
The National atlas of Russia was created as the official state edition according to the assignment of the Government of the Russian Federation. The atlas is a national information resource of the state without which use it is impossible to carry out functions of management effectively. Wide application of information technologies in bodies of the government within last decades has led to accumulation of the geographical information data bulk which is being, as a matter of fact, the main component of national GIS.

The general management of cartographical works on creation of the National atlas of Russia was carried out by Federal Agency of Geodesy and Cartography. The scientifically-methodical management was carried out by the Main Editorial Board of the National atlas of Russia; by the Editor-in-Chief of the National atlas of Russia, Head of Roskartographia Dr. A. V. Borodko; by Editorial Boards of four volumes of the National atlas of Russia. Editorial-technical questions were solved at sessions of Editorial Council and the Main Editorial Board of the National atlas of Russia. For each volume the Editor-in-Chief, the Assistant to the Editor-in-Chief and the Key Editor have been appointed. A large quantity of the organizations and the enterprises of various departmental subordination has been involved in work on creation of volumes of the National atlas of Russia. Drawing up and preparation for the edition of all four volumes
of the National atlas of Russia were carried out by the Roskartographia FGUP "Industrial Mapping Association “Cartographia”.

The National atlas of Russia is the fundamental complex cartographical product, called to give complete representation about the nature, population, facilities, ecologies, histories and culture of Russia, the national collection of scientifically processed and mutually coordinated space-time information, applicable in all branches of economy, management, science, education and defence of the country. It is a special kind of cartographical product in which as objects of mapping the state in all aspects and spheres of its existence and development acts.

Mapping in the National atlas of Russia is realized at four spatially-geographical levels: Global and Euroasian (maps of the world and large parts of the Earth; Russia in the world, the Europe and Asia, the CIS), scales of maps – 1:150000000, 1:90000000, 1:60000000; all-Russian (federal, the Russian Federation as a whole) – 1:40000000, 1:30000000, 1:20000000, 1:15000000; regional (physical-geographical areas, federal districts and subjects of the Russian Federation, separate regions, etc.) – 1:5000000, 1:4000000, 1:2500000, 1:1000000; local (separate cities, industrial units, most interesting in natural, cultural, economic aspects territories and objects) – 1:500000, 1:200000, 1:100000, 1:50000, 1:25000.

The National atlas of Russia includes maps, text explanatories to them, space images, photos, help materials, indexes of place names, etc. The format of the atlas is 43.0×29.5 cm.

The National atlas of Russia is published in two kinds: polygraphic and electronic.

**Volume 1 “General characteristic of territory”**. The first volume contains 496 pages of maps and text material which are grouped in six sections: Introduction; Formation, research and mapping of territory of Russia; Federated structure of Russia; Geographical regions and the seas washing territory of Russia; Help data; Index of place names.

**Volume 2 “Nature. Ecology”** is a component of the National atlas of Russia. The volume contains 496 pages of maps, text and illustrative material which are grouped in 15 sections: Introduction section; Evolution of the environment; Geological structure and resources of bowels; Relief; Climate; Waters of the land; Snow. Ice. Frozen ground; Seas; Soil cover and land resources; Vegetation; Fauna; Landscapes; Condition of the environment; Nature protection; Help section.

In the volume an extensive complex of the maps reflecting an environment, resources and an ecological condition of territory of the country is presented.
The section “Nature protection” includes maps of wildlife management optimization, recreational resources, wildlife preservation, participation of Russia in the international nature protection conventions and agreements.

In this section the theme “Recreational resources” is presented by the map of scale 1:20000000 and by insert maps: “The Gold ring” (scale 1:4000000), “The Caucasus-Black Sea Area” (scale 1:7500000). On the map the country resorts, mountain-skiing centers, routes (“The Gold ring”, routes of group tours, bus, railway), the basic areas of carrying out tours on the pedestrian, water, mountain, ski and other kinds of extreme tourism are shown.

Recreational resources represent a set of natural and historical and cultural objects and phenomena, suitable for use at the recreation and tourism. Basis of tourist-recreational potential of the Russian Federation consists of historical cities, monuments, memorial estates, ancient manors, national and natural parks, natural and cultural objects of the World heritage, tradition and customs of numerous people of Russia, national art crafts, the richest natural resources (seas, rivers, lakes, mountains, caves, hydro mineral springs) favourable for treatment, rest and tourism of many regions of our country. Here the map "Recreational regionalization" of scale 1:45000000 is presented. On the map the natural zones and areas and recreational areas with characteristic of the basic recreational functions (medical, health improovingly-medical, medical-make healthier, health improving, sports-tourist) are allocated. The map is accompanied by the description of natural-resource potential of each recreational area specificity promoting development of recreation and tourism; popular tours in the given area (on foot, on skis and snowmobiles, on horseback, mountain skiing, etc.) are marked; archaeological monuments, temples and places of interest in an area are specified.

