### REPORT ON THE CZECH CADASTRE 2005-2006

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# Essential information on the Information System of the Cadastre of Real Estates (IS CRE)

#### **Basic characteristics:**

- integrated legal and technical instrument for real estate inventory,
- maintained predominantly by computer tools,
- compulsory title registration based on adjudication process,
- · open access to cadastral data for the public

Administration: Czech Office for Surveying, Mapping and Cadastre in Prague - central and independent body of the state administration of the Czech cadastre of real estates

### Present organization of the state sector

Central body: Czech Office for Surveying, Mapping

and Cadastre (COSMC)

Regional executive bodies: Cadastral Offices (14)

Subordinated district bodies: Cadastral Workplaces (112)

Supervision: Surveying and Cadastral Inspectorates (7)

Special institutions: Land Surveying Office

Research Institute

**Number of employees** (2005) total: **5523** 

<u>Cadastral Offices</u>: 4816

Funding: state budget

2005 <u>expenditure</u> of the sector–total: \$ 105 million

<u>revenue</u> - paid services + fees: \$ 30 million

(services free of charge \$ 19 million)

### Activities of Cadastral Offices

### The basic types of procedures in the Cadastre:

- Land registration (entries, records, annotations)
- Providing cadastral information
- Certification of legal surveys
- Renewal of cadastral documentation
  - New cadastral mapping
  - Conversion of cadastral maps
  - Land consolidation (cooperation with private sector)
  - GIS/LIS (cooperation with private sector)
- Proceedings relating to corrections of errors, objections, changes of boundaries of cadastral units and sanctions

### Cadastral documentation

- <u>Geodetic /survey/ information file</u> graphical documentation partly in the form of vector digital cadastral maps /30% of the territory/
- <u>Descriptive information file</u> completely computerized textual information on registered objects /parcels, buildings, flats and nonflat rooms/ subjects and interests in land
- Surveying and measuring documentation
- Collection of deeds

#### Basic statistical data on the cadastre

Table 1, Total number of employees in the branch of the Czech Cadastre

Body	Unit	2002	2003	2004	2005
COSMC	employee	70	70	157	158
Cadastral Offices		5,107	5,106	4,883	4,816
Inspectorates		92	93	89	94
Land Office		407	411	463	455
Research Institute		50	49	50	54
Total		5,726	5,729	5,642	5,577

### Basic statistical data on the cadastre

Table 2, Data about objects and subjects of the Cadastre in the Czech Republic

Data	Unit	2001	2002	2003	2004	2005
Territory	km <sup>2</sup>	78,865				
Inhabitants	million	10.3				
Cadastral units	one unit	13,079	13,059	13,027	13,027	13,027
Cadastral parcels	million	14.733	15.147	15.640	16.138	16.555
Parcels in simplified inventory	million	6.783	6.476	6.108	5.741	5.455
Owner's folios	million	4.731	5.701	5.005	5.145	5.270
Registered buildings	million	3.612	3.613	3.618	3.637	3.663

### Basic statistical data on the cadastre

#### Table 3, Settled Demands on Cadastral Offices

Data	Unit	2001	2002	2003	2004	2005
Entries into the Cadastre	case	380,500	480,801	498,229	572,000	581,000
Records in the Cadastre		415,900	443,000	485,161	588,000	768,000
Requests for official cadastral information	request	1,292,300	1,515,721	1,569,246	1,699,000	1,758,000
Confirmed legal surveys /survey sketches/	geometric plan	110,800	139,000	138,537	130,000	127,000
Cadastral maps converted into digital form	cadastral unit	440	473	571	411	367

Geodetic horizontal control



#### Czech Network of GPS Permanent Stations for Positioning

- 26 permanent stations GPS (Global Positioning System) covering the entire Czech territory at distances approximately 60 km.
- Continuous 24 hours observation of GPS with registration period one second.
- Enables users with a single GPS apparatus with GPRS or GSM transfer to determine position in real time with the centimeter accuaracy or by postprocessing after measurement with the milimetre accuracy.
- CZEPOS is operated by the Land Survey Office.
- Providing data during testing the network in 2006 is free of charge URL: <a href="http://czepos.cuzk.cz/">http://czepos.cuzk.cz/</a>

