ABOUT APPLICATION OF GEOINFORMATION IN THE EDUCATIONSYSTEM AND COMMUNICATION OBJECTS OF THE STATE CADASTR

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ABSTRACT
The article describes the content of the organization of geoinformatics and GIS technologies; establishment; communication of cadastr and its use in educational system; the content of new "Geoinformatics" educational literature in masters outlined.

KEYWORDS: geoinformatics, cadastre, education, communication-GIS, cartography, geo visualization, Arc GIS database, debase, TEMPUS program.

INTRODUCTION
At the present time, the database is regarded asthe manufacturing industry in geoinformatics, its bank and management, a variety of purposes aimed to solve the problems of geographic information systems (GIS), including the preparation of hardware and software products. GIS — geoinformation technology will be used as a shell application.GIS technologies are used in a variety of areas in there public, including the Ministry of Land Resources, Geodesy, Cartography and Cadastr State Committee proceedings in all the land tasks, architecture, building three-dimensional models, remote astronomical observations, distance research of the earth, etc. Experts have conducted a lot of research by applying geographic information systems.

GIS technology is being used not only in the state cadastral proceedings, but also in the formation of a database and the creation of digital cards; in general, every cadastral sector is doing research to create its own compatible GIS. This unified system shows that the coordinates of the areas of digital cards should fall on top of each other when state cadastrs provide its objects to the State Cadastr system. This article discusses cadastral GIS technologies and its application in education and training systems.

Cadastr of communication objects lists following objects and look at it as an object of study: international, intercity, important regional and local telephone and telegraph networks, fixed equipment, transmission lines, etc. At the same time roads and railways are also cadastral object. To input cadastral data and preceding its system on the process of creation of "Communication GIS" Geographic Information system can be imagined as follows.

To perform cadastral system's duties, collection regional data, storage, search, analyze and illustrate, to understand database via a computer management system complete tools of ArcGIS are recommended.

