

## Map of large scale in utility companies

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Association of network administrators in the central and eastern Bohemia

# ASSOCIATION OF NETWORK ADMINISTRATORS PAST - CURRENT STATUS



"In the 1992-1993 was established in the eastern Bohemia probably the first association of network administrators in the Czech republic. It was established out of necessity, but it was really necessary … Geodesists usually processed for utility companies graphical data of topographic situations in the field which can be easy combined with important elements of the electric/gas/telco networks. By combining these two data sources its possible to provide easy QA process and protect IT systems against mistakes. "Said the director of Geovap Ivo Vodehnal.

Source: Land Surveyor No. 7 +8 / 1997

The association was formed in the absence of large scale maps with a quality suitable for data acquisition and management of engineering networks

The agreement on the joint creation of map series was called Unified Digital Technical Maps.

With the following key assumptions:

- A unified data model
- The reference map work
- Capability to share data high accuracy
- Cost sharing between owners
- · Cost savings for multiple geodetic survey
- Ensured the process of acquiring and updating data
- Detection and elimination of errors



Association of network administrators in Central Bohemia Association of network administrators East Bohemia

Agreements with regional authorities

# **DIGITAL TECHNICAL MAP**IMPACT THE ABSENCE OF LARGE SCALE MAPS

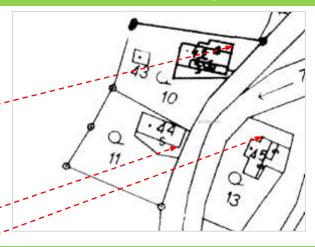


#### **Unified Digital Technical Map (UDTM)**

- A similar format like paper technical maps used in utilities for 100 years ...
- Represent the real status of topographic situation in the field



#### **Cadastral maps**



**Comparison between cadastral maps and UDTM** 



#### **GEODATA STORAGE**

#### DATA MAINTENANCE IN THE DATASTORE - WORKFLOW EXAMPLE



#### **DESIGNER**

Verification of areas of interest in the datastore

## DATASTORE ADMINISTRATOR

Publication of updated

#### **DESIGNER**

Data export

## DATASTORE ADMINISTRATOR

Data quality validation

#### **GEODESIST**

Geodetic surveying in the field

#### **GEODESIST**

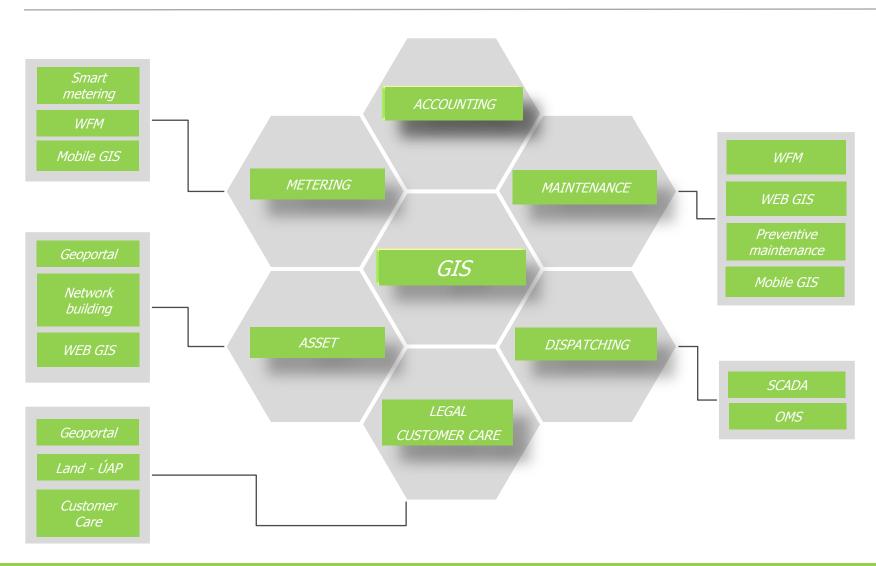
Import updated date back to datastore

#### DATA ERRORS - GEODESISTS

Errors	Contract	%
		50.67%
2	3	66.67%
2	Δ.	50.00%
110	382	28.80%
20	74	27.03%
14	52	26.92%
4	21	19.05%
14	92	15.22%
3	20	15.00%
1	7	34,29%
12	87	13.79%
11	80	13.75%
4	30	13.33%
8	62	12.90%
25	196	12.76%
1	8	22.50%
3	29	10.34%
3	34	8.82%
1	17	5,88%
14	266	5.26%
2	42	4.76%
2.	46	4.35%
1	24	4.17%
1	25	4.00%
22	625	3,52%
1	29	3.45%
6	178	3.37%
1	30	3.33%
10	327	3.06%
2	66	3.03%
22	733	3.00%
20	668	2.99%
2	67	2.99%
1	34	2.94%
14	541	2.59%
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# GIS AND ITS PRESENT POSITION IN THE UTILITY COMPANY GIS AS A KEY INTEGRATION PLATFORM EXAMPLE FROM ČEZ GROUP





#### **ADVANCED GIS FEATURES**

### CZECH IDEAS FOR GEO-PORTAL SOLUTIONS IN UTILITY COMPANIES



#### Examples of using geo-portal solutions

- Customer Care service and a high degree of automation such as "Call Before You Dig"...
- Automation of legislative requirements
- Simplifying the internal WF

#### The most problematic part

- The accuracy of maps
  - The issue of property rights
- The absence of large-scale reference maps
  - Problematic data sharing
  - Problematic higher degree of process automation



Company

Saving MD in the Czech Republic >85 000

Quantity per year 2012

ČEZ Distribution

>170 000

## MAP OF LARGE SCALE – NEXT STEPS EXPECTATIONS FROM THE OWNERS OF THE TECHNICAL INFRASTRUCTURE



#### LEGISLATIVE - METHODICAL - FINANCIAL SUPPORT IN THESE AREAS

- 1. CONSISTENT SUPPORT FOR UDTM LARGE SCALE MAP PROJECTS
- 2. NON-DISCRIMINATORY ACCESS TO THE DATA SOURCES SUCH AS MAPS etc.
  - DATA DEVELOPED IN PUBLIC ADMINISTRATION FOR FREE IN THE STANDARDIZED
     FORMAT OF COURSE ALLOWING AUTOMATED DATA PROCESSING FOR CITIZENS AND
     COMPANIES DOING BUSINESS IN THE EU
- FINANCIAL / PROCESS PENALTIES RELATED TO THE UNUSED OF ELECTRONIC AND AUTOMATED FORM COMMUNICATION AT ALL LEVELS OF USE
- SYSTEMATIC EDUCATION OF THE GENERAL PUBLIC
- NEW TECHNOLOGIES FOR DATA COLLECTION