
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I. Country Report

A. Country Context

Geographical Context

The Czech Republic is a small landlocked country, lying in the central part of Europe. Its area of 78 866 square kilometres, population of 10 289 621 people, and population density of 130 inhabitants per square kilometre rank the country on the 21st, 12th and 13th places among European countries, respectively. The country's borders make up neighbourhood with Poland (762 km), Germany (810 km), Austria (466 km) and Slovakia (252 km). 67% of the country's whole territory can be found at an altitude of up to 500m, 32% between 500 and 1,000m, and only 1% above 1,000 m. The average altitude of the Czech Republic is 430 m.

The land fund according to land use is distributed as follows:

- 54% of total area is an agriculture land (arable land 39%, gardens 2%, meadows and pastures 13%),
- 46% of total area is non-agriculture land (forests 33%, waters 2%, buildings and yards 2%, other land 9%).

Historical Context

The former kingdom of Bohemia (Golden Age under Charles IV of Luxembourg – the king of Bohemia and the Emperor of Rome and Germany) lost his independence after the battle of the White Mountain in 1620 and began for next 300 years a mere province of Habsburg monarchy, later the most industrial part of the Austrian-Hungarian Monarchy. After the Word War I. in 1918 former Czechoslovakia as an independent and democratic state (republic) of Czechs and Slovaks was formed. During Word War II. Czechoslovakia was occupied by Germany. After the war Czechoslovakia continued in its economic and democratic development till the communist coup in1948, which stopped democratic development for next forty years. After so called "Velvet Revolution" in 1989 the process of liberation and economic restoration begun. In 1993 former Czechoslovakia was democratically divided into two independent states: the Czech Republic and Slovakia. The Czech Republic should be a member state of European Union in 2004.

Current Political and Administrative Structures

Political system in the Czech Republic is a parliamentary democracy based on a free competition of political parties. According to the Constitution legislative power, executive power and justice are separated. The legislative power is carried out by elected Parliament (two chambers). The central government consists of several ministries and other central administration bodies with competencies and responsibilities defined by law. On lower levels of administration there are regional and municipal self-governments. The justice consists of a system of independent courts.

The Czech Republic is administratively divided into 14 regions, each region consisting of several districts (totally 77 districts).

Historical Outline of Cadastre

Czech cadastre has its roots in former Austrian cadastre and Land registry ("Grundbuch"). Modern era of cadastre and Land registration is based on the Cadastral law from 1819, Civil Code from 1811 and the Land registration Act from 1871. This cadastre based on a new mapping was designed solely for fiscal purposes of the state, but since 1871 (new Land registration Act) the description and presentation parcels in the cadastre was compulsory used in land registration, later a copy of cadastral map was a part of Land Registry. The Cadastre was administered and maintained by Ministry of finance, Land Registry by Courts.

Next cadastral development was heavily influenced by political events in last century:

- 1914 -1918 *W.W.I.* Czechoslovakia formed in 1918
- 1919 *first land reform* (confiscation and redistribution of all landed property greater than 250 hectares)
- 1927 new cadastral law (new modern mapping started)
- 1939 1945 W.W.II.
- 1945 **second land reform** (confiscation and redistribution landed property of enemies, traitors and collaborators)
- 1948 communist coup (*nationalization and collectivization* process started)
- 1951 new Civil Code (compulsory land registration was abolished)
- 1964 new Civil Code, new simplified cadastre (registration of deeds within the new cadastre)
- 1989 "velvet revolution" (fall of communist regime)
- 1991 *third land reform* (mass process of restitution and privatization)
- 1993 Czech Republic formed, new cadastral legislation, *cadastral reform started*

New cadastre of 1993 (registration of titles) unified former Land Cadastre and Land Registry into one technically - legal tool administered solely by survey authorities ("legal cadastre" kept and maintained prevailingly by computer-based means).

B. Institutional Framework

Government Organizations

The supreme administrative body is the *Czech Office for Surveying, Mapping and Cadastre (COSMC)*, which is a central governmental body with a president (not a minister) in its head. COSM is submitted directly to the government. There are *7 Surveying and Cadastral Inspectorates* in regions and *77 Cadastral Offices* in districts, which are subordinated directly to COSMC.

Beside that there are two special institutions - the *Land Survey Office* (geodetic control, state map series) and the *Research Institute for Geodesy, Topography and Cartography*, both subordinated to COSMC.

Private Sector Involvement

The private sector is involved in maintaining the cadastre. Solely private surveyors prepare all subdivision plans for the cadastre and do all setting out boundaries (more than 100 thousand cases per year).

Professional Organization or Association

Some of surveyors are associated in the *Czech Union of Surveyors and Cartographers* (about 550 members). Beside that there is the *Chamber of Surveyors and Cartographers* (with only about 150 members, because of absence of any practical advantages).