Figure 1.in ArcGIS program topographic for nomenclature square

To input cartographical data into GIS each object in the present paper map is numbered as a separate layer. Before numbering task topographic maps are selected then they are scanned at 300 dpi TIF format color volume and placed in the computer memory in raster form. To repair scanning errors the map schemes are corrected on Adobe Photoshop graphics editor, they are brought into the same size and cut. After completion of cutting task maps are uploaded to Arc GIS software. In Arc GIS program first and foremost task begins by choosing the base points, in this step angular coordinates of trapeze topographical map are used. Trapeze topographical maps are called by their nomenclature.
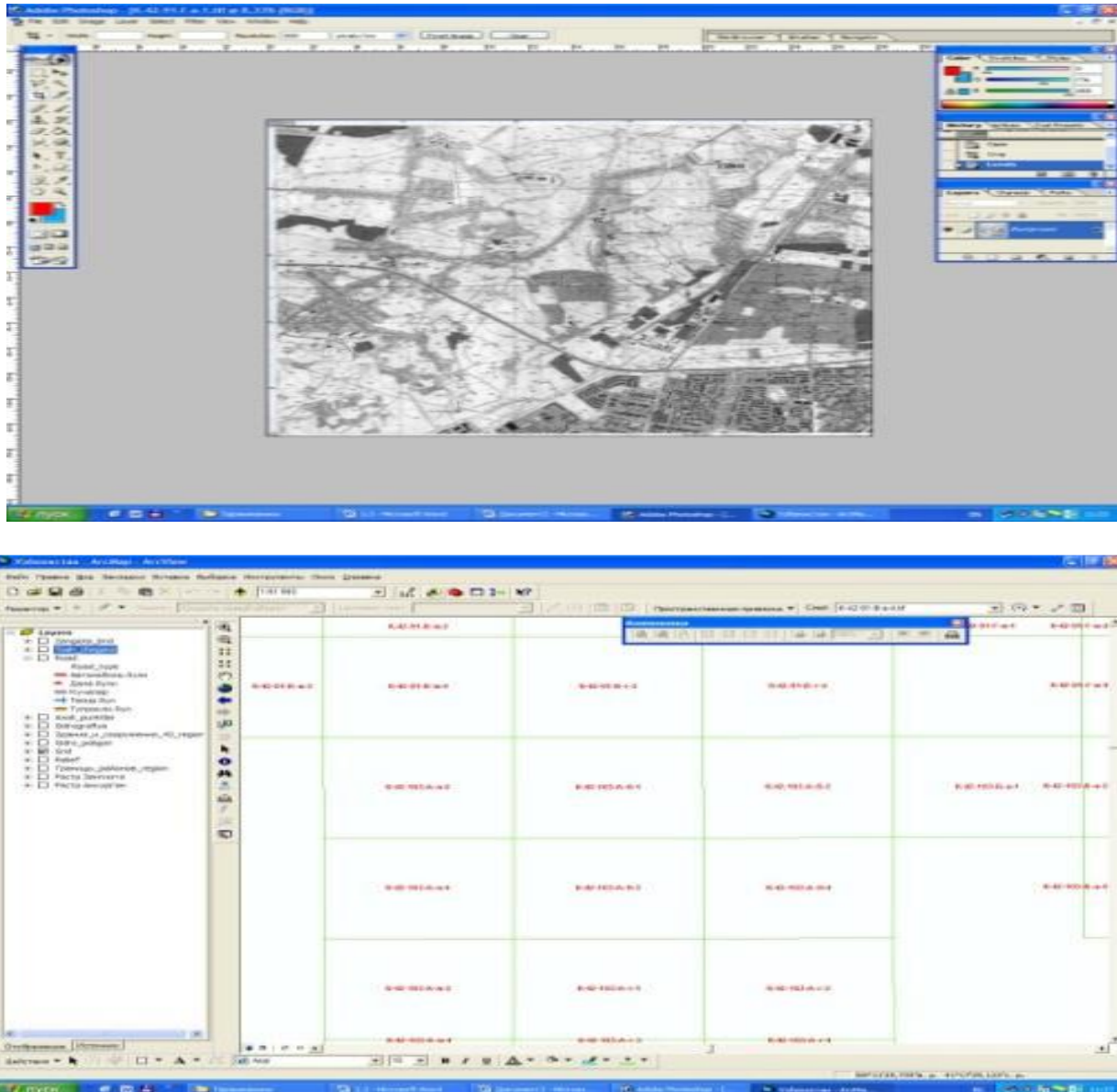

**Figure 3.Createion of nomenclature square ArcGIS program**

For trapeaze which was created for the GIS program, corresponding topographic sheets of maps are inserted, and this is performed by using "add" icon (equipment) on the Arc GIS program. After receiving the map sheets from Fold equipment "added layer" function is selected. Then from "Spatial Reference" section "Fit to the displayed extent" function is selected and is carried out by adding new maps to the previous maps. At the same time, a new layer is placed on its Trapeze and "transformation" task is performed. A new map process is performed again the above-mentioned procedure.

After creation of trapeaze of topographical maps each type of object in the map is numbered as a separate layer. Creation of layers of object types is carried out through "Layers", they are saved with the name of the object (Figure 4). The results of the work performed in the Arc GIS program, attached cartographic,