# Contemporary development Geodetic horizontal control

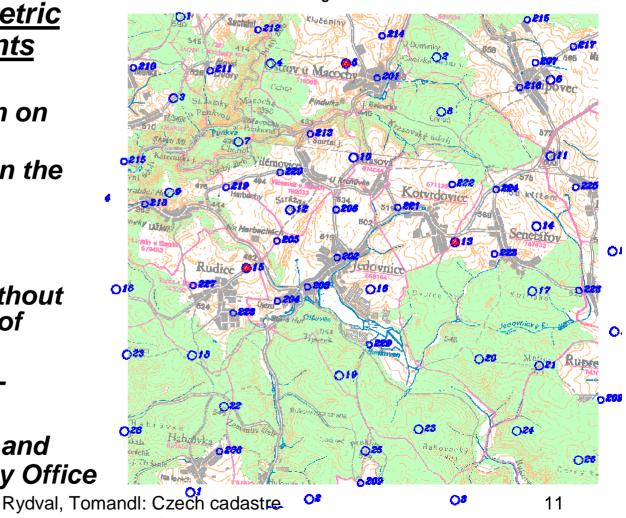
C Z E P S – location of permanent stations GPS



# Contemporary development Geodetic horizontal control

# Database of trigonometric and densification points (DATAZ)

- Complete information on trigonometric and densification points in the Czech Republic at <a href="http://dataz.cuzk.cz/">http://dataz.cuzk.cz/</a>
- Established in 2004
- Acces via Internet without registration and free of charge
- Administration of DP-Cadastral Offices
- Administration of TP and updating-Land Survey Office



Triangūlační list č.3420

Annual meeting C7 FIG 2006

# Contemporary development Innovations in technology I

2005 Extended remote excess to cadastral data via Internet /due to extended demand on providing information/

2006 Obligatory electronic providing of cadastral data and receiving of the results of cadastral surveying activities in new exchange format /descriptive and graphical data as 1 computer file/ in cadastral units with digital cadastral map On-line data exchange with other IS /registry of ihabitants/
Renewal of the hardware of the IS CRE

Rydval, Tomandl: Czech cadastre Annual meeting C7 FIG 2006

Innovations in technology II 2006

- Testing the design of the centralisation of the IS CRE /cancellation of local databases and direct updating of central database/
- Preparation for upgrade of the separate sectoral WAN to the <u>new communication infra-</u> <u>structure</u> of the IS of the public administration
- Preparation for using <u>XML/GML format</u> for data exchange, electronic submissions and results of cadastral surveying

New contents of the Information System of the Cadastre

2006

- Implementation of <u>orientation raster maps</u> with vector parcel numbers in all cadastral units without digital cadastral maps
- Blanket implementation of <u>house addresses</u> and <u>centroid points</u> of land parcels
- Connection of raster maps and color orthophotomaps in the IS CRE and in remote access
- Representation of <u>easements</u> in cadastral maps

Innovations in administration and providing cadastral information 2006

- Authorisation of remote access outputs by means of <u>electronic stamp</u> and their <u>official</u> <u>provision by post offices, municipalities and</u> <u>notary offices</u>
- Pilot project of electronic filling in <u>cadastral</u> <u>templates</u> for updating cadastral documentation
- Pilot project of <u>a storage of</u> legal and technical cadastral documents in electronic form

# Conceptional changes and trends

Legislation

New Civil Code (superficies solo (non) cedit, disputes over intabulation principle)

New Cadastral legislation - mutual relations to the new Civil Code, consolidated legal protection of owners, technical changes-firstly new technology of the conversion of analogue cadastral maps - 2006

Implementary regulations to the Act on the information systems of public administration

basic registers of public administration (register of territorial identification, addresses and real estates-administrator COSMC, 2006 technical solution, register of citizens, register of economic subjects

# Conceptional changes and trends

#### Funding the system

#### Present time:

- cadastral activities are fully covered from the State budget,
- · revenues are direct income of the State budget,
- dependency on the State budget negatively limits the possibilities of sector development, remuneration of employees and improving the quality of customer service.

#### **Improvement proposal:**

- adoption and extension of cadastral charges,
- collected cadastral fees and charges are direct income of cadastral authorities,
- transition to decreased dependancy on the state budget and later cost recovery.
  - The government refused solution prior to the national elections in June.

# **Conclusion**

### Next targets in the cadastral sector

- Building of the national geoinformation infrastructure
- Creation of the register of territorial identification, addresses and real estates
- Interconnection with basic information systems of the public administration through a uniform communications infrastructure
- Completing conversion of cadastral maps and of the collection of deeds
- Recodification of cadastral legislation
- Participation in activities and projects of the EU (e.g. Eurogeographics, EULIS)
- Professional development of personnel
- Decreased dependancy on the state budget and later cost recovery
- Transition of the organisation oriented on fulfilling tasks to the fulfilling of customer requirements

#### **Contacts**

- Web pages of COSMC, Cadastral Offices and Cadastral Workplaces
- Free Internet access to cadastral information

http://www.cuzk.cz/

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