

Agnieszka Bieda: **Valuation of fixed Assets for Accounting Purposes** • Geomatics and Environmental Engineering 2008, Vol. 2, No. 2

Fixed assets are elements of company's material assets. They have a determined useful life which is longer than one year, they are complete and usable at the moment of bringing them into operation, destined for the entity's own needs or transferred to other entities on the basis of rental, lease or other agreements of similar kind. Fixed assets comprise real property, machines and equipment, means of transport and livestock. The article discusses the methods of fixed asset valuation exemplified by real property, machines and appliances as well as means of transport in use at one of enterprises located near Krakow in January 2008. Showing method of estimating market value of machines and devices as well means of transport building properties depends on calculating formula takes into consideration initial value fixed asset, number of years of depreciation, years of using as well as capital rate. In case when initial value is not original value but recalculated, should be improve up on real coefficient from accounting value to market value. Because that method can not be using in estimating of ground estates author shown another method of estimating its value.

Keywords: accountancy, accountant value, amortization, enterprise, estimating, fixed assets, market value, tangible constantly assets

Józef Czaja, Janusz Dąbrowski: **Special Algorithms for Assessing Market Value of Real Estates** • Geomatics and Environmental Engineering 2008, Vol. 2, No. 2

This paper deals with bases of market representative real estates that may contain blank fields referring to information on some attributes of these estates. In market analysis of these bases only such parameters may be used that refer to the marginal distribution of the multidimensional random variable, i.e.:

- average value for the unit price or for attributes of the real estate in the marginal distribution of the multidimensional random variable,
- standard deviation for the unit price or for attributes of the real estate in the marginal distribution of the multidimensional random variable,

- total correlation coefficients for the individual attributes relative to the unit price of an estate in the marginal distributions of the multidimensional random variable.

For bases of representative real estates with incomplete information on the attributes, special market analysis methods must be developed as well as special algorithms of assessing the market value of an estate. The basis for such a market analysis of real estate are appropriate similarity weights of the attributes of the estate, the values of which are determined, according to the Markov principles, taking into consideration the known and unknown values of the attributes of the real estates concerned. The special algorithm developed for assessing market value of real estate is based on the model of two-dimensional regression, taking, however, into consideration the mutual similarity weights of the attributes of the real estate.

Keywords: real estate bases, market analysis, real estate valuation

Timi Ecimovic: **The Climate Change System. Introduction. Part 1** • Geomatics and Environmental Engineering 2008, Vol. 2, No. 2

Contemporary sciences approach with use of system theory, complex problem solving, case studies and system thinking are offering new horizon for understanding the natural sciences and the climate change system issues. Novelty is understanding of holistic nature of the world and larger. System approach has been applied and history of happenings and evolvments are presented at this part. The Climate Change System Introduction, Brief history of the Planet Earth as a one of Subsystems of the Universe, and Interdependences, Interactions and Co-operations of the Life, Climate Change System, and Biosphere are major parts presented.

Keywords: climate change system, system theory, matter, energy, information, living conditions on the planet Earth

Marcin Ligas: **The Restricted Use Zones around the Airports and the Property Value** • Geomatics and Environmental Engineering 2008, Vol. 2, No. 2

The implementation of restricted use zones constitutes a real threat for people having the legal title to the property thus the methods of appraisal in such cases should not be casual only but should be the fixed tool of the appraisers. The article presents a short characteristic of International Air Port Krakow-Balice development. It includes also a review of polish legal acts concerning restricted use zones and its influence on environment. In case of constantly collected market data (special database system) the model approach on average seems to be a very useful and justifiable tool. It gives the opportunity of appraising all the property within the given area (the restricted use

zones) in the real time. Such a properly constructed model has the ability of recalculating every time when additional data come into the system. This gives the constant insight in mechanism of declining property values caused through the implementation of the restricted use zones and could be a useful tool for policy-makers and people having the legal title to the property

Keywords: restricted use zones, noise, appraisal, hedonic pricing model

Ewa Michalena: **Methods of Promotion of Renewable Energy among Local Municipalities of Poland** • Geomatics and Environmental Engineering 2008, Vol. 2, No. 2

Poland faces nowadays a multi-dimensional challenge: She's a country of a high-accelerated economic development (considered to show another 30% of economic development, during the next 50 years), with abundant energy needs, situated at a crossroad between Europe and Russia (an energy-consuming and an energy-productive center), with ambitious objectives to catch in the sector of renewable energy sources, with dynamic and participative local municipalities struggling for the benefit of their territories, with a very recent accession to the European Union (only in 2004), and with a historical past full of revolutionary ideas and actions. Nowadays, Poland needs to persuade her people to adopt innovative schemes of energy production in order to protect the environment while at the same time she has to achieve a target of 7,5% from renewable energy sources until 2010 (14% until 2020), showing at the same time a high degree of competitiveness equal to the one of other European Member States. For the newly accessing country, these challenges are not an easy task. In this paper, we run a quick look at the energy situation in Poland, and we try to approach an effective strategy regarding the promotion of renewable energy applications among Polish municipalities, taking into consideration the specific concerns of local people as well as the already existent supporting scheme from the central government.

Keywords: renewable sources of energy, environmental protection, Polish local municipalities, European cooperation

Sławomir Mikrut: **Experience from the Utilisation of Archival Aerial Images for the Needs of Databases Feeding** • Geomatics and Environmental Engineering 2008, Vol. 2, No. 2

The subject of research was developing the technology of utilising archival aerial images as an element of databases feeding. The goal of such studies is, first of all, to reconstruct the existing condition (orthophotomap, 3D models) of facilities (areas) of interest to us in relation to a freely-selected time period provided, of course, that we have the relevant data in the form of photos. Such a proceeding can

provide us with a certain view about the infrastructure of the period, for example it makes it possible to assess the condition of building structures of that time. Those data can be supplemented with ground photos, thus making it possible to reconstruct objects, which can show „those“ days. In this paper, the author proposed a technology, which makes it possible to utilise those photos, in spite of the lack of elementary information on them and their poor quality. The coordinates of background marks were restored in an analytic way. Final results of studies allow drawing conclusions as to the correctness of the adopted technology, while the use of proper filtration of images enhances their radiometric quality.

Keywords: archival photos, digital orthophotomap, aero-triangulation

Tomasz Salata: **Possibilities of the of the data interpretation in the databases structures** • Geomatics and Environmental Engineering 2008, Vol. 2, No. 2

The paper presents the possibility of interprets of data in the database systems considered under the angle of the way of the construction style of the structure of accumulating database system, the sights of the system decisive about the format kept data the and ways of interpreting data by users using the system.

Keywords: interpretation of data, databases, format of the data