Licensing

According to the Survey Act private surveyors are entitled to carry out survey activities on certain conditions. Enterprising in this field are bound on *trade license* according to the Trade Law. Education in surveying and praxis (5 years or 3 years in case of graduated surveyors) are basic conditions for giving this license.

Beside that all results of survey activities used for the cadastre and for the state map series must be verified by a person with the *official authorization*. The Czech Office for Surveying, Mapping and Cadastre can give this authorization to a person fulfilling the following conditions: university degree in surveying, five years of praxis, passing a special examination.

Education

There are 5 technical universities offering degrees in surveying (5 year study). Average annual number of graduating students is about 150.

C. Cadastral System

Purpose of Cadastral System

Present cadastral system works as a multipurpose tool (first of all for legal and fiscal purposes, but the cadastral data are generally used in planning, for making decision of local government and for all land oriented information systems).

Types of Cadastral Systems

"The Cadastre of Real Estates of the Czech Republic" covers all the territory of the state. No other cadastre dealing real estates exists. There are a great amount of specialized or local (towns, municipalities) information systems, but they all take over and use data from the cadastre (because legally binding).

Problems with informal or illegal settlements are unknown.

Cadastral Concept

The main unit in the cadastral system is **a parcel**. A parcel is defined in law as a piece of land delimited by its boundaries and represented in a cadastral map. Every parcel has its unique parcel number within so called "cadastral unit". Buildings with yards are usually individual parcels.

Cadastral unit is an area of original municipality delimited by its boundaries and represented in cadastral map. The first cadastral mapping was done and documentation was arranged within this units. Every cadastral unit has its unique name (usually the name of village or town). Bigger towns usually consist of more than one cadastral unit.

Property consists usually of several parcels (e.g. house and garden). Since the object of registration is a parcel, not a property as a whole, a property is registered as a set of individual parcels.

Content of Cadastral System

The present cadastre covers <u>in one complex tool land cadastre</u> (parcels with detailed information about types and areas of plots, building numbers, land use, tax information, selected information about preservation, etc.) <u>and land registry</u> (with detailed information about titles and other rights, owners and their identifiers and addresses).

The cadastre consists of descriptive information file, geodetic information files (cadastral maps and their digital data, if any), survey documentation, collection of deeds, and summary surveys of the land fund.

The descriptive information file is fully computerized (100%), the geodetic information file (cadastral maps) are under digitization (about 25% completed).

The cadastre co-operates with several other public registers, e.g. with the Register of Citizens (ID numbers and addresses of natural persons) and the Register of Economic Subjects (ID numbers, and addresses of legal persons).

D. Cadastral Mapping

Cadastral Map

Currently, there are two kinds of cadastral maps in use: a) old maps on plastic foils at historical scale 1: 2880 (covering about 70% of land) and b) newer cadastral maps at scale 1:1000 or 1:2000 (30%). Both types of maps are being digitized (about 25% completed).

Old graphical cadastral maps 1:2880 in old geographic system (origin from 1835–1855) have been re-drawn on plastic foils. Newer cadastral maps 1:1000 or 1:2000 in present national system (after 1927) have been practically digitized and are kept and maintained by computer-based means.

Contents of cadastral map: geodetic control, boundaries (administrative boundaries, boundaries of cadastral units, boundaries of ownership, land use and preservation areas, perimeters of buildings), parcel numbers, land use symbols, numbers of geodetic control, cartographic symbols, place and local names.

Example of a Cadastral Map



Fig. 1: A specimen of the old graphical cadastral map 1:2880.



Fig. 2: A specimen of newer map 1:1000 – digital cadastral map.

Role of Cadastral Layer in SDI

Cadastral data including cadastral maps are widely used in national, municipal, local and specialized information systems. Cadastral layer is a part of nearly all land oriented information systems. In some cases (when digital cadastral maps are not available) a simple digitization for the purpose of the IS has been carried out.

E. Reform Issues

Cadastral Issues

The main problem of the cadastre - *digitization of old graphical maps* - still remains. The graphical maps represent more than 60% of cadastral maps. Technology of their overworking enabling further maintaining as a digital cadastral map has been developed and tested, but final decision has not been made. Missing digitization of those maps lowers the level of remote access to the cadastre in a significant way. On the other hand, the result of overworking should enable easy and reliable surveying work in the national coordinate system.

Never ending story is, of course, a *financing* the cadastre. Present state is sufficient and enables further indispensable development, but problems are in planned income. Income of the cadastre is an income of state budget. Remote access via Internet has been paid even by public sphere. The Ministry of Informatics asks for remote access to cadastral data free of charge for everybody. It is impossible without a certain investment into technology and a reduction of planned income.

