

## **ANALYSIS OF INFORMATION POTENTIAL OF TOPOGRAPHIC MAPS FOR STUDYING NATURAL AND CULTURAL HERITAGE**

Tamara V. Vereshchaka, Elizaveta V. Baranova

*Moscow State University of Geodesy and Cartography (MIIGAik)*

*4 Gorokhovskiy by-street, Moscow, Russia, 103064*

*Telephone: +7 095 267 2872, Fax: +7 095 267 2518*

*E-Mail: [forest@miigaik.ru](mailto:forest@miigaik.ru)*

The UNESCO Convention on the protection of universal cultural and natural heritage accepted by the countries of the world, obliges them to reveal, protect and popularize this heritage by their own efforts and through the international cooperation and help, to include it in the programs of planning and projecting, to avoid the risks of social and military character, of natural disasters and cataclysms threatening the heritage.

Problems of preservation of heritage are closely connected with mapping and they are the premises and stimulus for the development of cartography.

Topographic maps are the most universal source of versatile space-and-time information on heritage for vast territories.

Interrelated complex of natural and cultural landscape components displayed on topographical maps, constitutes a natural and history environment (background), in which the heritage objects are formed and exist. The limits of heritage objects and their protection zones depend namely on topographic situation (natural borders, urbanization rate, etc) and are established according to that.

The present report deliberates in detail the content aspects of modern maps that should enable to evaluate natural factors in the formation of environment and its protection, their recreational and resource capacities. The proposals aimed at the improvement of information potential of topographical maps, are also developed.

The essence of this study consists in the categorization of objects, developed with international documents and Russian legislation taken into account. It is based upon the selection of natural, historical and cultural components of heritages, subdivision of objects according to their status (universal, federal, regional or local importance) and to the regime and type of their protection, territorial extent and genesis.

The authors have developed conceptual approaches to the representation of objects belonging to the natural and cultural heritage on topographic maps, as well as the corresponding symbolization system, that is supposed to be a separate section of maps' content with theoretical substantiation. Put forward as well is the problem of composing a computer cartographic database on heritage for using it in territory management, general and detailed terrain planning, for optimal organization and co-ordinations of building, land-reclamation and road construction works, maintenance of forest and park areas, reconstruction cities and districts, tourism, in functional zoning of lands and other fields of activities.