On the map 15 recreational areas with their basic functions are allocated: the Caucasus-Black Sea – medical-health improving; the North-Caucasian –health improving, medical and sports; the Mountain-Caucasian – sports-tourist; the Azov – health improving; the Caspian – medical and sports; the Central, tourist-recreational – health improving and cognitive; the Northwest – health improving and cognitive; the Western –health improving and medical; the Volga – health improving and cognitive; the Ural – health improving, cognitive and sports; the Ob-Altai – health improving and sports–tourist; the Yenisei – sports, health improving and cognitive; the Pribaical – health improving and sports-tourist; the Far East – health improving, cognitive-sports; the Northern – sports function and extreme kinds of tourism.

Volume 3 “Population, Economy” is a component of the National atlas of Russia. Objects of mapping in the volume are the population and economy of the Russian Federation, and also formed by them in interaction the social and economic systems. The volume contains 496 pages of maps, text and illustrative material which are grouped in 4 sections: General characteristic of the Russian Federation; Population
and social development; Facilities and economic development; Regions and regional
development (each of which includes a number of subitems) and Help information.
The basic scales of maps for territory of Russia as a whole – 1:15000000, 1:30000000
and 1:40000000. Considering specificity of the territorial structure of Russia the
significant number of maps is presented in a following kind: for the European part of
Russia - the scale 1:10000000, for the Asian part of Russia – 1:22000000 are chosen.
For unit of mapping a subject of the Russian Federation (republic, kraj, area, and
autonomous region) is accepted.
Almost all thematic content of maps is constructed on use of settlement parameters on
official statistical data, including results of the All-Russia Population Census conducted
in 2002.

In the volume structure the sections devoted to componential and territorial subsystems of
the population and the national economy are presented: demographic, social, economic and
regional, and also the section, devoted to the general characteristic of the country.

The volume “Population. Economy” is open by the section “General characteristic of
the Russian Federation” which includes subitems “Place of Russia in the world”,
“Territorial structure of the Russian Federation” and “Geographical conditions of
settlement and facilities”.

In subitem “Place of Russia in the world” the maps reflecting position of Russia on a
political map of the world, the international political and economic associations and the
organizations in which work Russia takes part are presented; the comparative information
of Russia with the countries of the world on size of a total internal product, on manufacture
and a current consumption, on fuel and energy resources is resulted. A theme “Russia in the
world tourist market”, very actual today, attracts doubtless interest (the map in scale
1:120000000).

One of the cores on value and volume is the second section of the volume
“Population and social development” which is devoted to the characteristic of the
population, social environment of human and to social development. Accordingly there
three subitems are allocated: population and settlement, social sphere, socio-political
development.

The integral part of inhabitancy of townsfolk and countryfolk is the social sphere to
which the second subitem is devoted. There the characteristic of the social sphere
condition and dynamics basic components is given: public health services, education,
science, culture, living conditions of the population and housing and communal
services, recreation, tourism, sports.

Our country possesses significant recreational resources and to this theme in section
“Social sphere” the subitem “Recreation. Tourism. Sports” is allocated. This subitem
contains the block of maps on the territory of Russia recreational division into districts,
on the sanatorium-and-spa organizations and various kinds of tourism (water, mountain, foot, ski, etc.).

The map “Recreational division into districts”, scale 1:45000000.

The map “Resorts”, scale 1:30000000; the map “The Caucasus-Black Sea region”, scale 1:10000000; the map “Sanatorium -and-spa organizations”, scale 1:45000000.

The map “Tourist-classification regionalization”, scale 1:45000000.

The theme “Recreational resources of the Moscow region, Help data” is interestingly revealed. Here the characteristic of climatic, water, balneological, vegetative, cultural-historical and other resources of area is given. Each above-named resource is characterized from the point of view of its use for the tourist purposes. Areas where motor ship tourism is developed, as well as kayak tourism and sailing are shown in the section “water resources”.