Current Initiatives

Reorganization of organizational structure of the COSMC is being prepared. Instead of present 77 Cadastral Offices only 14 Cadastral Offices (with many working places in districts) will be arranged. The reorganization comprises also a mild reduction of employees and a rigorous separation of cadastral and surveying activities.

As a result of legislation activities there are a new Regulation on providing cadastral data (modified condition of remote access to cadastral data, access to data via every standard Post Office), some amendments to the Survey and Cadastral Administration Act (reorganization), and amendments to the Survey Act. A quite new complex Cadastral Law was submitted to the government (in connection with a newly prepared Civil Code).

Wider use of free of charge remote access to cadastral data via Internet is under discussion with the Ministry of Finance and the Ministry of Informatics.

References

- 1. Pesl, I., 2000. Five years of Cadastral Reform in the Czech Republic. *Survey Revue*, 35(276): 398 411.
- 2. Pesl, I., Slaboch, V., 2002. Ten years of Cadastral Reform in the Czech Republic: From defective cadastre to Internet access to reliable cadastral and land registry data. *Proceedings of the XXII FIG International Congress, April 19-26, 2002, Washington D.C., USA*

II. Questionnaire

1. Cadastral Principles

Deed	or title	registration
1.1	Is your	cadastral system based on deeds registration or on title registration ?
		deeds registration
	×	title registration
		other:
Regi	stration	of land ownership
1.2	By law	, is registration of land ownership compulsory or optional?
	×	compulsory
		optional
		other:
1.3	If felt 1	necessary, please, comment on the actual practice and the legal consequences.
4 <i>ppr</i>	oach foi	· the establishment of the cadastral records
	Are lar	downers required to register their properties systematically during the initial establishment
Appr 1.4	Are lar	downers required to register their properties systematically during the initial establishment cadastre or is registration sporadic, i.e. triggered only by specific actions (such as for exam-
	Are lar of the o	adowners required to register their properties systematically during the initial establishment cadastre or is registration sporadic, i.e. triggered only by specific actions (such as for examble)?
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	Are lar of the of ple sale	adowners required to register their properties systematically during the initial establishment cadastre or is registration sporadic, i.e. triggered only by specific actions (such as for exame)? systematic sporadic

2. Cadastral Statistics

Population

2.1 What is the **population** of your country?

10.3 million

2.2 Please, estimate the **population distribution** between urban and rural areas.

urban:	?? %	
rural:	?? %	
total:	100 %	

Number and distribution of land parcels

2.3 Please, estimate the approximate **total number of the smallest uniquely identified land units**, often called "land parcels" in your country, including urban and rural areas?

21,622,814

The total number would include all freehold and state owned land, regardless of registered, non-registered or informal holding.

2.4 What is the approximate **total number of registered strata or condominium units**? This number would be in addition to the number of land parcels indicated in 2.3?

there are no condominiums, but the cadastre registers except parcels another units – 1,033,484 apartment units

2.5 For **URBAN** areas, please, estimate the distribution between the smallest uniquely identified land units, often called "land parcels" (i) that are legally registered and surveyed, (ii) that are legally occupied but not registered or surveyed, and (iii) that are informally occupied without any legal title (this may include illegal occupation or squatting).

If the estimation is too difficult or complex using land parcels, you may base your estimation alternatively on the number of people occupying these forms of land parcels.

legally registered and surveyed:

...100... %

legally occupied, but not registered or surveyed:

...0... %

informally occupied without legal title:

...0... %

total: ...100... %

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2.6	For RURAL areas, please, estimate the distribution between the smallest uniquely identified land units, often called "land parcels" (i) that are legally registered and surveyed, (ii) that are legally occupied but not registered or surveyed, and (iii) that are informally occupied without any legal title (this may include illegal occupation or squatting).	legally registered and surveyed:100 % legally occupied, but not registered or surveyed:
	If the estimation is too difficult or complex using land parcels, you may base your estimation alternatively on the number of people occupying these forms of land parcels.	
		0 %
		informally occupied without legal title:
		0 %
		total:100 %
the p	se estimate the total number of <i>academic professionals</i> that are active roportion of the time that they actually commit for cadastral matters (adastral system)? Total number of professional land surveyors , such as licensed	
2.1	surveyors active within the cadastral system:	??
2.8	Proportion of the time that these land surveyors commit for cadastral matters:	??
2.9	Total number of lawyers/solicitors or equivalent active within the cadastral system or land market:	??
2.10	Proportion of time that these lawyers/solicitors commit for cadastral matters or land market:	??
	arks and Comments se, identify the best aspect of this questionnaire?	

Please, suggest the area in the questionnaire that could be improved?

It is difficult to estimate quantification when no statistics is available (surveyors and lawyers working outside of cadastral system). Some problems arise from terms (e.g. urban, rural), which are not used (and statistically followed) in our country. Above mentioned estimates and terms should be avoided.