

## **Cartographical Support of Steady Development of Tourism on Trans-Border Territories of Russia and Mongolia**

**Leonid A. PLASTININ, Nadezhda V. KOTELNICOVA, Boris N. OLZOEV,  
Russian Federation**

**Key words:** digital map, tourism and recreative, steady development, GIS

The steady development of locale is one of the priority tasks of the modern state, as in many respects depends directly on the socio economic and natural factors. In this connection the modern tool is indispensable, which one completely would solve the given problem. We offer as such tool – creation of an intelligence system of steady development of tourism on trans-border territories of Russia and Mongolia. The special place in solution of this problem is taken by national parks “Tunkinskiy”, engaging southwest territory of Republic Buryatiya (RB) and adjacent with it – “Hubsugulskiy”, posed in basin lake Hubsugul.

In 2007 in centre «SIBEK» the electronic recreative and tourist card of a national park “Tunkinskiy” to scale 1:200 000 was created. Now in centre the project of a card of Kabanskiy’s and Pribaikalskiy natural and cultural heritage objects (scale 1:500 000) designed, and also form a card of Horinskiy’s natural and cultural heritage objects in districts RB to scale 1:100 000 and series of educational electronic ecological cards RB to scale 1: 1 000 000 that is a landscape and ecological map, map nature usage and recreative and tourist map.

The experience of creation of electronic maps and hybrid module of offered districts will be necessary in creation of an intelligence system trance boundary of territories of Russia and Mongolia on an example of national parks “Tunkinskiy” and “Hubsugulskiy”, providing steady development of tourism at an international level.

Let's consider criteria, on which one estimate steady development of locale [Wikipediya]:

- Rational maintenance of natural resources;
- Favourable directions of the investments;
- Orientation of technological development;
- Institute of change.

Rational maintenance of natural resources is meant as activity of the person on learning, reconnaissance, primary processing (enrichment) of natural resources with the purpose of their direct consumption or support by them of an industrial orb with allowance for of main ecologic and economic, social and nature protection criteria and limitations officially adopted by company.

Favourable directions of the investments are the perspective tourist projects, the resort economic programs etc. Long-term nestings of the investors can be directed on building of sanatoriums, bases of rest, hotels, camping, balneal complexes and other tourist objects. The development of the investment projects has a high social signifi-

cance: the job-security program of a great many of the able-bodied population, and also will entail strengthening an infrastructure and economics of district, that is apart important in conditions of instability and economic crisis.

At creation of a recreative and tourist zone on territory of district the forward reachings of a science and engineering, and also new geographical information technologies – digital maps with permanently enlarged and updated units of databases should be utilized. Such intelligence systems can allow the expert of any technological area to receive the staticized information on recreative and tourist resources of district.

Under institute by changes the constituent of processes of social economic development is meant expressed in development and change of social institutes [Institute of Change]. At implementation of introduced changes in an orb of tourism the different services and offices will be created, which one can be independent, and at management of district. They will be carried out a control, handle and level of development of tourism of district, and also development of the different projects and programs.

If to follow all these aspects at creation of recreative and tourist infrastructure, there is a possibility to minimize social, economic and ecological expenditures, and in a consequence steadily to develop tourism and recreation on trans-border territories.

On researched districts of geographical information mapping it is possible to develop following sorts of tourism:

- Ecological tourism and tourism in conditions of the natural environment, nature support of excursion;
- Rest at tourist centres and zones with a developed resource base and infrastructure of fissile tourism, physical culture and sports;
- Rest in wood and park zones;
- Rest in specialized tourist complexes of a family type with a developed resource base for occupations and entertainments of children;
- Winter tourism;
- Medical and improving tourism on health resorts;
- Agricultural tourism;
- Cultural – cognitive tourism.

Both districts of mapping are close on natural environments both degree of development of economics and social orb. Therefore creation of a cartographical frame of the data of territories will allow to decide the social economic tasks and to perfect foreign traffics.

Consider briefly contents of an electronic recreative and tourist map of a national park “Tunkinskiy”.

The electronic recreative and tourist map of a national park «Tunkinskiy» includes units topographic and subject contents. The topographic units represented by occu-

ped points, road network, hydrography, contour, vegetative integument and grounds. The subject block is entered by recreative and ecological complexes, recreative and tourist objects and exogenous processes of contour derivation. At mapping the comprehensive approach will be utilized, which one allows to estimate binding and space allocation of subject objects to the precisely localized objects of topography (terrain).

In common, electronic recreative and tourist maps – complex tourist maps intended for orbs of tourism, science, derivation, nature protection activity, bionomics and managements.