Tourism as a travel with non-productive purposes outside a place of constant residing makes specific demands to the environment, arising in connection with needs of a person in health improvement, intelligent content, achievements in sport, dialogue, education, etc. For this purpose the special tourist resources should be found in an environment. Their presence, quality, sizes, reproducibility, capacity (i.e. ability to satisfy needs of this or that quantity of tourists on the given area in a unit of time) provide division of a country on a degree of their suitability for those or other types and kinds of tourism.

The estimation of tourist resources is certain on functional types of tourism (health improving, cognitive and sports) and on kinds (water, bicycle, foot and mountain, ski), allocated in the ways inside of route travel and applied thus technical means and vehicles. Allocation for research of types and kinds of tourism does not mean their obligatory independent existence; more often there are mixed types with prevalence of one leader, and sometimes the combined kinds. Classification units of tourism allocated on another bases: domestic and foreign, scheduled and amateur, long and short-term (day off), etc. – include in full or in part types and kinds of tourism.

Each of tourism types and kinds having arisen from public needs of a person for the appropriate natural or changed by human environment, demands for the development of quite certain and precisely expressed properties of a country which turn from natural and anthropogenous bodies and the phenomena to tourist resources.

Tourist resources are considered as resources of tourist subbranch of recreation.

The major resources of tourism are:
– Territory or water area which is passed on foot or with use of technical means and vehicles;
– Weather and climate at which a person can live and move in open air or inside of vehicles;
– Specific resources of tourism types: Health improving (weather and climate, waters, vegetation, relief and other properties of a country giving either strengthening the health improving or prophylactic action), cognitive (objects and the phenomena which are representing cognitive interest and absent in places of constant residing), sports (obstacles representing sports-tourist interest: almost impassable sites of a country, passes, ferries, rapids, etc.);

– The resources providing life activity of a person on travel (air, potable water, food, shelter and habitation, fuel) which can be both direct nature-anthropogenous resources, and material resources of tourism; also absence of dangerous to life and health the natural and anthropogenous phenomena here concerns.

The two first types of resources any place of globe possesses practically, that in a combination to universal distribution of cognitive tourism resources, an opportunity of availability of health improving and sports effect not only from use of resources, but also from physical activities, discrete distribution or transportation of resources of the fourth group makes all our planet to be suitable for tourism. However for mass development of tourism not only presence of resources, but their certain quantity and “industrial concentration” are required. From here there is a problem of measurement and estimation of quality and quantity of resources.

Specificity of various types, kinds and other classification units of tourism is those, that each of them uses not all resources entirely, but only their any parts or the features so that with use of corresponding means of conveyance, in the certain terms and at other restrictions the functional purpose of travel could be reached. It puts a problem of measurement and estimation not resources in general, but with reference to concrete types, kinds and other classification units of tourism. As examples we shall consider resources of tourism.

In this block of maps four maps "Estimation of an environment for tourism" in scales 1:40000000–Boating tourism, Bicycle tourism, Foot and mountaineering tourism, Ski tourism are presented.

Here following environment conditions are allocated:

*Unfavourable* – suitable for travel involving the limited contingent of tourists, or for travel at adverse conditions;

*Rather favourable* – are suitable for travel at presence of essential restrictions;
Favourable – are suitable for various travels at presence of some restrictions;

Optimum – are suitable for mass development of tourism, except for (in some cases) hikes of high categories of complexity unsuitable for tourism.

**Volume 4 “History. Culture”** is a component of the National atlas of Russia. In this volume the course of historical development of Russia since the most ancient times till the present epoch is consistently revealed, the modern existental information on cultural and natural heritage of the country is presented. The volume contains 496 pages grouped in two sections: History. Culture.

**Section “Culture”**.

The culture in the volume is considered as the public phenomenon and as a branch of social sphere which development was caused by historical events. The basic purpose of this section of the volume – to give a collection of the modern information and knowledge on the cultural and natural heritage of Russia to show laws and features of distribution and development of regional and national cultures, interrelations and mechanisms of their interaction and to present a material for development of the all-Russian and regional programs on protection and use of heritage objects for preservation and restoration historical and cultural and human environment of Russia. Cultural heritage is one of the major modern resources defining social and economic and welfare development of Russia at a world level. The heritage includes not only the art valuable, separate architectural or historical-memorial objects, but also little changed environment, historical environment of cities or rural settlements, special sort of spiritual and the material assets embodied in folklore, crafts and art values and special forms of manifestation of wildlife and abiocen, that is all that reflects history of development of the nature and culture, is recognised valuable in scientific economic, aesthetic and educational sense and is considered as national patrimony.