statistical and text data stored in the form of graphics and tables, contact is re-loaded when required (Figures 4, 5).
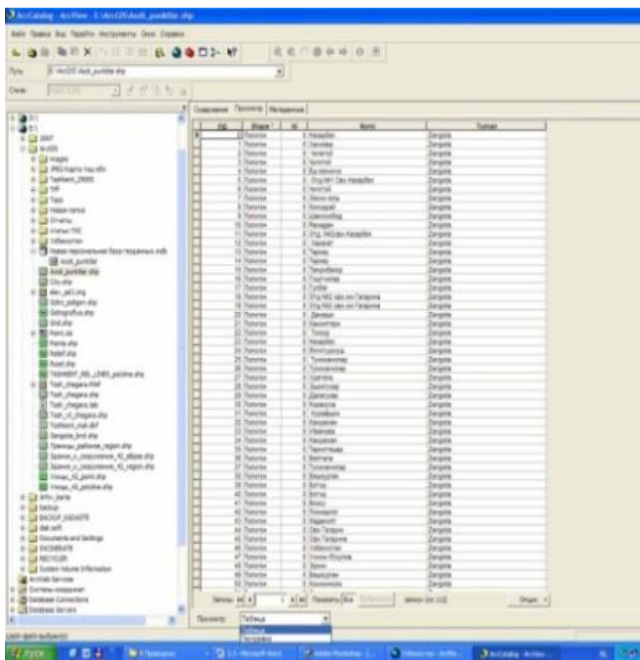
Figure 4. The appearance of a digital graphics map layers on ArcGIS software
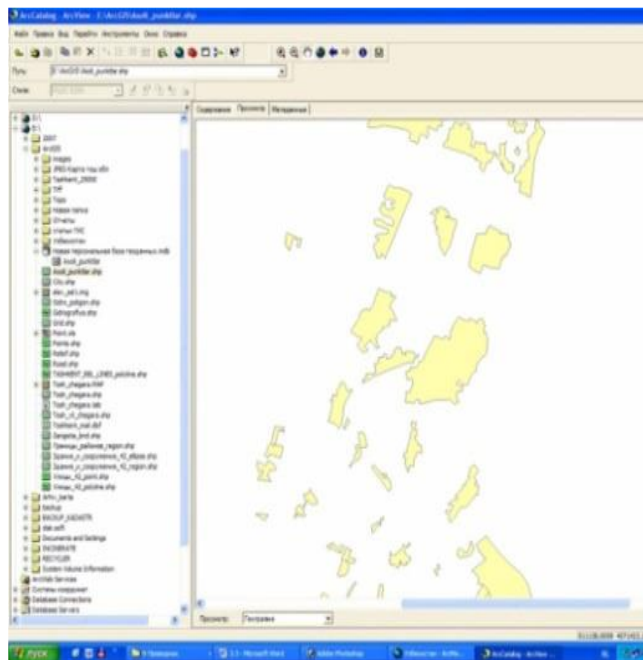
Figure 5. Description of a digital map as a tableon ArcGIS program (by database attributes)

Research, practical experience has shown that before performing the steps in the program description it is important to pay attention to the structure of the individual parts of the system. To fulfill completed requirements of the map fields GIS software products, technological approaches and architectural structure play an important role. Ignorance and the allowable error might be very costly and subsequent actions can lead to big problems.

Currently, carried out work in the development of science education process of Geoinformatics in the Department of Geodesy and Cartography at University is worth to mention. Geoinformation as a science studies cartography, remote sensing, geography and other disciplines of nature and society geo systems through special tools and techniques. One of the most important method is computer modeling and creation of geo informatics maps.

Members of the department participated in the creation of the master's education system of Tempus GE-UZ project 5A311502 — "Geodesy and Cartography (informatics)". According to this developed postgraduate training system "Cartography and Geo visualization" science considered to be one of the main courses for the new academic schedule. In order to train students training guide book was written by members of the department. In the training guide book followings were outlined clearly: visual communication, map design, cartographic modeling, map design and forming, surface rendering, virtual and reality, map design and planning on the basis of a modern GIS technology, modeling, database creation, 3D (Dimension), forming geo imagies (visualization). Graduate students, senior researchers and institutions of higher education teachers can use the book. This handbook was prepared for publication and published by professor-teachers of the faculty of the Department of Geodesy and Cartography (E. Yu. Safarov Sh. M. Prenov O. R. Allanazarov A. K. Sayidov, D. N. Raxmonovs).

Conclusion, the implementation of the GIS mapping and cadastral work programs and its extensive database gives great opportunity to experts. For this purpose, developed experience of communication objects in GIS technology for the state cadastor canbe interesting for professionals who are working inother areas.

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