The scheme of contents of electronic recreative and tourist maps is offered. In the offered scheme of a contents the methodological principles of creation of geosystems encompassing by system mapping by a landscape fundamentals (recreative and ecological complexes) and exogenous processes of contour derivation in interaction with tourist and recreational objects are considered.

The introduced principles can serve as a sample for creation of electronic maps of tourism and recreation of a national park “Hubsugulskiy”, and also at more detailed mapping of characteristic recreative and tourist resources for concrete district in larger scale. Also in a recreative and tourist orb the special section “natural and cultural heritage” of mapping districts is selected, which represented historical, religious, cultural, ancient and natural objects.

In the offered scheme of a contents the methodological principles of creation of geosystems encompassing by system mapping by a landscape fundamentals (recreative and ecological complexes) and exogenous processes of contour derivation in interaction with tourist and recreational objects are considered.

In 2007 the operation on creation of a Series of electronic educational ecological maps RB to scale 1:1 000 000 started will be created as directory systems permitting to fulfill search of the indispensable data, and enables to use, having knowledge in the field of common computer science.

The names of three electronic educational ecological maps were represented above. One of them is a map nature usage RB, indicating how the person will utilize natural resources and what effect renders on the natural environment. There is a map – insertion “Characteristic of districts nature usage RB”, on which one Tunkinskiy the district concerns to districts agricultural, recreational, wood trade nature usage [Map nature usage, 1998]. Allowing the given information, it is possible to speak about factors in development of tourism, about a quality of life of the population, about a degree of development of a social infrastructure.

The electronic (digital) map represents the system of interdependent subject coatings and stratum generator spatially – oriented the database. It becomes a collection of bound databases formed on a uniform conceptual and methodical basis. Such data-

base is supported by tools a hybrid module permitting to solve the user's tasks: to produce on the basis of base maps unlimited set of derivative maps both other output illustrative and account materials of different sort and contents.

The electronic maps, created by us, represent digital general purpose working spaces, which one consist of a number of coatings and stratum, included in them. These spaces open for input of the manifold and non-simultaneous digital information about any objects nature usage and landscape and ecological processes, and, as a matter of fact, represent a regional intelligence system.

As a whole, it is possible to mark, that there are all indispensable conditions for steady development of tourism in offered districts.

In a period of 2004-2009 year the major size of the text, statistical, graphics and departmental information about districts and itself RB is accumulated, that will allow to create the directory system.

The steady development of tourism is reached at usage of the complex technological product by the way GIS. As the GIS is a combination different space and attributive of the data of territory, that enables to fulfill different inquiries, simple and composite calculations, build-up of models, bumper zones etc.

The GIS solves the tasks of handle, organization of activity, territorial planning, development of an infrastructure, therefore with the purposes of inducing development of an orb of tourism and creation of the modern competitive tourist and recreational complex state policy of Republic Buryatiya is directed on implementation of the following strategic tasks on the basis of the cluster approach:

- Development and rise of competitive strength of a tourist cluster through inducing of business – cooperation and state and private partnership;
- Creation of a modern tourist infrastructure, including transport support, comfortable hotels, industry of entertainments, and favourable business – climate for development of tourism by means of contributing to preparation of the skilled frames and implantation of information technologies;
- Rise of notoriety of the tourist product of Republic Buryatiya through promoting brands of Baikal in the global tourist markets;
- Creation of competitive tourist products on a basis most of strong tourist assets by means of installation of the long-term inter-regional and international ratios on development trance boundary of the tourist paths for the tourists traveling on North-east Asia;
- Saving and development of natural and cultural property on the basis of balanced ecological economical of technologies, development of norms marginal of recreational loads both rules of organization of tourism and rest on the Baikal natural territory.

In this connection it is possible to draw a conclusion about steady development of tourism at a level of its organization and development on the basis of creation a GIS.

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## CONTACTS

Prof. Dr. Leonid A. Plastinin  
Irkutsk State Technical University (ISTU)  
83 Lermontova Ul.  
Irkutsk, 664074  
Russian Federation  
E-mail: [plast@istu.edu](mailto:plast@istu.edu)  
http: [www.istu.edu](http://www.istu.edu)

Kotelnicova N.V.  
Irkutsk State Technical University (ISTU)  
83 Lermontova Ul.  
Irkutsk, 664074  
Russian Federation  
E-mail: [plast@istu.edu](mailto:plast@istu.edu)  
http: [www.istu.edu](http://www.istu.edu)

Olzoev B.N.  
Irkutsk State Technical University (ISTU)  
83 Lermontova Ul.  
Irkutsk, 664074  
Russian Federation  
E-mail: [icob\\_irk@mail.ru](mailto:icob_irk@mail.ru), [plast@istu.edu](mailto:plast@istu.edu)  
http: [www.istu.edu](http://www.istu.edu)

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