On maps “Objects of the world heritage in territory of Russia” the objects are shown of the World cultural and natural heritages which are being under protection of UNESCO. The section shares on subitems.

*The subitem “Cultural and natural heritage of Russia”* is the greatest and covers the extensive list of maps from small-scale on all territory of Russia and up to plans and schemes of separate objects. Maps of archaeological monuments which are under federal protection, from the Stone Age to the Middle Ages are presented; monuments of military history; cult, civil, industrial architecture; monumental art; estate architecture. The separate map gives historical cities and rural settlements. Maps of national art crafts are of great interest. Maps “Russia in art of domestic writers” and “Russia in art of domestic artists” are presented.
The significant attention is given to maps of the Russian Federation subjects and their administrative centers with allocation on them of cultural and natural heritage monuments. Maps are supplemented with plans of cities, their historical centers, kremlins’ plans, monasteries, the most known memorial estates, culture preserves. Especially valuable objects of the cultural heritage of the Russian Federation people are allocated; the big place is allocated to a natural heritage (the state natural reserves and wildlife preserves, national parks, natural and dendrology parks, nature sanctuaries, botanical gardens, medical-improving countries and resorts). The subitem “Modern culture” is presented by the maps reflecting a network and activity on specialization of various culture establishments (theatres, museums, libraries, archives, club establishments, higher educational institutions in sphere of culture). The statistical information on work of culture establishments is given in the form of cartograms and diagrams, supplemented with text and illustrations.

In the fourth volume of the National atlas of Russia a lot of attention is given to tourist subjects. Disclosing of this theme is interesting. The map “Educational tourism in Russia” (scale of the map 1:15000000) is presented which shows zones of active development of informative tourism, tourist-recreational areas, the tourist centers of the international value and the basic centers of religious pilgrimage, demonstrates use of heritage objects in tourism sphere. The map is accompanied by the text and rich illustrative material. Cognitive tourism includes travel with the purpose of survey and studying of monuments of history and culture (which in Russia it is registered from above 150 thousand), nature, ethnographic and economic features of country and population, typical natural complexes, general shape of country outside of constant residing zone. Achievement of this purpose demands minimization of exhaustion on a way to objects of survey for preservation of the raised emotional susceptibility of a tourist that entails wide use of various vehicles and makes demands to concentration of objects of survey, their variety, attractiveness and traffic capacity. Any district can give a minimal set of resources of cognitive tourism, but for its mass development the certain concentration of highly attractive objects is required.

The map “Organization of heritage objects protection and restoration management” is interesting.

The National atlas of Russia is the major information resource of the State representing in information system the base information layers, promoting development of national and regional programs of ecological, economic, social, and cultural-educational and other value.

Scientifically-practical conference “Cartography to tourism” took place in Saint-Petersburg in Russian Geographical Society from September, 21-24 September 2008. Organizers of conference: International Cartographic Association, Saint-Petersburg State University, Russian Geographical Society, Close Joint-Stock Corporation “Map”. On September, 21st there was an opening of exhibition “Tourist map in Russia” (from
funds of the Russian National Library). During work of the conference the exhibition-competition of cartographical products of 2008 release (on imprint) on nominations has been organized as follows: the best tourist map of Russia, the best tourist atlas of Russia, the best help map of Russia, the best help atlas of Russia, the best road map of Russia, the best road atlas of Russia, the best scientific map of Russia on tourism, the best scientific atlas of Russia on tourism.

With the report “Theme ‘Tourism’ in the National atlas of Russia” at the conference has acted Mr. S. V. Krivov. The report and illustrative material have caused interest of the conference participants and presented on the exhibition-competition “National atlas of Russia. Volume 3 “Population. Economy” with enough rich cartographical information on tourist subjects has been awarded by the I-st degree DIPLOMA “Awarded Industrial Mapping Association “Cartographia” (Moscow, Russia) for development of the “National atlas of Russia. Volume 3” as the winner of competition “The best tourist map” 2008 in the nomination “The best scientific development” [Fig. 1].
Fig. 1. The Diploma. The Industrial Mapping Association “Cartographia” (Moscow, Russia) is awarded for development of the “National atlas of Russia. Volume 3” as the winner of competition “The best tourist map” 2008 in the nomination “The best scientific development”. 